UNIVERSITY OF
ILLINOIS LIBRARY
AT URBANA-CHAMPAIGN
BOOKSTACKS

UNIVERSITY LIBRARY
UNIVERSITY OF ILLINOIS AT URBANA-CHAMPAIGN

The person charging this material is responsible for its renewal or return to the library on or before the due date. The minimum fee for a lost item is **$125.00, $300.00** for bound journals.

Theft, mutilation, and underlining of books are reasons for disciplinary action and may result in dismissal from the University. *Please note: self-stick notes may result in torn pages and lift some inks.*

Renew via the Telephone Center at 217-333-8400, 846-262-1510 (toll-free) or circlib@uiuc.edu.
Renew online by choosing the **My Account** option at:
http://www.library.uiuc.edu/catalog/

APR 04 ANS'D

Pages 779-80 msg.in Nov.21,1928

VOLUME
FIFTY-EIGHT

1923

JULY—
DECEMBER

LIBRARY
UNIVERSITY OF ILLINOIS
URBANA

28928
176

THE ARCHITECTS' JOURNAL

& Architectural Engineer

THE ARCHITECTURAL PRESS LTD.
27-29 TOTHILL STREET, WESTMINSTER

720.5
ARB
v.58

CONTENTS.

- **ACOUSTICS OF LECTURE HALL,** 112.
- Acquisition Acts on Small Dwellings, 1899–1923, 410.
- Acton, Ministry of Pensions Office, 207.
- Adams, Maurice, Retirement, 439.
- Admiralty Screen, Whitehall, Restoration, 609.
- Agricultural Hall, Road Construction Exhibition, 812.
- Aid, Council of Professional Classes, 154.
- Alfred Bossom Travelling Studentship, 226, 814.
- Algeria and Tunisia, Travel Series, 45.
- Algiers, Museum Gardens, 47.
- America, Modern Architecture in, 105.
- American Architecture, as seen by E. W. B. Scott, 884.
- American Women's Club, 863.
- Ancient Town Planning, 626.
- Apartment House in Chicago, 950.
- ARCHITECTURAL ASSOCIATION—
  - Prize Distribution, 161, 190.
  - Annual Excursion, 228.
  - Cricket Match, v. R.I.B.A., 270.
  - Excursion to Avignon, 343, 704.
  - Colour Work, Supplement to October 3.
  - Excursion in Provençe, 526.
  - Musical Evening, 737.
  - Exhibition of Holiday Sketches, 780.
  - Sketch Book, 809.
  - General Meeting, 851.
  - "Harlequinade," 914.
- Architectural Poems of Thomas Hardy, 415.
- Architectural Schools of London, 343.
- ARCHITECTURAL SOCIETIES—
  - 3.—Leeds and West Yorkshire, 159.
  - 4.—Liverpool, 385.
  - 5.—Sheffield, South Yorkshire and District, 939.
- ARCHITECTURAL TRAVEL—
  - 3.—North Africa, Algeria, and Tunisia, 45.
  - 4.—Germany: (1) Northern, 196–206; (2) Southern, 597.
- Architecture Club, 784–97.
- ARCHITECTURE IN THE LAY PRESS-
  - Passing of Regent Street; Adam Restored in Whitehall; War Memorials in London; Gothenburg Exhibition; Old London; Architecture of Our Streets; Stockholm's Town Hall, 184.
  - London's Worst; New Regent Street; New York's Sky Bungalows; Admiralty Screen; On Critics, 305.
  - Oxford's Ancient Buildings; Plagiarism in Architecture; Shooters Hill and its Wells; What Grows on Stained Glass; Our Best Statues, 400.
- Armstrong College Library Competition, 409.
- Artistic Roof Treatment, 268.
- Atkinson, the late Frank, 187.
- **BANKS**—
  - Martin's, 137.
  - Bank of England, 158, 190, 312.
  - National, Liverpool, 282.
  - Hibernian, Dublin, 535.
  - Extensions to Munster and Leinster Bank, Cork, 942.
- Bartlett School of Architecture, 480, 914.
- Birmingham Civic Society, 220.
- Birmingham Masonic Temple Competition, 512.
- Birmingham Renaissance, 914.
- Birmingham, Royal, Society of Artists' Autumn Exhibition, 703.
- Bologna, its Churches, 85.
- Bolsworth Castle, Cheshire, 793.
- BOOK REVIEWS—
  - Architectural Acoustics; House and Cottage Construction, 112.
  - New Book on Italian Renaissance Architecture, 153.
- BOOK REVIEWS—*cont.*
  - Heating and Ventilating, 154.
  - The Deeside; City Planning, 265.
  - Colour and Colour Reproduction; House and Cottage Construction, 304.
  - Architectural Building Construction, 342.
  - Glossary of English Architecture, 343.
  - English Church Fittings, Furniture and Accessories; Cardinal Wolsey at Hampton Court; Heat Transmission Through Walls, Concrete and Plasters, 432.
  - The House You Want; Kensington Palace, 474.
  - Architectural Education a Century Ago; Practical Joinery and Carpentry, 547.
  - Window Design and the Measurement of Daylight Illumination; Wallpaper; The Work of the Building Research Board, 625.
  - The Modern Signwriter; Architecture at a Glance, 658.
  - A Guide to the Architectural Teacher and Student; Concrete Roads, 733.
  - Town Planning and Town Development, Merseyside; How to Approach the Architect; Kelly's Directory of the Building Trades, 881.
  - Stratford-upon-Avon; Who's Who in Architecture, 838.
  - The Smoke Inspector's Handbook, 914.
- Bosham, Cut Mill, 352.
- Bossom (Alfred), Travelling Studentship, 226, 814.
- Bournemouth Pavilion, 64, 97.
- Brickwork, 110.
- British Confederation of Arts, 26, 73, 187.
- British Empire Exhibition, 334, 486.
- BRITISH SCHOOL AT ROME—
  - Scholarship Award, 29.
  - Decorative Painting Award, 620.
  - Rome Scholarship, 1924, 703.
- British Schools of Architecture, 475.
- BROADCAST TALKS ON ARCHITECTURE—
  - Modern London: Its Public Buildings, 233.
  - Kingsway and Bush House, 379.
  - The New Regent Street, 561.
- Brook House, Colwall, 829, 833.
- Buenos Aires Tap Competition, 228.
- Builders' Benevolent Institution, 620.
- BUILDING—
  - Expedition in, 37.
  - Rate of Wages, 40
  - Prices of Materials, 44, 410.
  - Costs, 78.
  - Industry and Technical Education, 113
  - Tests on Building Stones, 194.
  - Cost in Limerick, 266, 343.
  - Education, 268.
  - Trade Peace, 312.
  - Longer Hours, 341.
  - By-laws, 378.
  - Labour and Building Boom, 407.
  - Control, 661.
  - Origin of London and Building Laws, 729.
  - New Methods, 739.
- Bush House and Kingsway, 194, 234, 370, 379.
- BUSINESS OF AN ARCHITECT—
  - 8.—Care of Drawings, 87.
  - 9.—Preparation of Drawings, 162.
  - 10.—Specification Writing, 682, 769, 874.
- **CAIRD HALL, DUNDEE,** 638, 716.
- CAMBRIDGE—
  - New Baths and Changing Room, 673.
  - Collegiate Buildings Competition (Winning Design), 683; (Criticism), 728.
- Cambridge Design, by Thos. T. Tait, 876.
- Canadian Monument at St. Julien, 382.
- Cardiff Technical College, Entrance Scholarships, 408.
- Cement and Concrete Finishes, 704.
- Charabanc Station, Studies for, 826.
- Chicago, Duplex Apartment House, 950.
- Church of the Annunciation, 164–175.
- CHURCHES—
  - Bologna and its, 83.
  - Annunciation, Bryanston Street, 164–175.
  - New London, 164.
  - in Cadinen, 199.
  - City, 740.
- Church Window in Reinforced Concrete, 482.
- CITY—
  - Its Past and Its Future Form, 607.
  - Churches, 740.
- Civic Societies and Their Aims, 445.
- Clerkenwell, Northampton Polytechnic, 410.
- Cockersand Abbey, 446.
- Collegiate Buildings Competition, A Criticism, 728.
- Colour Decoration, Teaching of, 511.
- Colour in Street Architecture, 50.
- Coming Events, 37, 519, 556, 590, 621, 664, 704, 741, 776, 809, 851, 914.
- Commercial Man and Craftsman, 122, 195.
- COMPETITIONS—
  - Lanark War Memorial, 24.
  - Bournemouth Pavilion, 64, 111.
  - Manchester War Memorial, 111, 113.
  - Tunbridge Wells Pavilion, 261.
  - Cork City Hall, 330.
  - Armstrong College Library, 430.
  - Liverpool Shipping Office, 491, 562, 652.
  - Birmingham Masonic Temple, 512.
  - Greenwich Public Baths and Wash-houses, 553, 621.
  - Manchester Masonic Hall, 601.
  - Cambridge Collegiate Buildings, (Criticism), 728; (Corres.), 803.
  - D.I.C. House, Manchester (Winning Design), 724.
  - Hull Art Gallery (Winning Design), 798–802.
  - Glasgow University Sports Pavilion, 887; Review of Designs, 913.
  - Durham Cottage Hospital, 920.
- Competition News, 38, 113, 154, 189, 228, 270, 307, 344, 372, 409, 439, 480, 519, 556, 590, 664, 704, 741, 776, 809, 851, 919.
- Competitions Open, 38, 113, 189, 228, 270, 307, 344, 372, 409, 439, 480, 519, 556, 590, 621, 664, 704, 741, 776, 809, 851, 919.
- CONCRETE—
  - in Domestic Architecture, 662.
  - House in San Juan, Porto Rico, 662.
  - Roads, 958.
- Constable Close, Hampstead, House in, 20.
- CONSTRUCTION—
  - 29.—The Liverpool Victoria Friendly Society Building: Underpinning, etc., 403.
  - Curved Stairway, 428.
  - Cowhouses, 474.
- Contemporary Art, 27, 103, 147, 177, 226, 440, 467, 540, 581, 615, 702, 737, 813, 847, 886, 917, 959.
- Control of Building, 661.
- Conversion of Two Old Cottages, 616.
- Corinthian Capital, Origin and Use, 959.
- Cork City Hall, 330.
- CORRESPONDENCE—
  - Building Heights and Ancient Lights, by Delissa Joseph, 29, 141.
  - Sanitation, by Burnett Orphoot, 29.
  - Bournemouth Competition, by J. Murray Easton, 111.
  - Architects and Advertising, by Karshish, 141.
  - Helping Japan, by W. T. Jones, 439.
  - Earthquake in Japan, by "Reader," 477.
  - Preservation of Bricks, by G. C. Gardner, 477.
  - The Reconstruction of Japan, by Ernest Gee, 576.
  - An Italian System of Housing, by Arthur Welford, 576.
- CORRESPONDENCE—*cont.*
  - Human Proportions in Architecture, by "Reader," 660.
  - Strength of a Concrete Floor, by W. Basil Scott, 660.
  - Danger of Sky Signs, by "Mercutio," 703.
  - Cambridge Collegiate Buildings, by T. S. Tait, G. H. G. Holt, and V. O. Rees, 775.
  - Cambridge Collegiate Buildings, by C. H. Reilly, W. Naseby Adams, "One Who Did Not Take Part," 803.
  - Cambridge Collegiate Buildings Competition, by T. Taliesin Rees, Richard Holt, "Old Competitor," and Edgar Lucas, 838.
  - The Architectural Shilling, by C. S. Overy, 839.
  - Cambridge Collegiate Buildings Competition, by Frederick Clark, T. S. Tait, H. T. Thornely, 876.
  - Cambridge Competition, by C. H. Reilly, Cecil A. Sharp, and C. McArthur Butler, 907.
  - Strength of a Saucer Dome, by P. J. W., 907.
  - Cambridge Competition, by "One Who Did Not Take Part," R. D. Robson, 941.
- CORRIGENDA—
  - Design for Public Institute; R.I.B.A Problems in Design, 410.
- Cost of Building Materials, 957.
- COTTAGE BUILDING—
  - 2.—Experiments in, 142.
  - 3.—294.
- Cottage Conversion, 616.
- Cradle Roof Trusses, Construction and Use, 883.
- Craftsman and Commercial Man, 122, 195.
- Crosby Hall, 780.
- Cut Mill, Bosham, Sussex, 352.
- **DANGEROUS STRUCTURES,** 181, 224.
- DECORATION—
  - Walls of a Room, 88.
  - Great Liners ("Aquitania" and "Leviathan"), 341.
  - Teaching in Colour, 511.
  - Empire Style, 654.
- Decorative Art Exhibition at Monza, 927.
- Decorators' Exhibition, 440, 619.
- "Dekart," 37.
- Department of Architecture and Civic Design, Technical College, Cardiff, 408.
- DESIGNS—
  - Charles I's Mausoleum at Windsor, 761.
  - "Favorite" Design for St. Paul's Cathedral, 763.
  - Weather Clock by Wren, 764.
- Detail of Staircase, 15 Queen Square, Bristol, 557.
- D.I.C. House Competition, Manchester: Winning Design, 724.
- Die-casting Research, 39.
- DINNERS—
  - To Professor Beresford Pite, 140.
  - Architecture Club, 797.
  - Northern Architectural Association, 954.
- Domestic Architecture, Concrete in, 662.
- Dublin, Hibernian Bank, 535.
- Dundee, Caird Hall, 638, 716.
- DURHAM—
  - County War Memorial, 120, 371.
  - Cottage Hospital Competition, 920.
- Durham School War Memorial Competition: First Premiated Design, 541.
- Dutch Work (Old) in South Africa, 730.
- **EASTBOURNE, CORNFIELD TERRACE,** 94–5.
- Edinburgh, Scala Theatre, 392
- Education, Technical, 113.
- Egyptian Architecture, 590.
- Elm Weatherboarding, 112.
- Empire Style in Decoration, 654.
- England, Bank of, 312.

573518

APR 24 '28

- ENQUIRIES ANSWERED—
  - Elm Weatherboarding; Sinking a Well; Norman Churches near Leeds; Acoustics of a Lecture Hall, 112.
  - Ash from Factory Chimney; Preservation of Bricks; Dry Rot; Steel Structure Hut, 301.
  - Ventilating a Public Shelter; How to Fell a Tall Chimney; Decayed outside Cement Facing; Ash from Factory Chimney; Preservation of Bricks, 406.
  - Wired Plate Glass and Sun; Size of Rolled Joists; Decorated Doorway in Leeds District; How to Fell a Tall Chimney, 443.
  - Elm Boarding; Strength of Concrete Floors; Reinforced Concrete Beams; Hips of Pantile Roofs; Architectural Partnerships, 622.
  - French Stuc, 623.
  - Tudor and Perpendicular Stone Parapets; Housing Subsidy; Strength of Concrete Floor, 738.
  - Separation of Rainwater; Alleged Party Wall; Tarry Deposit in Chimneys; Tudor and "Perpendicular"; Period Parapets; Construction of Bedroom in Roof; "Dry Rot" in a Church Roof, 846.
  - Dome Construction; Compensation for Setting Back, 882.
- EXHIBITIONS—
  - London University School of Architecture, 104.
  - Liverpool School of Architecture, 176.
  - Public Works, Roads, and Transport, 228.
  - Students' Work at the A.A., 293.
  - British Empire, 334.
  - Drawings at University College and A.A., 475.
  - Glass at Victoria and Albert Museum, 477.
  - Decorators, 619.
  - Gothenburg Jubilee, 633.
  - Royal Birmingham Society of Artists, Autumn Exhibition, 703.
  - Members' Holiday Sketches at the A.A., 730.
  - Town Planning, Olympia, 740, 791.
  - Islington, Road Construction, 812.
  - International Exhibition of Decorative Art at Monza, 927.
- Expeditious Building, 37.
- EXPERIMENTS IN COTTAGE BUILDING—
  - 2.—142.
  - 3.—294.
- **FIRE :**
  - Losses Commission Report, 442.
  - Enquiries and Inquests, 850.
- Floor Construction, New System, 777.
- Fourth Green, Sandwich, 875.
- Furniture of Sir John Soane, 275.
- **GARDENS :**
  - Landscape, at Wembley, 544.
  - Sussex Garden, 764.
- GAS—
  - Past and Future of, 39.
  - Cure for Smoke Evil, 482.
  - Lighting and Heating, 915.
- Geneva, International Labour Office, 843.
- GERMANY—
  - 1.—North, 196–206.
  - 2.—South, 597.
- GLASGOW—
  - Municipal Buildings Extension, 454.
  - Cathedral, 663.
  - University Sports Pavilion Competition, 887, 913.
- GLASS PAINTING, 314.
  - Exhibition of, 477.
- Gold Medal for Sculpture, 957.
- Gothenburg, International Town-planning Conference and Exhibition, 349, 633.
- Government Assistance for Public Works, 590.
- Grand Stand at the Rectory Field, Blackheath, 587.
- Greenwich Public Baths and Washhouses Competition, 553, 621.
- G.W.R. Staff Housing Schemes, 663.
- **HARDY, THOMAS, ARCHITECTURAL POEMS,** 415.
- Harlequinade, 914.
- Harvey Nichols' New Premises, 148–150.
- Hendon Town Planning Scheme, 308.
- Hibernian Branch Bank, Sackville Street, Dublin, 535–9.
- Higher Buildings and Town Planning, 935.
- Hint for Architects, 446.
- Holt Line Building Competition Award, 453.
- Home, Labour-saving in the, 324.
- "Homes of Queen Elizabeth's Courtiers," 737.
- Hotels and Licensed Houses Planning, 436, 550.
- HOUSES—
  - Constable Close, Hampstead, 20.
  - St. George's Hill, Weybridge, 388.
  - Newton St. Cyres, Devon, 428.
  - No. 65 Rutland Gate, W., 532.
  - Bungalow at Malden, Essex, 548.
  - Concrete House in San Juan, 662.
  - Bolsworth Castle, Cheshire, 792.
  - House in Surrey, 804.
  - Brook House, Colwall, 829.
  - The Fourth Green, Sandwich, 875.
- Houses and Population, 308.
- HOUSING—
  - An Optimistic View, 232.
  - In Italy, 232.
  - Costs, 269.
  - Subsidy, 274, 408.
  - New Act, 306.
  - £6 Subsidy, 343.
  - Experiments, 348.
  - Settlement of Accounts, 413.
  - G.W.R. Housing Schemes, 663.
  - Winchester Housing Schemes, 691.
  - Army for, 776.
- Hull Art Gallery Competition : Winning Design, 798.
- Hygiene of Heating, 477.
- **INDIAN ARCHITECTURE,** 893.
- Industry, Building, 113.
- International Labour Office, Geneva, 843.
- International Town-planning Conference and Exhibition, Gothenburg, 349.
- Islington Municipal Buildings, 643.
- **JOKING APART—**
  - Architectural Politics, 121.
  - Praise Where Praise is Due, 313.
  - Ugly is that Ugly Does, 525.
  - A Punch at the Punchers, 749.
- **KINGSWAY AND BUSH HOUSE,** 379.
- **LABOUR SAVING IN THE HOME,** 324.
- Labour and the Building Boom, 407.
- Lambeth Bridge, Reconstruction, 780.
- Lanark War Memorial, 24.
- Landscape Architecture in Relation to Town Planning, 774.
- LEADING ARTICLES AND NOTES AND COMMENTS—
  - Art in Social Service, 3.
  - Professor Beresford Pite; Tram and the Street; Popularizing Architecture; The Rome Prize, 4.
  - Waste in Architecture, 43.
  - Competition Troubles; Building Heights and Ancient Lights; Prices of Building Materials; Celtic Britain from the Air, 44.
  - Town Architecture, 81.
  - Wren Society; Architects and Advertising; Why Not a Wren Monument ?; Competitions; Monuments on the Embankment, 82.
  - London of the Future, 119.
  - Gilbert's Fountain; Architecture and the Press; Durham War Memorial Site; Adam's Whitehall Screen; Fashions of To-day, 120.
  - Assessing of Public Competitions, 157.
  - Mr. Waterhouse; The Bank; Riot in the Roads; Beresford Pite's Successor, 158.
  - In Search of Gaiety, a Holiday Suggestion, 193.
  - Bush House; Threat to London's Open Spaces; The Temple; A Sign of the Times; Tests on Building Stones, 194.
  - Beauty in the Strand, 231.
  - An Optimist on Housing; Housing in Italy; Helping Things On; Silhouettes, 232.
  - A New Use for Temporary Buildings, 271.
  - London Street Repairs; Spoiling Fine Places; Poor Academy for the Artists; Annual "Architects' Week"; New Housing Subsidy, 274.
- LEADING ARTICLES AND NOTES AND COMMENTS—*cont.*
  - Spread of Ugliness, 311.
  - The Bank of England; The City Churches; Wembley; Peace in the Building Trade; Any Way but the Right Way, 312.
  - Who Shall Build ? 347.
  - Problem of the Large Empty House; Seaside Architecture; An Interesting Housing Experiment, 348.
  - The Earthquake in Japan, 377.
  - Vanishing Oxford; Regent Street; "As You Were" Architecture; Caen Stone in London; Building By-laws and Housing, 378.
  - Settlement of Housing Accounts, 413.
  - Charing Cross Bridge Again; Mr. Thomas Adams and New York, 415.
  - Holiday Thoughts from France, 449.
  - Architecture and Industry; Revival of the Arcade; External Ironwork; Uninsured Public Buildings, 450.
  - Indefinable Boundary Lines, 485.
  - London Vistas; "Georgian" and "Colonial"; British Empire Exhibition; Holt Building Competition, 486.
  - Preservation or Demolition ? 523.
  - Condition of Waterloo Bridge; Improvement in Lettering; Sooty Cities; Hotels or Flats ? 524.
  - Makeshift Architecture, 558.
  - Human Proportions and the New Architecture; Unsightly Advertisements; First and Second Thoughts; Chimney Pots and the New Era; Historic Monuments for the Nation, 560.
  - Nixon v. Erith Urban Council, 595.
  - Relief Works and the Building Industry; Numismatics; "Cast-iron Gothic"; Preservation or Demolition ? 596.
  - The Unwanted Country House, 631.
  - In Defence of the City Churches; Sky Signs and Architecture; Discoveries at St. Helen's, Bishopsgate; Dearth of Skilled Labour; A Question of Taste, 632.
  - Modern Industrial Art, 668.
  - Sir Edwin Lutyens Speaks Out; Versatile Architects; Colour and the Architect, 670.
  - The Revival of the Road, 711.
  - R.I.B.A. Presidential Address; Town-planning Activity; Intermediate Stages; Religious Symbolism; London's Bridge Problem; "Luxury" Building, 712.
  - Architecture and Photography, 747.
  - The City Churches; The Building Exhibition; "The Fortune" Theatre; A Forgotten Theatre, 748.
  - The Architectural Shilling, 783.
  - Ancient Light Law in Scotland; Ypres the Phœnix; The Architecture Club, 784.
  - The Election; The Trade Unions and the Building Industry, 821.
  - Words and Emotions; More Bridge Suggestions; "Hideous" City Churches; Non-Technical Terminology; Pleasure in Work, 822.
  - The Lesson of Stratford-upon-Avon, 856.
  - Condition of Waterloo Bridge; Sir Edwin Lutyens' Bridge Suggestion; R.I.B.A. and Building Trade Unemployment; A Song of the City Churches, 858.
  - Housing : Facing the Facts, 891.
  - Sash or Casement ?; Architecture in the Popular View; Architects Geographically Classified; The Price of Fog; Temporal and Spiritual, 892.
  - The Assessing of Competitions, 925.
  - Lambeth Bridge : Why Not an Open Competition ?; Modern Indian Architecture; Our Special Issue, 926.
- LEEDS—
  - University War Memorial, 51.
  - and West Yorkshire Society, 159.
  - Development, 340.
- LEGAL CASES—
  - Contract for Terra Cotta—Liability; Danger of Infection, 34.
  - Conversion of Premises; Question of an Improvement, 72.
  - Reasonable Repairing Time; Architects and Scheduled Work; Alleged Water Nuisance; Builder's Successful Claim, 106.
  - Covenant to Repair; House Construction; Alleged Nuisance, 151.
  - Obstruction of View, 152.
  - What are Structural Alterations ? 186.
  - Right to Sink a Manhole on a Lawn; Estate Question; Non-repair; Collapse of Building, 267.
  - Alleged Nuisance to Quiet Enjoyment, 408.
- LEGAL CASES—*cont.*
  - Nixon v. Erith Urban District Council, 620.
  - Repair of Roads : Important Point; Repair of Highway—Liability . Important Action, 659.
  - Percolation : Alleged Damage; Town Planning Act—Question of Order; Plans and Drawings—Infringement of Copyright; Right to Posters on Party Wall, 701.
  - Covenant—Assignment; Building Contract—Alleged Rescision; The Trade Mark "Solignum," 734.
  - Powers of Justices under Private Street Works Act, 1892; Light and Air Dispute—Judge and London Buildings, 772.
  - Right of Way Dispute; Machinery and Furnace—Alleged Nuisance; By-laws Prosecution; Scottish Ancient Light Case, 810.
  - Housing and Town Planning Act—Orders to Close, 847.
  - Fees as Architect; Right of Way Over a Yard; Builder's Yard—Alleged Breach of Covenant, 918.
  - Alleged Nuisance—Change of Neighbourhood, 955.
- Licensed Houses and Hotels, Planning, 436.
- Lighting of Modern Restaurant, 153.
- Limerick, Cost of Building in, 266, 343.
- Liners' Decorations : The "Aquitania" and the "Leviathan," 341.
- LITTLE THINGS THAT MATTER—
  - XIX.—Brickwork, 110.
  - XX.—Dangerous Structures, 181.
  - XXI.—Dangerous Structures, 224.
  - XXII.—Sanitary Fittings, 655.
  - XXIII.—Gas Lighting and Heating, 915.
- LIVERPOOL—
  - University School of Architecture, 78, 176.
  - National Bank, 282.
  - School of Architecture—Aim and Work, 338.
  - Architectural Society, 485.
  - Victoria Friendly Society's Buildings, 403.
  - Shipping Office Competition, 491.
    - Winning Design, 562.
    - Willink and Dod's Design, 652.
- Lloyd's New Building, 914.
- Lombard Hall, Proposed Building, 441.
- LONDON—
  - of the Future, 119.
  - Open Spaces, 194.
  - University Site, 154.
  - University, Students' Work, 223.
  - Modern Public Buildings in, 233.
  - Street Repairs, 274.
  - Architectural Schools of, 343.
  - Problem : Skyscrapers, 361.
  - Caen Stone in, 378.
  - and New York, Planning of, 451.
  - Pumping Station, 590.
  - Underground, 663.
  - Origin of Building Laws, 729.
  - Royal Residences of the Past, 823.
  - University Atelier, Designs for Charabanc Station, 826.
  - Good and Bad Manners in London Architecture, 958.
- Longer Working Week for Builders, 341.
- **MAGAZINES OF THE MONTH,** 505.
- MANCHESTER—
  - War Memorial, 111, 113, 409, 467.
  - Masonic Hall Competition, 601.
  - D.I.C. House Competition, 724.
  - Society of Arts, 959.
- Manners, Good and Bad, in London Architecture, 958.
- Master Carvers' Association, 853.
- Maxwell, The late Edward, 886.
- Ministry of Pensions Offices, Acton, 207.
- MINOR ASPECTS OF TOWN PLANNING—
  - 3.—11.
  - 4.—Public Services, 391.
- Modern Architecture in America, Study of, 105.
- MODERN CRAFTSMANSHIP—
  - 4.—Colour in Architecture, 487.
  - 5.—Thatch, 859.
- Modern London : Its Public Buildings, 233.
- Modern Restaurant Lighting, 153.

MONUMENTS—
  Victoria, 82.
  St. Julien, Canada, 382.
Monza, International Exhibition of Decorative Art, 927.
Morton, The late J. H., 73.

MUNICIPAL BUILDINGS EXTENSION—
  Glasgow, 454.
  Islington, 643.
Municipal Recreation, 886.
Munster and Leinster Bank Extensions, Cork, 942.

NATIONAL BANK, LIVERPOOL, 282.
New Regent Street, 407, 561.

NEW YORK—
  and London, Planning of, 451.
  Physical Survey, 481.
  Rockefeller Memorial Carillon, 780.
No. 223 Regent Street, London: A New Departure in Shop-Front Design, 750.
Norman Churches, near Leeds, 112.
North Africa, Travel Series, 45.
Northampton Polytechnic, Clerkenwell, 410.
Northern Architectural Association Academic Dress, 954.
Northern Ireland, New Parliament Buildings, 499.
Northern Polytechnic Institute, 519.
November "Architectural Review," 730.

OBITUARY:
  Morton, J. H., 73.
  Atkinson, R. Frank, 187.
  Smith, C. S., 343.
  Tanner, A. W., 445.
  Jackson, F. Hamilton, 620.
  Braithwaite, W. S., 620.
  Krall, Carl C., 776.
  Clayton, C. E., 852.
  Maxwell, Edward, 886.
Old Theatre Remodelled, 392.
Oldest Throne in Europe, 737.
Origin of London and Its Building Laws, 729.
Origin and Use of the Corinthian Capital, 959.
"Our Clients and Ourselves," 904.
Oxford University College Pavilion, 904.

PAPAL VILLA IN THE VATICAN GARDENS, 426.
PAPERS READ—
  The Craftsman and the Commercial Man, by Harold Speed, 122.
  The Commercial Man and the Craftsman, by W. L. Wood, 195.
  Civic Societies and their Aims (Extract), by Mrs. Victor Branford.
  The Planning of London and New York, by Thomas Adams, F.S.I., 451.
  Rubber Floors and Rubber Roadways, by Evan J. Edwards, 623.
  Ancient Town Planning, by Wm. Haywood, 626.
  The City, its Past and its Future Form, by Mr. Raymond Unwin, F.R.I.B.A., 607.
  The Empire Style in Decoration, by Felix de Jong, 655.
  The Control of Building, by A. L. N. Shelley, M.A., B.C.L., 661.
  New Methods of Building, by James Houston, 739.
  Landscape Architecture and its Relation to Town Planning, by T. H. Mawson, 774.

PARLIAMENTARY NOTES—
  Building by Private Enterprise; Cost of Building; State-aided Housing; Housing Bill; Price of Building Materials; Housing Progress, 72.
  Houghton Towers; Sale of Works of Art; Housing Progress; Municipal Savings and Housing Banks, 107.
  New Town Planning Powers; Appointment of Assistant Architects; £6 Subsidy; Price of Bricks; Average Time for Building Houses; Cost of Houses, 152.
  Housing Progress; Insanitary Houses; Cost of Houses, 186.
  Housing Bill; Cost of Houses; House of Lords Memorial, 225.
  Unemployed Building Operatives, 226.
  House of Lords; House of Commons, 772.
  Minister of Health and House of Commons, 803.
Parliament Buildings for Northern Ireland, 499.
Part Demolition of City Church, 590.

PAVILIONS—
  Bournemouth, 64, 95.
  Glasgow University Sports Pavilion, 887, 913.
  Oxford University College, 904.
Physical Survey of New York, 481.
Pite, Professor Beresford, Works of, 4, 128, 141, 158.

PLANNING—
  Of Hotels and Licensed Houses, 435, 650.
  Of London and New York, 451.
Polytechnic, Northampton, Clerkenwell, 410.

PRACTICAL DESIGN OF STEEL BEAMS AND PILLARS IN BUILDINGS—
  1.—369.
  2.—585.
  3.—735.
Premises for Harvey Nichols & Co., Ltd., 148.
Presentation of Medal to Mr. Curtis Green for the Best Building of the Year, 713.
Prinstead Farmhouse, Sussex, 318, 323

PRIZE DISTRIBUTIONS—
  A.A., 161, 190.
  Royal Academy Schools, 917.
Professional Classes Aid Council, 154.
Professional Conduct and Practice of Architects, Suggestions Governing the, 185.
Proposed Durham County War Memorial, 371.
Publications Received, 38, 266, 410, 547, 626, 733, 881.
Public Utility Societies Amendment Regulations, 1923, 445.
Public Works, Government Assistance, 590.
Pumping Station for London, 590.

RATING AND VALUATION BILL, 780.
Reading Society of Architects, 852.
Rebuilding Scheme, Bank, 476.
Rebuilding of Ypres, 785.
Regent Street, 378, 407, 561.
Regent Street, No. 223, 750.
Regional Planning Activities, 828.

REINFORCED CONCRETE—
  Church Window, 482.
  Grandstand at Blackheath, 587.
Remodelling of Old Theatre, 392.
Renaissance of Birmingham, 914.
Renaissance Town Planning, 780.
Report of the Losses Commission, 442.
Restoration of Admiralty Screen, Whitehall, 609.
Road Construction, Progress in, 884.
"Rockefeller Memorial Carillon," 780.
Rolled Steel Joists, 435.

ROMAN—
  Colonies, 663.
  Point of View, 740.
  Architecture, 816.
Rome Decorative Painting Award, 620.
Rome Scholarship Awards, 29.
Roof Treatment, Artistic, 268.
Royal Academy School of Architecture, 365; Prize Distribution, 917.
R.A.F. Memorial, 154.
Royal Birmingham Society of Artists' Autumn Exhibition, 703.

R.I.B.A.—
  Council Meeting, 39.
  Suggestions Governing Professional Conduct and Practice of Architects Adopted, 185.
  Alfred Bossom Travelling Studentship, 226, 814.
  Examination Results, 227.
  Cricket Match, v. A.A., 270.
  Exhibition of Exempted Students' Designs, 442.
  Board of Architectural Education Medal Result, 620.
  Examination Exemptions and Archibald Dawnay Scholarships Award, 661.
  Presidential Address, 671.
  Presentation of Medal for "The Best Building of the Year," 713.
  Associateship and Statutory Examinations, 809.
  Council Meeting, 919.
  Final Examinations, 956.
  Notes and News, 957.
Royal Gold Medal Presented to Sir John Burnet, 5.
Royal Halifax Infirmary, New Ward, 780.
Royal Residences of London in the Past, 823.
Royal Scottish Academy, 959.
R.W.A. School of Architecture, 105.
Rubber Floors and Rubber Roadways, 623.
Rutland Gate, W., No. 65, 532.

ST. ALPHAGE, DEMOLITION OF PART OF, 590.
St. George's Hill, House on, 388.
St. John's College, Cambridge: New Baths and Changing-room, 673.
St. Julien, Monument at, 382.
Sanitary Ware, 39.
Sanitation, 29.
School of Architecture Exhibition, London, 104.
Screen Walls and Stone Seats, 302.
Seats, Stone, and Screen Walls, 302.
Sheffield and S. Yorkshire: Précis of Annual Proceedings, 591.
Sheffield, Yorkshire and District Architectural Society, 939.
Shopfront Design: No. 223 Regent Street, 750.
Skyscrapers: The London Problem, 361.
Small Dwellings Acquisition Acts, 1899-1923, 410.
Soane, Furniture of Sir John, 275.
Societies and Institutions, 885, 921.
Society of Architects, Election Results, 576.

SOME MINOR ASPECTS OF TOWN PLANNING—
  3.—Public Buildings, 11.
South Africa, Old Dutch Work, 730.
Southport, New Bank, 52.
Sports Pavilion, Glasgow University, 887, 913.

STAIRWAY—
  Curved Construction, 428.
  Detail, 557.
  Collapsible, 587.
Stone Seats and Screen Walls, 302.
Strand, Beauty in the, 231.
Strand-on-the-Green, 104.
Stratton, Mr. Arthur, Return from Holland, 816.
Street Repairs, London, 274.
Students' Work at the A.A., Exhibition of, 293.
Students' Work at the Royal Academy School of Architecture, 365.
Study of Architecture and Building, 591.
Subsidy, £6, 343.
Sussex Garden, 764.
Swansea Masonic Buildings Competition, 947.
Sydney University, New Buildings, 74.

TEACHING OF COLOUR DECORATION, 511.
Technical College, Cardiff: Department of Architecture and Civic Design, 408.
Technical Education and the Building Industry, 113.
Temple Bar, Hertfordshire, 100.
Theosophical Building, 12.

TIMBER MEASURING—
  II.—77.
  III.—264.
Tivoli Cinema Theatre, 416.

TOKYO—
  Air View, 381.
  Rebuilding Competition, 620.

TOWN PLANNING—
  Minor Aspects of, 11, 391.
  Model Clauses in, 270.
  Institute Conference, 270.
  Hendon Scheme, 308.
  Some Misconceptions, 342.
  International Conference and Exhibition, Gothenburg, 349.
  York Conference, 519, 572–5.
  and Housing, 575.
  Ancient Town Planning, 626.
  Exhibition at Olympia, 740, 791.
  Relation to Landscape Architecture, 774.
  and Health, 815.
  Influence of Renaissance Gardens upon, 816.
  Regional Planning Activities, 823.
  Regional Planning and Higher Buildings, 935.
Town Development in Wales, 308.

TRADE AND CRAFT—
  Merritt Service, and Art Metal Co.'s Change of Address; C. P. Kinnell & Co.'s New Telephone Number, 38.
  New Showrooms for R. Jenkins & Co., Ltd.; J. W. Singer and Sons, Ltd., Report; Simplex Conduits, Ltd., Booklet on their various Wiring Systems; Holophane, Ltd., Catalogue of Glassware and Fittings; Venesta, Ltd., Ply Panels; The Plate Glass Publicity Bureau, Polished Plate Glass; American Walnut Manufacturers' Association, "The Story of American Walnut," 116.
  C. P. Kinnell & Co., Ltd., Installation of Heating System; Ruston Vertical Oil Engine; G.E.C., Floodlights for Hoarding Lighting; C. A. Peters, Ltd., Coloured Cements; "Ozonair" on the Central London Railway, August 8; Bell's United Asbestos Cement Roofs; "Relay" Automatic Telephones; The Improved Wood Pavement Co., Whitehall Road Reconstruction, August 15; G.E.C. Reduced Prices; "Bimol Blocks"; Robert Adams & Co., "Victor" Springs; The Adamite Co., Film Exhibition of Stucco Work, 373.
  London Brick Co., Change of Title; Henry Allday and Son, Ltd., A Ball-bearing Curtain Rail; "Alundum Safety Products," September 19; John Tann's Safes; G.E.C. Shop-window Illumination; Thornley and Knight, "Tekavar" Varnish, September 26; British Thomson-Houston, Electric Lighting Service; "Rok" Roofing, D. Anderson and Son, Ltd., October 10; Roanoid, Ltd., Door Furniture, October 24; B.R.C. Co., Reinforcements, October 31; Richard Hill & Co., Ltd., "Maxweld," November 14.
Trafford Park, New Warehouses, 620.

TRAVEL SERIES –
  Algeria and Tunisia, 45.
  Germany (1) North, 196-206.
  Germany (2) South, 597.
Treatment of Wall Surfaces, 958.
Tunbridge Wells Pavilion, 261.

UGLINESS, SPREAD OF, 311.
University College Pavilion, Oxford, 904.
UNIVERSITY OF LONDON—
  Site, 154.
  School of Architecture; Bartlett Exhibitions, 914.

VICTORY SCHOLARSHIP, 1923, 442.

WALES—
  The Beautiful and Ugly, 268.
  Town Development in, 308.

WALLS—
  Decoration of, 88–91.
  Screen, 302.
  Treatment of Surfaces, 958.

WAR MEMORIALS—
  Lanark, 24.
  Leeds University, 51.
  Manchester, 111, 113, 409, 469.
  Durham, Site of, 120.
  R.A.F., 154.
  Loughborough, 327.
  Proposed Durham County, 371.
  St. Julien, Canada, 382.
  Durham School, 541.
Warning to Architects, 410.
Water Fittings, 660.
WATERHOUSE, Mr. Paul, PP.R.I.B.A.—
  Caricatured, 6.
  Appreciation of, 158.
  Presentation to, 182.
Week's News, 35, 114, 188, 371, 444, 478–9, 517, 556, 627–8, 665, 705–7, 742, 778, 817, 853, xxi December 12, 922, 960.
Wembley, Landscape Gardens, 544.
Winchester Housing Scheme, 691.

WREN—
  Why Not a Monument to, 32.
  Society, 82.
  Bi-Centenary Memorial Volume, 761.

YORK SCHOOL OF GLASS PAINTING, 314.
York, Town Planning Institute Conference at, 519, 572–5.
Ypres, Rebuilding, 785.

PLATE ILLUSTRATIONS.

ADMIRALTY SCREEN, WHITEHALL, 611–13.

ARCHITECTS' WORKING DRAWINGS—
  63.—Southport New Bank, 62.
  64.—Church of Annunciation, 174–5.
  65.—Cumberland Lawn Tennis Club Pavilion, 218.
  66.—Bush House, Aldwych: Detail of Strand Entrance, 254.
  67.—National Bank, Liverpool, 286–7.
  68.—Loughborough War Memorial, 328.
  69.—Bush Building: Detail of Arch and Pediment over the Aldwych Niche, 362–3.
  70.—Bush House, London, 396–7.
  71.—Extensions to the Munster and Leinster Bank, Cork, 844–5.
American Women's Club, 865, 869, 871.

ARCHITECTURAL DETAILS –
  46.—The Temples of the Sun and Moon, 401.
  47.—A Composite Capital, 545.
  48.—The Temple of Nîmes: La Maison Carrée, 908–9.

ARCHITECTURE OF THE ITALIAN RENAISSANCE—
  20.—Porch of the Church of San Petronio, 85.

BATHS AT ST. JOHN'S COLLEGE, CAMBRIDGE, 675, 677.
Board Room at the Offices of the B.A.W.R. Association Headquarters, 577–9.
Bolesworth Castle, Cheshire, 793, 795.
Bostock War Memorial, 937.
"Burton's," Wimbledon, 583.

BUSH HOUSE, ALDWYCH—
  View looking N.E., 235.
  Aldwych Entrance Hall, 241.
  Soffit of Semi-Dome and Arch, 245.

CAIRD HALL, DUNDEE, 639, 641, 717, 719, 721.
Canadian Monument at St. Julien, 383.
Christ Church, North Brixton, 131.
Church of the Annunciation, 165, 16 171.
Colour Plates: A.A. Students' Work, October 3, November 7.
Conversion of Two Cottages, 617.
Cornfield Terrace, Eastbourne, 95.

CURRENT ARCHITECTURE—
  178, 179, and 181.—Theosophical Society Headquarters, 2, 13, 17.
  182 and 183.—New Bank at Southport, 53, 55.
  184 and 185.—Ministry of Pensions, Acton, 209, 211.
  186.—Bush House, looking N.E., 235.
  187.—Bush House, Entrance Hall, 241.
  188, 189, and 190.—National Bank, Liverpool, 283, 289, 291.
  191.—Loughborough War Memorial Tower, 325.
  192.—Scala Theatre, Edinburgh, 393.
  196, 197, 198, and 199.—Glasgow Municipal Buildings, 448, 455, 457, 463.
  200.—Shepherd's Bush Pavilion, 509.
  201.—Hibernian Branch Bank, Sackville Street, Dublin, 537.
  202 and 203.—Board Room at the Offices of the British Australian Wool Realization Association, Ltd., Stafford House, E.C., 577, 579.
  204 and 205.—Caird Hall, Dundee, 639, 641.
  206 and 207.—Islington Municipal Buildings, 645, 649.
  208 and 209.—New Baths at St. John's College, Cambridge, 675, 677.
  210.—Caird Hall, Dundee: Main Entrance Vestibule, 717.
  211.—Caird Hall, Dundee: Balcony Exit, 721.
  212, 213, 214, and 215.—American Women's Club, 856, 865, 869, 871.
  216.—Victoria Jubilee Technical Institute, Bombay, 890.
  217.—Office Premises in Hornby Row, Bombay, 895.
  218.—Business Premises in Sandhurst Road, Bombay, 897.
  219.—Business Premises in Frere Road, 899.
  220.—University College Pavilion, Oxford, 905.
Cut Mill, Bosham, 353, 355, 359.

DETAILS OF CRAFTSMANSHIP—
  21.—Garden Gate at Groombridge Place, Kent, 192.
  22.—Bush House: Soffit of Semi-Dome and Arch, 245.
  23.—Pulpit in Kenton Church, Devon, 484.
  24.—No. 223 Regent Street, 759.
D.I.C. House Competition, Manchester, 725.

ENTRANCE DOOR OF OLD HOUSE, BOMBAY, 807.

FOUNTAIN IN STADTPARK, HAMBURG, 203.

GARDEN ARCHITECTURE—
  3 and 4.—Garden at Little Bognor, Sussex, 765–7.
Garden at Little Bognor, Sussex, 765–7.
Gateway to House on Chestnut Hill, Pennsylvania, U.S.A., 689.
Georgian Doorway in Liverpool, 841.
Gothenburg Jubilee Exhibition, 635.

HAMPSTEAD GARDEN SUBURB, CONSTABLE CLOSE. S. W. COOKE AND E. C. DAVIES, F. AND A.R.I.B.A., 21.
House in Addison Road, Kensington, 489.
House on St. George's Hill, Weybridge, 389.
House in Surrey, 805.
Hull Art Gallery, 799.

ISLINGTON MUNICIPAL BUILDINGS, 645, 649.

LIVERPOOL, NATIONAL BANK, 283, 289, 291.
London University School of Architecture: Students' Work, 223.
Loughborough War Memorial Tower, 325.

MEASURED DRAWINGS—
  36, 37, 38, 39.—Temple Bar, 101–2, 179, 180.
  40.—Mural Tablets in St. Mary Abbotts, Kensington, and St. Botolph's, Aldersgate, 471.
  41.—Admiralty Screen, Whitehall: Before Restoration, 611.
  42.—Admiralty Screen, Whitehall: As Restored, 613.
  43.—Entrance Door of Old House, Motti Bazaar, Bombay, 807.
  44.—Georgian Doorway in Rodney Street, Liverpool, 841.
Ministry of Pensions Offices, Acton, 209, 211.

MODERN AMERICAN ARCHITECTURE—
  41.—The First National Bank of Jersey City, 558.

MODERN DOMESTIC ARCHITECTURE—
  52.—House in Constable Close, Hampstead Garden Suburb, 21.
  53 and 54.—Prinsted Farmhouse, West Sussex, 319, 321.
  55, 56, and 57.—Cut Mill, Bosham, Sussex, 353, 355, 359.
  58.—House on St. George's Hill, Weybridge, 389.
  59.—Sherwood, Newton St. Cyres, Devon, 429.
  60 and 61.—"Stonedge," Leek-Wootton, Warwickshire, 495, 497.
  62.—No. 65 Rutland Gate, 533.

MODERN DOMESTIC ARCHITECTURE—*cont.*
  63.—"Burtons," Wimbledon, 583.
  63.—The Conversion of Two Old Cottages, 617.
  64.—Gateway to House at Chestnut Hill, Pennsylvania, U.S.A., 689.
  65 and 66.—Bolesworth Castle, Cheshire, 793, 795.
  67.—House in Surrey, 805.
  68 and 69.—Brook House, Colwall, 831, 833.

MODERN ECCLESIASTICAL ARCHITECTURE—
  22, 23, and 24.—The Church of the Annunciation, Bryanston Street, London, W., 165, 169, 171.
Monument, Canadian, at St. Julien, 383.

NATIONAL AMALGAMATED APPROVED SOCIETY'S OFFICES, 135.
National Bank, Liverpool, 283, 289, 291.
No. 223 Regent Street, 751, 753, 759.

PAGANI'S RESTAURANT, 129.
Prinsted Farmhouse, 319, 321.

R.A.F. WAR MEMORIAL, 125.

SAN PETRONIO, BOLOGNA, 85.
Scala Theatre, Edinburgh, 393.
Shepherd's Bush Pavilion, 509.
Sherfield Court, Hampshire, 731.

SHOP FRONTS—
  14.—No. 11 Cornfield Terrace, Eastbourne, 94–5.
  15 and 16.—No. 223 Regent Street, 751, 753.
Southport, New Bank at. Francis Jones and H. A. Dalrymple, F. and A.R.I.B.A., 53, 55.
"Stonedge," Leek-Wootton, 495–7.

TEMPLES OF SUN AND MOON, 401.
Theosophical Society, Headquarters, 13, 14, 15.

WALLS OF A ROOM, DECORATION OF, 89, 90.
WAR MEMORIALS—
  35.—R.A.F. Memorial, Victoria Embankment, London, 125.
  36.—Brussels, 156.
  37.—Canadian Monument at St. Julien, 383.
  38.—Manchester City, 468–9.
  39.—St. Maur des Fosses, 820.
  40.—Bostock, 937.

ZWINGER, DRESDEN, 197.

ILLUSTRATIONS.

ABBEY CHURCH, 199.
Academic Dress at the Northern Architect tural Association, 954.
Admiralty Screen in Whitehall: Restoration, 609–13.

AIR VIEWS—
  Tokyo, 381.
  Bush House, Aldwych, 243.
Aldwych, Bush House, 229.
Alhambra Court at the Crystal Palace, 923.
American Women's Club, 863–73.

AMSTERDAM—
  House in Hurensgracht, 272.
  Entrance to a House on a Canal, 522.
Architectural Society, Liverpool: Past Presidents and Presidential Badge, 385–7.
Arms of Glass-painters' Guild in Tracery of East Window, St. Helen's Church, 317.
Armstrong College Library Competition, 430–1.
Athenæum, Glasgow, 7.

AVIGNON—
  Popes' Palace at, 526–7.
  Outside of Ramparts, 531.

BANKS—
  Martin's, 137.
  Bank of England, 158, 190.
  National Bank, Liverpool, 282.

BANKS—*cont.*
  National Exchange, Augusta, 505.
  Hibernian Branch, Dublin, 535–9.
  First National Bank of Jersey City, 558.
  Munster and Leinster Bank, Cork, Extensions, 942.
Basilican Church at Bologna, 84.
Belgian Memorial, Victoria Embankment, 303.
Bergen, Garden Pavilion at, 599.
Berlin, Offices of "Fishbein" and "Mendel," 201.
Bidlake, W. H., M.A., F.R.I.B.A., 220.

BIRMINGHAM—
  Civic Society Gold Medal, 220.
  Masonic Temple Competition, 513–5.
  Winning Design, 773.
Bishop's Throne, 483.
Blackheath, Grand Stand, 588–9.
Board Room at B.A.W.R. Association, Ltd., 577–9.
Bolesworth Castle, Cheshire, 793–5.
Bologna, Church of San Stefano, 83.

BOMBAY—
  Victoria Jubilee Technical Institute, 890.
  Memorial Fountain near Alexandra Docks, 893.
  Office Premises in Hornby Row, 894–5.
  Business Premises in Sandhurst Road, 897.

BOMBAY—*cont.*
  Business Premises in Frere Road, 899.
  Country House at Poona, 901.
  Villa in Reynolds Road, 902.
  Residential Block in Owen Dunn Road, 902.
  Alexandra Dock Railway Station, 903.
Bosham, Sussex, Cut Mill, 352–8.
Bostock War Memorial, 937.
Bournemouth Pavilion, 64, 67, 70, 97.
Branfield Church Screen, 433.
Bremerhaven, Stadttheater, 201.
Breslau, Jahrhunderthalle, 201.
British Australian Wool Realization Association, Ltd., Board Room in Offices, 577–9.
British Empire Exhibition, 334–7.
Brook House, Colwall, 829–33.
Brunel Monument, Victoria Embankment, 302.
Bryanston Street, Church of the Annunciation, 164–75.
Bungalow at Maldon, Essex, 548–9.
Burlington Arcade, 138.
Burnet, Sir John, Caricatured, 5.
"Burtons," Wimbledon, 582-3.
Bush House, 229–60, 362–3, 396–7.

BUSINESS PREMISES—
  Sandhurst Road, Bombay, 897.
  Frere Road, Bombay, 899.
Butler, C. McArthur, 814.

CABINET, ITALIAN WOODEN, 345.
Cadinen Church, 199.
Caird Hall, Dundee, 638, 641, 716–23.

CAMBRIDGE—
  New Baths and Changing-room, St. John's College, 673–81.
  Collegiate Buildings Competition, 683–7.
Canadian Monument at St. Julien, 382.
Candelabra of Renaissance and Eighteenth Century, 434.
Canterbury City War Memorial, 117.

CARICATURES—
  Sir John James Burnet, A.R.A., 5.
  Paul Waterhouse, PP.R.I.B.A., 6.
  J. Alfred Gotch, P.R.I.B.A., 713
  Lord Riddell, 714.
  W. Curtis Green, 714.
  Edmund Gosse, 797.
  Raymond Unwin, 935.
Carolean Pulpit, Newport, Isle of Wight, 432.
Carshalton War Memorial, 521.
Cathedral, Peterborough, 745–6.
Cenotaph at Hull, 364.
Central Pavilion, "Zwinger," Dresden, 197
Charabanc Station, Studies by London University Atelier, 826–7.
Charlton, Mr. F. L., A.R.I.B.A., Hon. Secretary of the Leeds and West Yorkshire Architectural Society, 160.
Chartreuse Monastery, Villeneuve, 528.

Cherchel, 45.
Chesterfield Parish Church Nave, 1.
Chicago, Duplex Apartment House, 950.
Christ Church, Brixton, 131.
CHURCHES—
  San Stefano, 83.
  Basilican of San Petronio, 84.
  Christ Church, 131.
  English Mission, 137.
  The Annunciation, 164.
  Cadinen, 199.
  Pelplin Abbey, 199.
  St. Agatha, 221.
  Free Church, 375.
  St. Etienne's, 529.
CINEMAS—
  Tivoli, 417.
  Shepherd's Bush Pavilion, 509.
City Hall, Cork, and Municipal Buildings, 331–3.
Claude Lovat Fraser, Grave of, Buntingford, 93.
Collapsible Staircase, 516.
Colour Plates: A.A. Students' Work, October 3, November 7.
COMPETITIONS—
  Lanark War Memorial, 25.
  Bournemouth Pavilion, 64.
  Manchester War Memorial, 111.
  Tunbridge Wells Pavilion, 261–3.
  Cork City Hall, 331–3.
  Hull Cenotaph, 364.
  Armstrong College Library, 430.
  Liverpool Shipping Office, Site of, 493.
    Willink and Dod's Design, 552–3.
    Winning Design, 562–70.
  Birmingham Masonic Temple, 513–5
  Greenwich Public Baths, 554–5.
  Manchester Masonic Hall, 601–6.
  Collegiate Buildings, Cambridge, 683–7, 877.
  D.I.C. House, Manchester, 724–7.
  Hull Art Gallery—
    Winning Design, 799–802.
    Swansea Masonic Buildings, 947.
Composite Capital, 545.
Conversion of Two Old Cottages, 616.
Cooke, S. N. (Portrait), 798.
Cork City Hall and Municipal Buildings Competition, 331–3.
Cornfield Terrace, Eastbourne, 94–5.
Corson, Mr. George, First President of the Leeds and West Yorkshire Architectural Society (Portrait), 159.
Cottage Building, Experiments in, 143–6.
COTTAGES—
  Front Elevation of Block, 163.
  Knutsford, Cheshire, 183.
  Prestatyn, N. Wales, 399.
  Thatched Cottage at Heale, 859.
Cow Houses, Construction of, 472–3.
Cradle Roof Trusses, Details, 883.
Crosby Hall, Principal Quadrangle, 824.
Crystal Palace, Alhambra Court, 923.
Cut Mill, Bosham, Sussex, 352, 357, 358.

DAVIES, E. C. (Portrait), 798.
Delft, Room at, 412.
DIAGRAMS—
  Dome Construction; Building Compensation, 882.
  Little Things, 916.
D.I.C. House Competition, Manchester: the Winning Design, 725, 727.
Drawing of Greenwich Hospital Dome, 762.
Dresden, Central Pavilion, 197.
Durham County War Memorial, Proposed, 371.
DUTCH ARCHITECTURE—
  "Zwinger," Dresden, 197.
  Sea Wall, Gatem Enkhuizen, 230.
  House in Hurensgrach, Amsterdam, 272.
  Pump in Fish Market, Middleburg, 310.
  Houses in Haarlem, 376.
  Room at Delft, 412.
  Entrance to a House at Amsterdam, 522.
  Enkhuizen, Warehouse, 668.
  Enkhuizen Town Hall, 230.
  Monikendam, Doorway and Window Detail, 924.

EAST ANGLIAN SCREEN, BRAMFIELD, SUFFOLK, 433.
East Prussia, Small Houses in Re-built Town, 395.
Edinburgh, Scala Theatre, 393.
ENKHUIZEN—
  Gate in Sea Wall, 230.
  Warehouse of Old East India Co., 668.
  Town Hall, 782.

EXHIBITIONS—
  British Empire, 334.
  Decorators' (Temple of Paint), 619.
  Gothenburg Jubilee, 629–37.
  International Exhibition of Decorative Art at Monza, 927.
Experiments in Cottage Building: Details of Floors, Roofs, Doors, Windows, and Staircase, 295–300.

FAIRNALIE MANSION HOUSE, 8–9.
Farleigh, Somerset, Wrought-iron Gate at, 433.
"Favorite" Design for St. Paul's Cathedral, 763.
Finial from a Gate or Screen in Wrought-iron, 309.
"Fishbein and Mendel," the Lindenstrasse, Berlin, 201.
Flockton, T. J., the late (Portrait), 939.
Floor Construction, New System (Diagrams), 777.
Florence, Giotto's Tower, 487.
Fountain Court, Chartreuse Monastery, Villeneuve, 528.
Fountain in the Stadtpark, Hamburg, 203.
Fourth Green, Sandwich, 875.
Franklin Field Stadium, University of Pennsylvania, Philadelphia, 506–7.
Free Church, 375.
Friedhofskapelle in Frohnau, 201.
Frohnau, Friedhofskapelle, 201.
Furniture of Sir John Soane, 275–81.

GARDEN PAVILION OLD BERGEN, 599.
Gate in the Sea Wall, Enkhuizen, Holland, 230.
Gateway to House at Chestnut Hill, Pennsylvania, U.S.A., 689.
Geneva, International Labour Office, 843–5.
GERMAN ARCHITECTURE—
  Small Houses in East Prussia, 375.
  Free Church, 376.
  Ulm Cathedral, 594.
  Castle Erbach-Furstenau, 597.
  Nymphenburg, 598.
  Hindenburg Bridge, 599.
  Bergen Garden Pavilion, 599.
Gibbs, H. B. S. (Portrait), 940.
Giotto's Tower, Florence, 487.
GLASGOW—
  Athenæum, 7.
  Western Infirmary, 10.
  Municipal Buildings, 447, 455–67.
  University Sports Pavilion, 887.
Glass-Painters' Guild, Arms of, 317.
Gold Medal of the Birmingham Civic Society, 220.
Gothenburg, 349, 633.
Gothenburg Jubilee Exhibition, 629, 630, 633 7.
Grandstand at Rectory Field, Blackheath, 588–9.
Grave of Claude Lovat Fraser, 93.
GREENWICH—
  Public Baths and Washhouses Competition, 554–5.
  Hospital Dome, Drawing, 762.
Grigg's Cross, near Orpington, Kent, House at, 398.
Groomsbridge, Wrought-iron Gate, 192.

HAARLEM: HOUSES ADJOINING THE GREAT CHURCH, 376.
HAMBURG—
  Water Tower, 191.
  Fountain in Stadtpark, 203.
Hampstead Garden Suburb, House at, 20.
Harvey, Nichols & Co., Ltd., New Premises for, 148–150.
Head of "The Spirit of the Revolution," from the Group on the Arc de Triomphe, 411.
Heale, Cottage at, 859.
Henry Jarvis Scholarship, 32–33.
Hibernian Branch Bank, Sackville Street, Dublin, 535.
Hindenburg Bridge, Berlin, 599.
H.M.S. "Resolution," 271.
HOTEL KITCHEN—
  Plan of, 437.
  Key to Plan, 438.
House of Commons, Mosaic in the Lobby of, 80.
HOUSES—
  Constable Close, Hampstead, 19, 20, 23.
  Cheam, Surrey, 42.
  Silloth, Cumberland, 98–9.
  Hurensgracht, Amsterdam, 272.
  Haarlem, 376.
  on St. George's Hill, Weybridge, 389.
  in Rebuilt Town of East Prussia, 395.
  at Grigg's Cross, Orpington, 398.
  Sherwood, Newton St. Cyres, Devon, 428.

HOUSES—*cont.*
  Addison Road, Kensington, 489.
  Old House on Canal, Amsterdam, 522.
  No. 65 Rutland Gate, 532–3.
  Bungalow at Maldon, Essex, 548–9.
  Sherwood Court, Hampshire, 731.
  Welwyn Garden City, 770–1.
  Bolesworth Castle, Cheshire, 793–5.
  Brook House, Colwall, 829–833.
  Thatched Cottage at Heale, 859.
  The Fourth Green, Sandwich, 875.
  in Welwyn Garden City, 946.
  Duplex Apartment House in Chicago, 950.
HOUSING SCHEMES—
  Winchester, 691–700.
HULL—
  Cenotaph Competition, 364.
  Art Gallery Competition (Winning Design), 799–802.
Hurensgracht, House in, 272.

INFIRMARY, WESTERN, GLASGOW, 10.
Inns of Court O.T.C. War Memorial, 303.
Islington Municipal Buildings, 643–651.
ITALIAN RENAISSANCE, ARCHITECTURE OF—
  20.—Porch of San Petronio, 85.
Italian Wooden Cabinet, 345.

JAHRHUNDERTHALLE, BRESLAU, 201.
Jersey City, First National Bank, 558.
Jones, Alfred E. (Portrait), 330.
Jutland War Memorial, 223.

KAIROUAN, 47.
Kelly, Stephen S. (Portrait), 330.
Knutsford, Cheshire, Cottages at, 183.

LANARK WAR MEMORIAL, 25.
Leeds University, 51.
Library, Model of a Small Public, 339.
Little Things that Matter (Diagrams), 110, 655–7.
LIVERPOOL—
  National Bank, 282–92.
  Architectural Society, Past Presidents and Badge, 385–6–7.
  Liverpool Victoria Friendly Society's Building, 403–4–5.
  Shipping Office Competition, 659.
  Doorway in Rodney Street, 840–1.
Lombard Hall, Proposed, 440–1.
Loughborough War Memorial Tower, 325, 327.
LUTYENS, SIR EDWIN—
  Design for Manchester War Memorial, 468.
  on Modern Architecture, 672.

MANCHESTER—
  City War Memorial (Design), 468–9.
  D.I.C. House Competition, 724–7.
Mansfield College Chapel, Monument in, 79.
Map Showing Relative Densities of Population of New York, 452.
Margaret MacDonald, Monument to, 303.
Married Saints and their Children, Holy Trinity, Goodramgate, 315.
Martin's Bank, 137.
Marylebone, New Elementary School, 134.
Masonic Hall Competition, Manchester, 601–6.
Masonic Temple, Birmingham, 773.
Memorial Fountain near Alexandra Docks, Bombay, 893.
Middelburg, Pump in, 310.
Ministry of Pensions Offices, 207–17.
Miriam Palace, Sikri, 910–22.
Mission Church, Safed, Galilee, 137.
Models of a Small Public Library, 339.
Monikendam, Holland: Detail of Door and Window, 924.
MONUMENTS—
  Mansfield College Chapel, Oxford, 79.
  Brunel, Victoria Embankment, 302.
  Margaret MacDonald, Lincoln's Inn Fields, 303.
  Canadian, at St. Julien, 382.
Morley, Mr. Eric, F.R.I.B.A., President of the Leeds and West Yorkshire Architectural Society (Portrait), 160.
Morton, the late Mr. J. H., F.R.I.B.A. (Portrait), 73.
Mosaic in House of Commons, 80.
MUNICIPAL BUILDINGS—
  Cork, 331–3.
  Glasgow Extension, 447, 455, 467.
  Islington, 643–51.
Mural Tablets, St. Botolph's, 471.
Munster and Leinster Bank Extensions, Cork, 942.
Muntz Park, Birmingham, 222.

NATIONAL AMALGAMATED APPROVED SOCIETY'S OFFICES, 135.
NATIONAL BANK—
  Liverpool, 282–92.
  Exchange, Augusta, 505.
  Jersey City, 558.
Nyland, Model Plan, 1874, 350.
Nymphenburg, Munich, 598.

OFFICE PREMISES IN HORNBY ROW, BOMBAY, 895.
Ovenwald, Castle Erbach-Fürstenau, 597.
Oxford University College Pavilion, 904

PALACE OF WHITEHALL IN ABOUT THE REIGN OF JAMES II, 823.
Parliament Buildings for Northern Ireland, 499–504.
PAVILIONS—
  Bournemouth, 64–97.
  "Zwinger," Dresden, 197.
  Cumberland Lawn Tennis Club, 218.
  Garden Pavilion, Old Bergen, 599.
  Sports Pavilion, Glasgow University 887.
  University College, Oxford, 904–5.
Pelplin Abbey Church, 199.
Penancers' Window, the Nave, York Minster, 314.
Pergolesi, Design by, 819, 855.
Peterborough Cathedral, 745–6.
Pictorial Review, 108–9, 952–3.
Piedmont, Design for Window in Villa Stupinigi, 668.
PITE, PROFESSOR BERESFORD, 117–8.
  Works of, 129–139.
  Dinner to, 140.
PLANS AND DIAGRAMS—
  Scala Theatre, Edinburgh, 392.
  Hotel Kitchen, 437.
  Site of Manchester City War Memorial, 468.
  Site of Holt Building, 491.
  Part of an American Inn, 552.
  University College Pavilion, Oxford, 904.
  Site of Durham Cottage Hospital, 920.
Pont D'Avignon and Palace of the Popes, 527.
Popes' Palace, Avignon, 526–7.
Porte Cochere for City Hotel, 12hr. Sketch Design, 223.
PORTRAITS—
  Wyville-Home, G., A.R.I.B.A., and Shirley Knight, A.R.I.B.A., 66.
  Morton, J. H., F.R.I.B.A. (late), 73.
  Williams, Edwin, A.R.I.B.A., 78.
  Pite, Professor Beresford, F.R.I.B.A., 128.
  Corson, George (late), 159.
  Charlton, F. L., A.R.I.B.A., 160.
  Morley, Eric, F.R.I.B.A., 160.
  Bidlake, W. H., M.A., F.R.I.B.A., 220.
  Jones, Alfred E., M.R.I.A.I., 330.
  Kelly, Stephen S., M.R.I.A.I., 330.
  Horsfall, T. B. (late), 386.
  Picton, J. A., F.S.A., 386.
  Hinde, E. Percy, F.R.I.B.A., 387.
  Thornely, Arnold, F.R.I.B.A., 387, 491.
  Grayson, C. Hastwell, M.A., F.R.I.B.A., 387.
  Adams, Thomas, 414.
  Savage, Rupert, F.R.I.B.A., 453.
  Rowse, Herbert J., A.R.I.B.A., 492, 729.
  Green, W. Curtis, A.R.A., F.R.I.B.A., 709.
  Waterhouse, Paul, PP.R.I.B.A. (Presentation Portrait), 710.
  Budden, Lionel B., M.A., A.R.I.B.A. 729.
  Cooke, S. N., F.R.I.B.A., 798.
  Davies, E. C., A.R.I.B.A., 798.
  Butler, C. McArthur, 814.
  Honeyman, James M., A.R.I.B.A., 913.
  Flockton, T. J., F.R.I.B.A. (late), 939.
  Wigfull, J. R., F.R.I.B.A., 940.
  Gibbs, H. B. S., A.R.I.B.A., 940.
Presentation Portrait of Mr. Paul Waterhouse, 710.
Prestatyn, North Wales, Cottage at, 399.
Prinstead Farmhouse, 318, 321.
Proposed Durham County War Memorial, 371.
Proposed Lombard Hall, Little Britain, 440–1.
Prudential War Memorial, 346.
Public Library, Model of a Small, 339.
Pulpit, Carolean, at Newport, 432.
Pump in Fish Market, Middelburg, Holland, 310.

RAMPARTS, AVIGNON, 531.
Recreation Centre at Muntz Park, Birmingham, 222.

Regent Street, No. 223, 751, 759.
Reinforced Concrete Window, 482.
"Resolution," H.M.S., 271.
Roman Letters and Numerals, 658.
ROME—
  Architecture Scholarship, Winning Design, 30–1.
  Scholarship, Design Awarded, Henry Jarvis Studentship, 32–3.
Royal Academy School of Architecture: Students' Work, 365–8.
R.A.F. Memorial, 124–7.
R.I.B.A. Medal and Diploma for the Best London Street Frontage, 1922, 715.
Rutland Gate, W., No. 65, 532–3.

ST. AGATHA'S CHURCH, BIRMINGHAM, 221.
St. Botolph's, Aldersgate, Mural Tablets in, 471.
St. Etienne's Church, Uzés, 529.
St. George's Hill, Weybridge, House on, 389.
St. John's College, Cambridge, New Baths and Changing Room, 673–81.
St. Julien, Canadian Monument at, 382.
St. Mary Abbots, Kensington, Mural Tablets in, 471.
St. Maur des Fosses War Memorial, 820.
St. Paul's Cathedral, "Favorite" Design, 763.
Saints, Married, and their Children, 315.
St. William Window, York, 316.
Sandwich, the Fourth Green, 875.
San Petronio, Bologna, 84–5.
San Stefano, Church of, 83.
Scala Theatre, Edinburgh, Plan of, 392.
School, New Public Elementary, Marylebone, 134.
Screen Wall to the Law Courts, London, 303.
SCULPTURE—
  Bronze Statuette, 28.
  Memorial Tablet, 79.
  Prudential War Memorial, 346.
  Temples of the Sun and Moon, 401.
  Head from Arc de Triomphe, 411.
Sea Wall, Gate in, 230.
Shepherd's Bush Pavilion, 508.
Sherfield Court, Hampshire, 731.
Sherwood, "St. Cyres," Devon, 428–9.
Sidi Bou Saïd, 45–7.
Sidney Ball Memorial, 93.
Silloth, Houses at, 98–9.
Small Houses in Rebuilt Town of East Prussia, 395.
Soane, Sir John, Furniture of, 275–81.
Sousse, 45.
Southport, New Bank at, 52, 63.
Stadttheater, Bremerhaven, 201.
Staircases, Detail at 15 Queen Square, Bristol, 557, 593.
"Stonedge," Leek-Wootton, Warwickshire, 495.
Students' Work at the Royal Academy, 365–8.
Sun and Moon, Temples of, 401.
Swansea Masonic Buildings Competition, 947.
Sydney University, New Buildings for, 74.

TEMPLE BAR—
  Hertfordshire, 100.
  Fleet Street, 178.
Temple of Nimes, La Maison Carrée, 908–9.
"Temple of Paint" at the Decorators' Exhibition, 619.
Temples of the Sun and Moon, 401.
Thatched Cottage at Heale, 859.
Thatching Implements, 860–2.
Theatre, Scala, Edinburgh, 392.
Thirty-one Old Bond Street, 133.
Timgad, Temple at, 49.
Tivoli Cinema Theatre, 417–25.
Tokyo, Air View of, 381.
Tolsey, Burford, 889.
TOWN PLANNING—
  Gothenburg, 349.
  Nyland, 350.
  Tromso, 351.
Tromso, 351.
Tunbridge Wells Pavilion, 261–3.
Tunis, Typical Window in, 49.

ULM CATHEDRAL: THE PORTAL, 594.
UNIVERSITIES—
  Pennsylvania, Franklin Field Stadium, 506–7.
  Oxford University College Pavilion, 904–5.
University College Pavilion, Oxford, 905.
Unwin, Raymond (Caricature), 935.
UZÉS—
  St. Etienne's Church, 529.
  Arcaded Street, 531.

VATICAN, PAPAL VILLA, 426.
Victoria Jubilee Technical Institute, Bombay, 890.
VILLENEUVE—
  From Avignon, 528.
  Fountain Court, 528.

WALLS OF A ROOM—
  Decoration of, 88.
  Screen Walls, 303.
WAREHOUSE—
  Little Portland Street, 134.
  Enkhuizen, Holland, 668.
WAR MEMORIALS—
  Lanark, 24–5.
  Montgomeryshire, 41.
  Leeds University, 51.
WAR MEMORIALS—*cont.*
  R.A.F., Victoria Embankment, 124–7.
  O.T.C. Inns of Court, 303.
  Belgian, Victoria Embankment, 303.
  Loughborough, 325.
  Prudential, 346.
  Durham County (Proposed), 371.
  Window in St. Augustin's Hall, 482.
  Carshalton, 521.
  Durham School, 541–3.
Waterhouse, Mr. Paul, Presentation Portrait, 710.
Water Tower, Hamburg, 191.
Weather Clock by Sir Christopher Wren, 764.
Welwyn Garden City, House in, 770–1, 946.
West End Club-house, Design for a, 118.
Weybridge, a House on St. George's Hill, 388.
Wigfull, J. R. (Portrait), 940.
Williams, Edwin, A.R.I.B.A. (Portrait), 32–3.
Winchester Housing Scheme, 691–700.
Window in Reinforced Concrete at St. Augustine's Church, Hull, 482.
Windsor, Design for Charles I's Mausoleum, 761.
WROUGHT IRONWORK—
  Garden Gate at Groomsbridge, 192.
  Finial from Gate or Screen at Hampton Court, 310.
  Gate at Farleigh, Hungerford, Somerset, 433.
Wyville-Home, G., A.R.I.B.A. (Portrait), 66.

YORK MINSTER—
  Penancers' Window, 314.
  St. William Window, 316.
Ypres, 781, 785–91.

"ZWINGER," DRESDEN, 197.

ARTISTS AND AUTHORS.

ADAMS, PROFESSOR HENRY, 77, 264, 301, 406, 435, 443, 622.
Adams, Thomas, F.S.I., 451.
Andrew, H., 482, 554.
Armstrong, Edward, 476.
Ashley, H. V., F.R.I.B.A., 65.
Ashworth, T. Arnold, and Son, 282–3, 293.
Ayrton, Maxwell, F.R.I.B.A., 334.

BARNES, MAJOR HARRY, VP.R.I.B.A., 233, 379, 561.
Bell, R. Anning, R.A., 80.
Berg, Max, 201.
Bernoulli, Hans, 201.
Bhedwar and Bhedwar, F.R.I.B.A., 890, 893–903.
Birnstingl, H. J., A.R.I.B.A., 11, 761, 835–8.
Blomfield, Sir Reginald, R.A., F.R.I.B.A., 124.
Blundstone, E. V., 346.
Blunt, A. C., 88–91.
Bolton, Arthur T., F.R.I.B.A., 275.
Blow and Billerey, F.R.I.B.A., 856, 865–873.
Bossom, Alfred C., F.R.I.B.A., 558.
Bourchier, Tatchell, and Galsworthy, 521.
Braddell and Deane, 352, 532–3, 875, 937.
Bridges, Walter, & Co., 587–9.
Brierley, Walter H., F.R.I.B.A., 541–3.
Brinton, Selwyn, 927.
Budden, Lionel B., M.A., A.R.I.B.A., 79, 683.
Burnet, Sir John, A.R.A., F.R.I.B.A., 7–10.
Butler, A. S. G., A.R.I.B.A., 88–91.
Byrne, William H., and Son, 535–9.

CAVE, WALTER, F.R.I.B.A., 428.
Chancellor, Beresford, M.A., F.S.A., 83, 823.
Clemesha, Chapman, 382.
Collcutt and Hamp, and J. F. Watkins, 71.
Connard, Phillip, A.R.A., 88–91.
Cordingley, R. A., A.R.I.B.A., 30–31.
Craze, Romilly Bernard, 368.
Cooke and Davies, F. and A.R.I.B.A., 19, 20, 23, 798–802.
Creswell, H. Bulkeley, F.R.I.B.A., 495–6.
Crewe, Bertie, and Gunton and Gunton, 416.
Cross, Alfred W. S., and Kenneth M. B., 673.
Cullen, Lochhead and Brown, 25.
Culpin, Ewart, 348.
DAUPHIN AND LESTANG, 820.
Davidge, W. R., F.R.I.B.A., 414.
Davies, Crossley, 232.
Dawber, E. Guy, F.R.I.B.A., 829-833.
De Jong, F., 654.
Dod, H. A., A.R.I.B.A., 176.

EASTON, MURRAY, A.R.I.B.A., 111, 633.
Easton and Robertson, 398–9.
Elijah, Samson A., 807, 911–2.
Epitaux, M., 843.

FAGAN, WILLIAM, 245.
Ford, E. Onslow, R.A., 28.
Forrest, G. Topham, F.R.I.B.A., 785.
Fortescue, G. Alan, A.R.I.B.A., 804.
Fyfe, D. Theodore, F.R.I.B.A., 128.

GARDNER, J. STARKIE, 271.
Gaskin, Arthur J., 220.
Gill, Eric, 51.
Gotch, Alfred, P.R.I.B.A., 671.
Graddon, R. M., 841.
Green, Curtis, A.R.A., F.R.I.B.A., 691.
Gunston, E. Leslie, A.R.I.B.A., 471.

HAKE, G. D. GORDON, A.R.I.B.A., 526.
Hall, E. Stanley, F.R.I.B.A., 388.
Hare, William L., 370.
Hargroves, Miss, 223.
Harris, E. Vincent, F.R.I.B.A., 261.
Hastings, H. de C., 5, 6, 713–4.
Helmle and Corbett, A.I.A., 234, 362–3, 396–7.
Hembrow, J., A.R.I.B.A., 342.
Hemm, Gordon, 98–9.
Hennell, Murray, F.S.I., 87, 162, 682, 769, 874.
Hill, A. and Henry H., 942.
Hill, Oliver, A.R.I.B.A., 318–323.
Holt, Gordon H. G., 196, 293, 597.
Home, G. Wyville, A.R.I.B.A., 66.
Honeyman, James M., A.R.I.B.A., 887.
Horth, F. J., and H. Andrew, 554.
Hubbard, George, and Sons, 41.
Hughes, T. Harold, 364.

JAGGARD, WALTER R., F.R.I.B.A., 142, 294.
Jagger, C. S., 156.
Jarrett, J. S., 528.
Jones and Kelly, 330.
Jones, W. T., 371, 439.
Jones and Dalrymple, F. and A.R.I.B.A., 52.
Joseph, Delissa, F.R.I.B.A., 29, 141.
KARSHISH, 121, 141, 313, 525, 749.
Kaufmann, Oscar, 201.
Kickton, Arthur, 199.
Knight, Shirley, A.R.I.B.A., 64, 65.
Knowles, John A., 314.

LOBBAN AND GENEVE, 404–5.
Long, C. W., 404–5.
Loweth, Sidney Harold, 367.
Lutyens, Sir Edwin L., R.A., F.R.I.B.A., 2, 13–17, 468–9, 619, 672.

MACFARLANE, ALAN GEORGE, 365.
Maufe, Edward, M.A., F.R.I.B.A., 93.
Mawson, Thomas H., 774.
Mellor, Meigs, and Horne, 689.
Monson, E. C. P., F.R.I.B.A., 643–51.
Moore, Leslie T., F.R.I.B.A., 746.
Morley, Eric, 848.
Murdoch, W. G. Blaikie, 380.
Murray, Colin Hay, A.R.I.B.A., 94–5.

NAYLOR, J. J. S., F.R.I.B.A., 440.
Newman, Winton, F.R.I.B.A., 67.
Nicholson, M., 223.

OLIVER, BASIL, F.R.I.B.A., 548–9.
Orphoot, Burnett N. H., 29.
Orphoot and Whiting, 392.
Owen, Scotter, 218.

PARKER, BARRY, F.R.I.B.A., 616–7.
Parkes, Kineton, 27, 147, 226, 440, 467, 549, 591, 615–6, 625, 702, 737, 813, 886, 959.
Part, Alexander F., 436, 550.
Pepler, G. L., 349.
Philipp, Hans J., 376, 395.
Pierce, Robert, F.R.I.B.A., 101, 102, 179, 180.
Pite, Professor Beresford, F.R.I.B.A., 128.
Poelzig, Hans, 191.
Poole, Henry, 245.
Pöppelmann, 197.
Powell, Alfred H., 487, 859.
Prestwich, J., and Sons, 724–7.

REBORI, WENTWORTH, AND DEWEY, 950.
Rees, V. O., 157.
Reilly, Professor C. H., F.R.I.B.A., 338.
Ricardo, Halsey, F.R.I.B.A., 489.
Robertson, H. M., S.A.D.G., 45, 511.
Rothery, G. Cadogan, 302.
Rowse, Herbert, A.R.I.B.A., 492, 683.
SAVAGE, RUPERT, F.R.I.B.A., 453, 513–15, 773.
Sayer, Harvey R., 110, 181, 224, 655–7, 915.
Schmidt, Mott B., 428.
Schumacher, Fritz, 203.
Scott, Basil, 369, 585, 735.
Scott, E. W. B., 884.
Shelley, A. N. C., 661.
Simpson, John W., PP.R.I.B.A., 334.
Smith, A. Dunbar, F.R.I.B.A., 430–1.
Smith, G. H. Tyson, 79.
Soissons, Louis de, A.R.I.B.A., S.A.D.G., 770–1, 946.
Stahl-Urach, Carl, 201.
Stowell, H. Spencer, 516.
Sullivan, L. Sylvester, A.R.I.B.A., 582–3.

TAIT, T. S., 156, 877.
Tapper, Walter, F.R.I.B.A., 164, 327.
Tatchell, Sidney, and Wilson, 577–9.
Thomson, James, F.R.I.B.A., 638, 716–23.
Thornely, Arnold, F.R.I.B.A., 499–504.
Thornely and Rowse, 562–571.
Tijou, Jean, 309.
Turner, Thackeray, 487.

UNWIN, RAYMOND, F.R.I.B.A., 607.

WALSH, JOHN W. T., 625.
Watson, Salmond, and Gray, 447–8, 455, 467.
West, J. G., 207, 217.
Williams and Cox, 148.
Williams, Edwin, A.R.I.B.A., 32–33.
Williams-Ellis, Clough, 764–7, 792–5, 905.
Williams, E. O., B.Sc., A.M.I.C.E., 334.
Wilkinson, Leslie, F.R.I.B.A., 74.
Willink and Dod, 652–3.
Wood, W. L., 195.
Worthington, Hubert, M.A., A.R.I.B.A., 183.
Worthington, Thomas, and Sons, 601–606.

YATES, COOK, AND DARBYSHIRE, 750–9.
Yerbury, F. R., 45.

PRINTED BY EYRE AND SPOTTISWOODE, LTD., HIS MAJESTY'S PRINTERS, DOWNS PARK ROAD, LONDON, E.8.

720.5
ARB

Wednesday, July 4, 1923. Vol. LVIII No. 1487

THE ARCHITECTS' JOURNAL & Architectural Engineer

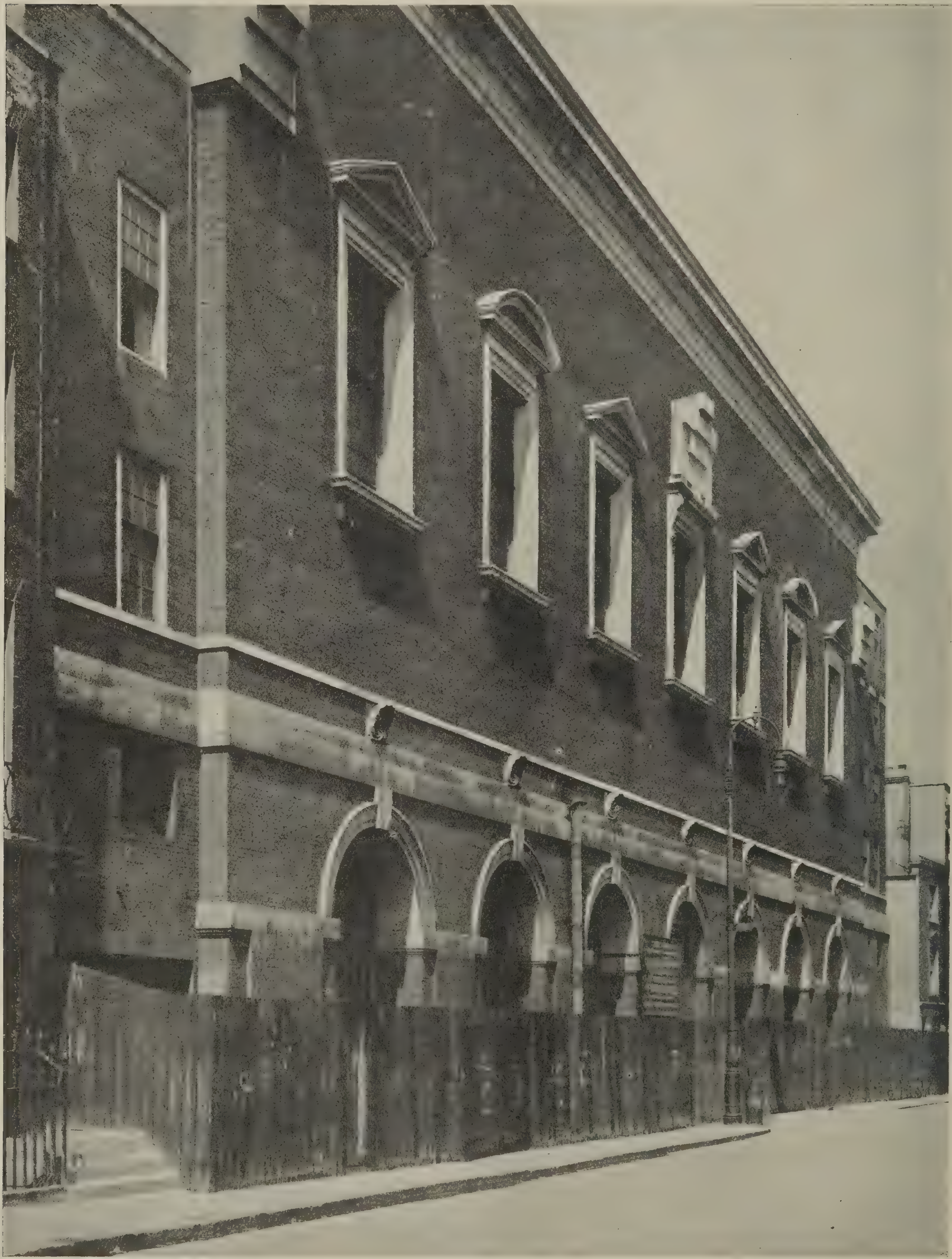
With which is incorporated "The Builders' Journal."

THE NAVE OF CHESTERFIELD PARISH CHURCH

27-29 Tothill Street, Westminster, S.W.1.

Current Architecture. 178.—Building designed as the Headquarters of the Theosophical Society, London: Elevation to Burton Street

Sir Edwin L. Lutyens, R.A., Architect



This building was erected during the years 1912–16, and was taken over by the Government for war purposes. Our photograph shows the rear elevation in its present condition. We understand that the building is shortly to be completed. Some further illustrations are given on pages 13, 15, and 17.

THE
ARCHITECTS' JOURNAL
27-29 Tothill Street, Westminster, S.W.1.

Wednesday, July 4, 1923 Volume LVIII. No. 1487

Art in Social Service

MANY artists are asking to-day if there is any place in the common life for them. And among them are not a few architects. Art is too highbrow to be popular, too costly to reach the masses. It is an exotic plant, too delicate to be grown out of doors among the hardy annuals which the people love. And so the artists starve and the nation suffers the loss of perhaps the most important social service of all. It is a tragedy of misplaced effort and misunderstood function.

Much talent of a high order is allowed to run to seed for want of proper care. The artist, apart from a chosen few who have genius that nothing can suppress, has become an outcast for whom no room can be found in the body politic. It is an astounding fact that, although we have plenty of architects to do all the work this country could need in the way of building, only a negligible proportion of the houses in which the people live have been designed by them. That is clearly wrong. Domestic architecture is no less important than public. And it is to the common weal that our citizens should be able to employ the wealth of architectural skill which our schools train year by year for their benefit. The same argument applies to all art, but one question qualifies it. That is the problem of using our artists in a way most fitted to enable them to give their best to the community and to enable the community to employ them in artistic service.

But lured by false ideals of their functions the painter and sculptor have forgotten that their arts are subservient to the Mistress and Mother of them all. Their ancestors brought art up to the level of the common life. But the modern men have lost touch with the people because they have ceased to perform any social service.

And they will never get back to the rightful place of the artist in the common weal until they serve again. The Prince Consort saw this and did much to restore art to its true position by founding the Victoria and Albert Museum and the Royal College of Art. That is why the suggestion of Mr. Thomas Derrick, the present instructor in decorative painting, in a letter to "The Times," is so welcome. Mr. Derrick places his finger on the weakest spot in modern art. "For the practice of the 'fine arts' only a very small proportion of the thousands of students in our art schools," he writes, "can expect ever to be really qualified. But the assimilation of this great mass of more or less trained artistic capacity by society is an urgent matter, both in justice to the students, and also for the proper conservation and application of our artistic resources."

He suggests that "there is no reason why men, or bands of men, with considerable talent, if not the highest artistic talent, should not by means of simple and unpretentious mural painting and decoration make more pleasant the places where ordinary people foregather in the course of their daily life. The artistic capacity exists. There has already been a splendid traditional school of mural painting in England, and there can be again. All that is required to restart it is some faith in our artistic resources, some little organization, and a not very great outlay. In quite a short time we could have bands of painters and decorators, founded upon the most approved guild basis, engaged upon congenial work of immense social value. They would have to be 'painters and decorators' in the ordinary trade sense and not gentlemen artists. They would not have to expect more than the ordinary wages of other skilled workmen, assuming that they could count upon reasonably continuous employment." The idea is on the right lines, although the guild experiment proposed is not too certain of success in view of the failure of recent guild efforts. Yet it may be worth while to disregard the failures of others and to attempt a new venture with the advantage of earlier mistakes to guide them. Enthusiasm can do much. It will attack the impossible and sometimes confound the critics and the worldly wise.

Let the details of the plan of campaign be left to those who will work it. What is of more immediate interest is the bold proposal that artists should regard themselves as workmen, and accept payment as such. Despite the fact that this is strictly on the lines of the best tradition, it will not be readily accepted by those who now consider the status of art students as professional, with a social standing that entitles them to move in the best circles. Yet this matter of status drove many good men in the last century out of commercial design, for which they were trained under the scholarships they won at the Royal College of Art, into the rarer atmosphere of "pure art," whatever that may be. Some of them made good, but the majority starved and bitterly complained that in this philistine nation there was no true appreciation of the artist. With them, and with many to-day, the divine right of kings has merely given way to the divine right of artists, who are above the laws that govern the labour of ordinary folk. Mr. Derrick is right in using the term workmen, which properly regarded is the proudest title that any man may claim. And this is the way in which one of our greatest moderns looks at it. He would tell you, if you asked him, that he is a British workman. It happens that he is an artistic genius as well, but he is proudest of the fact that he is one of the world's workers. And, since he can pick and choose what he will do, he always selects those jobs which are of the greatest social service.

It has been the worst influence art has known for many centuries, this theory of gentility of occupation. It may well be a gentlemanly thing to do, this production of coloured canvases and carved stones, but it is not a gentlemanly thing to talk about it. Honest toil has one common standard of nobility. Its nobility is measured by its honesty and that alone. Any other standard is vicious and leads to snobbery and emptiness. This has certainly been the case in art. Service to mankind is the touchstone that refines all labour. And only there can art find itself again.

And when an artist makes service his aim he becomes coherent. He no longer tries to express the universe in terms of geometry, realizing that conic sections are not fit vehicles for the higher emotions. The artist who is out to do a job of work will be workmanlike, simple in his methods, his message, and his manner. He will want other people to know what he is saying, and he will bend his mind to the task of being plain. He will be working for to-day rather than to-morrow. He knows that if his work is good the morrow will take care of itself.

Mr. Derrick has put the need well. "They should select themes," he says about this decoration scheme of his, "appealing to the popular imagination, and be in no sense obscure or beyond the understanding of common men. On the contrary it should be their business to interpret the common mind as members of the community."

There, in a sentence, is the whole duty of art. Mr. Derrick's project deserves success—at any rate success for the idea, if not for the precise manner in which he suggests it should be carried out, for if some sort of project such as this is not supported and established it will be all the worse for art. It should mean that the old and proper alliance between architecture and the plastic arts will be renewed. If this re-union, after a divorce that should not have been permitted, does not take place it will endanger art and it will bode no good for architecture.

Professor Beresford Pite

We learn that Professor Beresford Pite, after twenty-three years of service in the cause of art education, is retiring from the Professorship of Architecture at the Royal College of Art, and a dinner is to be given in his honour on Friday evening, July 20. Particulars of this function are given on a later page of this issue. Professor Pite has had a distinguished and a fruitful career, both as a teacher and a practitioner of architecture. He has rendered inestimable service to art education. Ninety-five per cent. of the art students at the Royal College of Art have passed through his architectural course, and as most of these have become art teachers his influence has obviously been very far reaching. In the creation of fine buildings Professor Pite has shown convincingly how architectural precept may conform with practice. To his credit stand a number of fine things, all bearing testimony to the scholarly originality of his mind. One would wish, indeed, that the Professor could have found more time for architectural practice; the record of achievement in modern British architecture would, we are sure, have been greatly enriched had he been able to do so. It is gratifying to know that, though retiring from his professorship, he proposes to continue with his private practice. Freedom from the cares of an official office should afford him that leisure for creative work that must hitherto have been in part denied him. We hope that a large company will assemble at the dinner to do honour to one who has rendered conspicuous service to the cause of architecture.

The Rome Prize

We heartily congratulate Mr. Cordingley, of Manchester, and Mr. Williams, of Liverpool, on winning the Rome Prize and the Henry Jarvis Prize respectively. This year it is a case of the north first and the rest nowhere—"the rest," of course, meaning London, for no other part of the country was concerned in the final competition. London has been handsomely beaten, and will certainly not grudge the universities of the north their well-earned success. For all this, it seems that London was far from being outclassed. The standard of work produced by the A.A. men was, we understand, in no sense below that of Liverpool and Manchester. We think we are right in saying that the difference was not one of quality but one of character; and the north succeeded in getting the correct character—that is, what is officially regarded as the correct character for the Rome Prize. It certainly seems that there has been a distinct difference of opinion on this question of character. Generally speaking, the north has expressed itself in the terms of conventional Classic, while the south has endeavoured to do something on more progressive lines. That the purpose of so important a competition as the Prix de Rome should be open to two entirely opposite interpretations is regrettable, and seems to imply a vagueness in the conditions that should be rectified at the earliest possible moment. So much for the result of the competition. We now find it our duty to protest strongly against what must apparently be regarded as the deliberate decision not to hold in London a public exhibition of the designs submitted. Our felicitations would no doubt be more appreciated by the winners if we had had an opportunity of seeing the other drawings. As it is we are only able to offer an opinion on the competition from hearsay and private information. The reason given for not holding an exhibition is, we understand, that the R.I.B.A. galleries are in the hands of the builders. But surely there are other galleries available in London. Liverpool is to hold an exhibition on its own, and possibly the A.A. may do likewise; but decentralized and sporadic exhibitions can never take the place of a headquarters exhibition with all designs present. We sincerely hope that this year's dereliction will not rank as a precedent. It is unfair to the competitors and unfair to the public that no opportunity should be afforded for an impartial judgment of the designs.

The Tram and the Street

We note that the City Corporation has refused sanction to a scheme of the London County Council for tramways in Farringdon Road, Holborn, and Charterhouse Street. Simultaneously the City Fathers put forward a proposal for the construction of a new City street, 60 ft. wide, from St. Martin's-le-Grand to Gresham Street, at an estimated cost of £1,532,000, to be carried out on condition that the L.C.C. pays half this amount. The rebuff to the tramway proposal is not, perhaps, calculated to put the L.C.C. in the right frame of mind to provide very readily a cool three-quarters of a million towards the cost of the City street. But cases of this kind should be considered strictly on their merits. Our municipal representatives must come to see that unless London is regarded as a whole, rather than as a number of isolated and hostile parts, progress and improvement for the benefit of the whole metropolis become impossible. Tramways in the City are not wanted: the roadways are already far too narrow for traffic requirements—witness the proposal to construct the new City street. In any case, tramways will soon be an obsolete form of locomotion, and it would be a waste of public money to sink more capital in the construction of permanent way. The new street, however, by providing an alternative route to Liverpool Street, thus relieving the pressure on Cheapside, would be a real improvement, of benefit not only to the City Corporation, but to London as a whole. All this may be very obvious, but it is necessary to say it because sectional interests are apt to obscure the larger view, though we hope they may not do so in the present instance.

Popularizing Architecture

There are many ways of popularizing architecture, but the most effective is the publication of articles in the general Press. Architecture can be made extremely interesting to the general reader. Professor Reilly has the knack of making it so. His contributions to the Liverpool and Manchester newspapers are among the most readable features of the northern Press. Mr. Purchon is doing a similar work in South Wales. If only architects in every town in the country would endeavour to interest their fellow citizens in architecture in the same way it would not be long before we should see a notable improvement in public taste. Architecture can be made as interesting to read about as racing, lawn tennis, or cricket, and until it is generally tackled in this way all other efforts to interest the public must remain largely ineffective.

The Royal Gold Medal

Presented by Mr. Waterhouse to Sir John Burnet.

GREAT enthusiasm prevailed at the R.I.B.A., when Mr. Paul Waterhouse, P.R.I.B.A., presented Sir John Burnet with the Royal Gold Medal. The Council Chamber was filled to its utmost capacity, the company including many distinguished British and French architects. The Council guests of the evening were: Sir John J. Burnet, A.R.A., R.S.A., Hon. LL.D. (Royal Gold Medallist), Sir Aston Webb, K.C.V.O., C.B. (President, The Royal Academy), Sir Frederic Kenyon, K.C.B., T.D. (Director, The British Museum), The Rev. E. C. Pearce, D.D. (Vice-Chancellor, University of Cambridge), Sir Robert Lorimer, A.R.A., R.S.A., Sir Henry Newbolt, C.H., Mr. J. C. Squire, Mr. Gordon Selfridge, Lieut.-Col. H. P. Cart de Lafontaine, O.B.E., T.D., Mr. Arthur J. Davis, Mr. Norman A. Dick, Messieurs G. Legros (President, S.A.D.G.), J. P. de Saint-Maurice, G. Lisch, A. Schneider, A. Louvet, J. Godefroy, A. Arfvidson C. Lefevre, J. Hébrard, Leon Chifflot, (Members of the S.A.D.G.), Chretien Lalanne (representing the Société Centrale). On the walls of the Council Chamber was an immense array of photographs and drawings of Sir John Burnet's work. On one side stood a big model of the British Museum Extension.

SIR JOHN JAMES BURNET, A.R.A.

(From a Caricature by H. de C.)

The President's Address.

Mr. Waterhouse said: Our Gold Medal night is for three reasons the best night of our year. I put first among these reasons the fact that on this occasion as often as it occurs we recognize the substantial reality of the Royal protection under which we live. I do not merely mean that a tangible and ponderable piece of gold passes literally from Buckingham Palace to Conduit Street, though that in itself would be an act of kingly favour which we should all here appreciate, but that by a deed of gracious symbolism, the grace of which is by no means either empty or formal, our Monarch does actually submit us to the duty of making a choice on his behalf, does actually according to his Royal pleasure confirm our choice, and further does great honour to the President of the moment by allowing him to administer the Royal gift.

The second reason is that on this annual festival we bring to fulfilment the annual exercise of what may be called our critical generosity. Architects, though no outsider would guess it, are not always free from the chagrin of rivalry. I would not breathe the word jealousy, even if I were to whisper the word envy. But I have known circles in which the discussion of contemporary architecture was more tempered with justice than mercy, and a justice at that in which reproof was more conspicuous than applause. But when the Gold Medallist is being sought for these feelings are absent. I have been in my time on many a Gold Medal Committee. I am unwilling to say that those committees have never made mistakes, but I can say that I have never known judgment marred by misguided partiality, malice, or bias. The contest has often been keen—as indeed it should be—for the prize is great and the competitors are good and many, so that those on whom falls (with the Council) the task of selection have often an embarrassing discrimination to effect. But the embarrassment I can truly say is never tinged with any spirit but that of the apparent equalities of claimants. Claimants, I say, but the word is disastrous, for it can rarely, if ever, have happened that the medal has gone to one whose own voice has been raised in his favour. No, gentlemen, it is with ungrudging appreciation on the part of the selectors and with unassuming modesty on the part of the recipient, that this world-honoured gift from the throne of old England finds its way from giver to receiver.

And the third reason of this evening's outstanding pleasure is the climax of the event itself. That an architect or an advancer of architecture should stand forth in an assembly of representative architects of this country as the one man, British or foreign, chosen as the worthiest to receive their passing plaudits and their more permanent homage is as an event and a spectacle something to move the heart, something to stimulate the young, something to vitalize in the minds of all the keenest sense of the unity and brotherhood of art.

It is known to you all—for the Institute has spoken it and His Majesty has graciously confirmed the word spoken—that the man on whom our purpose has been unanimously bent in this year's decision is Sir John James Burnet, an Associate of the Royal Academy of Arts, and an Academician of the Royal Scottish Academy. His honours already are many. He holds the Doctorate of the University of his native Glasgow, Paris has given him that coveted distinction honorary corresponding membership of the Institut de France, and twice has he won (in bronze and in gold) the medal of the Salon. Of his executed works we all have knowledge, and among most Londoners that knowledge will relate chiefly to those works of his that are well-known landmarks in our own town. There is no injustice in this, for our London examples are very interestingly typical of certain differences of method in Sir John's art.

The north front of the British Museum will, I expect, long remain a criterion of his genius, and it is a test of which its designer may well be proud. I have many a time preached a small sermon upon it, pointing out to young architects that only a man of the first rank would have had the continence and modesty to refrain from breaking the cool rhythm of that colonnade by an assertive central feature. There is consummate art in the skill with which the central doorway receives just sufficient emphasis and no more. Centrality is here rather respected than encouraged or acclaimed. The very lions, a lovable pair, perform their duty with self-suppression and not with emphasis. In fact, so triumphant is the riot of reserve that I could grudge that little bit of froth which on the metalwork over the cornice whispers "here is the middle." I have no idea where Sir John would place General Buildings in his own scale of comparative excellence, but I confess that to me it comes high. Its situation is happy on a convex frontage playing a movement of contrary flexure with the Norman concavity of the Aldwych sweep. Sir John handles his theme with a boldness worthy of the site and its size. He takes as his ground floor theme the motive which we may, I believe, respectfully call the Burnet architrave, a great granite ribbon a yard wide which rushes up the sides and duly mitres, flings itself across the top graceful with the general curve of the frontage, and grateful as any curved lintel would be for the support of the two massive columns which are the monarchs of the lower design. Behind the three-bay design thus formed on a segmental plan stands in a straight line and in delicate counter rhythm the five-bay composition of the actual window plane.

THE PRESIDENT'S
LAST SMILE.
H.de C.
'23.

MR. PAUL WATERHOUSE, P.R.I.B.A.

(From a Caricature by H. de C.)

In totally different methods, different from this and from one another, are the Institute of Chemistry in Russell Square, and the Kodak building in Kingsway. Both are evidences of the wish of the designer for fitness and directness, both a protest against that inflexibility of architectural invention which would make a man stamp with one family countenance buildings that bear no relationship to one another.

The Kodak building, standing as it does in a street of structures which, if not pharisaic in propriety, are at least fairly normal in their adherence to an accepted level of architectural dressiness, is Sir John's great protest. As such it is admirable. The measure of the value of all protestantism varies inversely with the value of the thing protested against. A protest takes its own risks. It may not be the protestor's fault if it outlives its purpose. Sir John himself will have wondered whether it wisely chose its place.

In Adelaide House, known at present by drawings only, we are happy to feel that Sir John is in control. Given the necessity for anything so vast, it is imperative that it should be handled by a giant. No architect could be trusted with it save a man with a great sense of mass and scale. In scale, in mass, our Gold Medallist is an expert, and we are happy, Sir John, to think that so great a responsibility is in the hands of one whose thought and execution are large.

Oxford Street, again, has its giant, and you are again the —I must not say the "giant-killer." Shall I say the giant's "nurse?" adding the conviction that you will not only nourish it into comely manhood, but render it harmless to its smaller neighbours. I, for one, am happy in the certainty.

I am glad to be one of those to whom your works outside London are not unknown. I have prowled around and into the great Bath House at Alloa; I have more than once turned back in Princes Street to have another look at the ingenuity of Forsyth's shop; I have admired the subtle change of character between it and the stores in George Street, a change which typifies, I think, the difference in character of the two businesses. I have lingered outside the Glasgow Athenæum, and have considered with a respectful smile the adroitly grave frivolity of the Alhambra in the same city.

My lords, ladies, and gentlemen, Sir John will have pardoned me, and you will have pardoned me also, I hope, for having looked at his work in the light in which I think he has designed it. It is not work which a man or woman with any sort of brain can pass with a mere "good" or "bad," still less with indifference. Indeed, so often have I studied it, always with some stirring of my own thought, and so often will most of you have studied it also, that it would have been a mere insult to Sir John and a great deprivation to ourselves if silence had been kept over those qualities which so alluringly arrest the attention.

The Presentation.

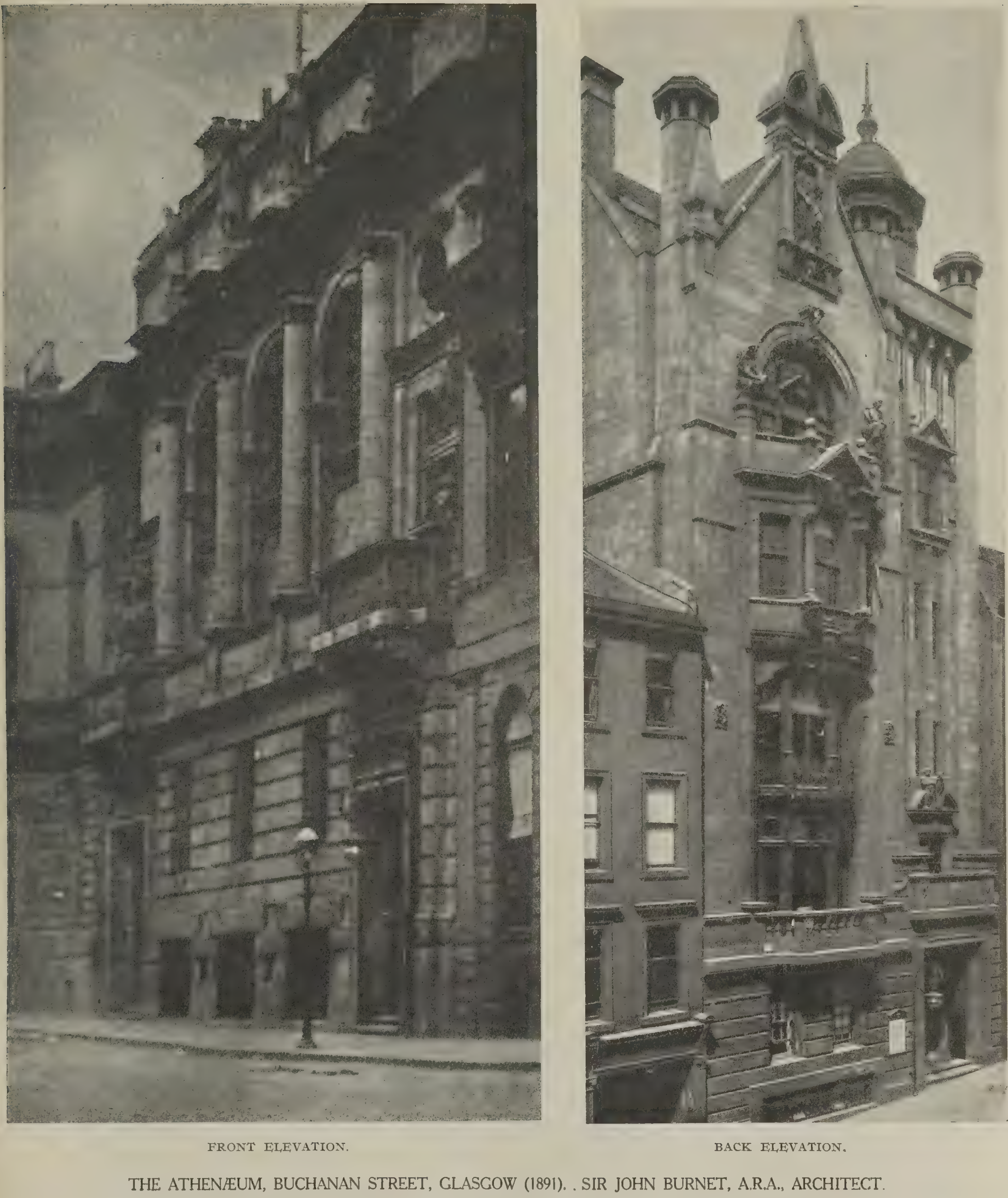
Sir John James Burnet, it is in the name of His Majesty and on the most cordial initiative of your fellow British architects that this medal is given to you. I am the most fortunate channel of the transfer from the King to yourself, and I hope you will allow me to say with what pleasure and pride I now perform the last official act of my presidency.

Messieurs les confrères français, notre ami Sir John Burnet, l'homme distingué auquel nous accordons ce soir le courronnement de son travail, est en quelque sorte de chez vous.

Ancien élève de votre superbe École des Beaux Arts il a gardé toujours le main un peu française, l'œil un peu parisien. Ainsi, en célébrant aujourd'hui sa vie, son art, et ses triomphes, nous offrons au même temps, la même coup, nos hommages à l'école de son origine.

Sir John Burnet's Reply.

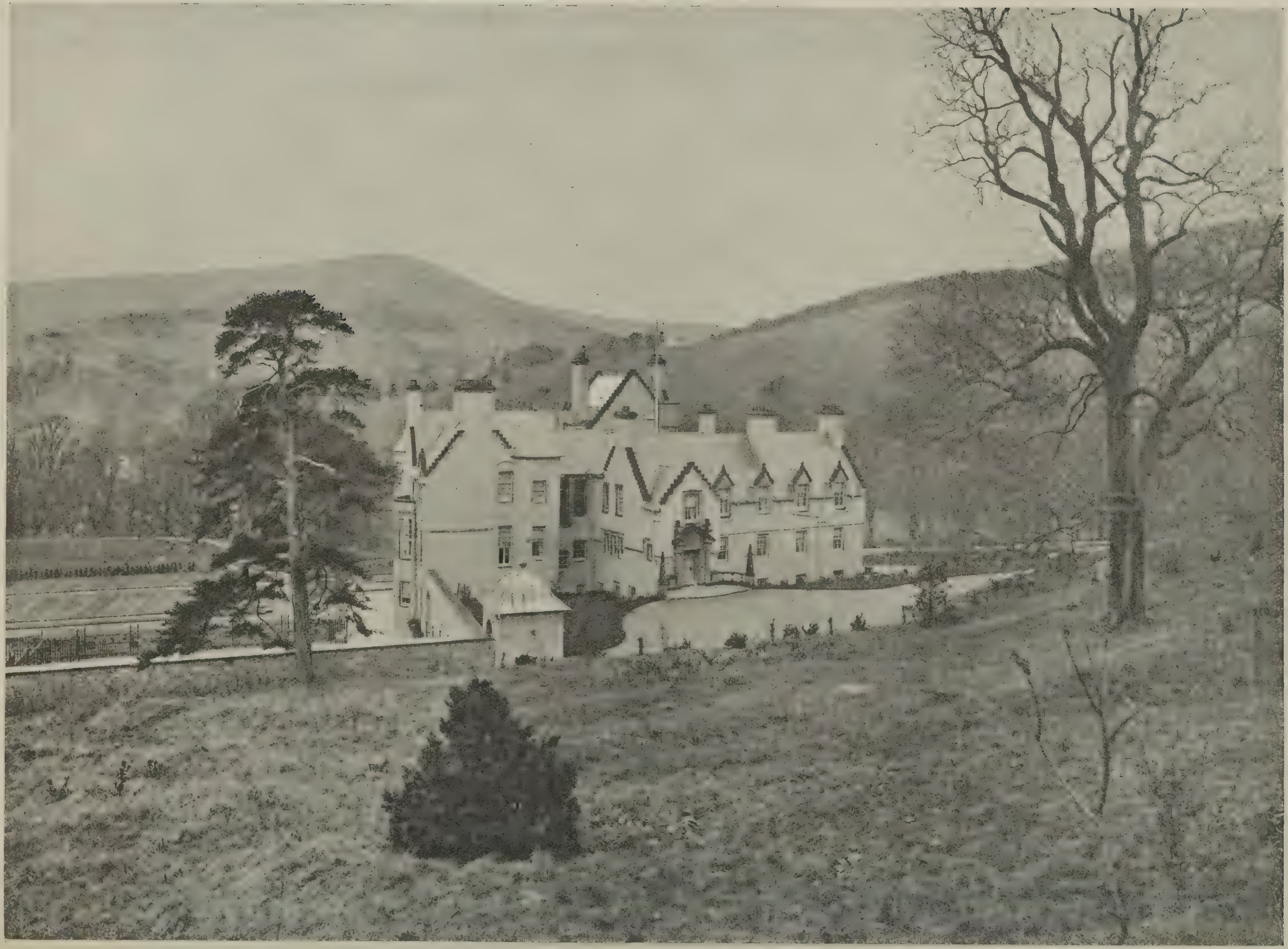
Sir John Burnet, in his reply, said: As exclusively a practising architect whose life has been spent in meeting the responsibilities of the profession as they appeared to him, I feel peculiarly unfitted to do justice to the position in which, through your kindness, I now find myself. I am deeply conscious of the honour to which you, my fellow members of the Institute, have elected me, and profoundly sensible of the distinction conferred upon me by His Most Gracious Majesty the King in approving your choice. But



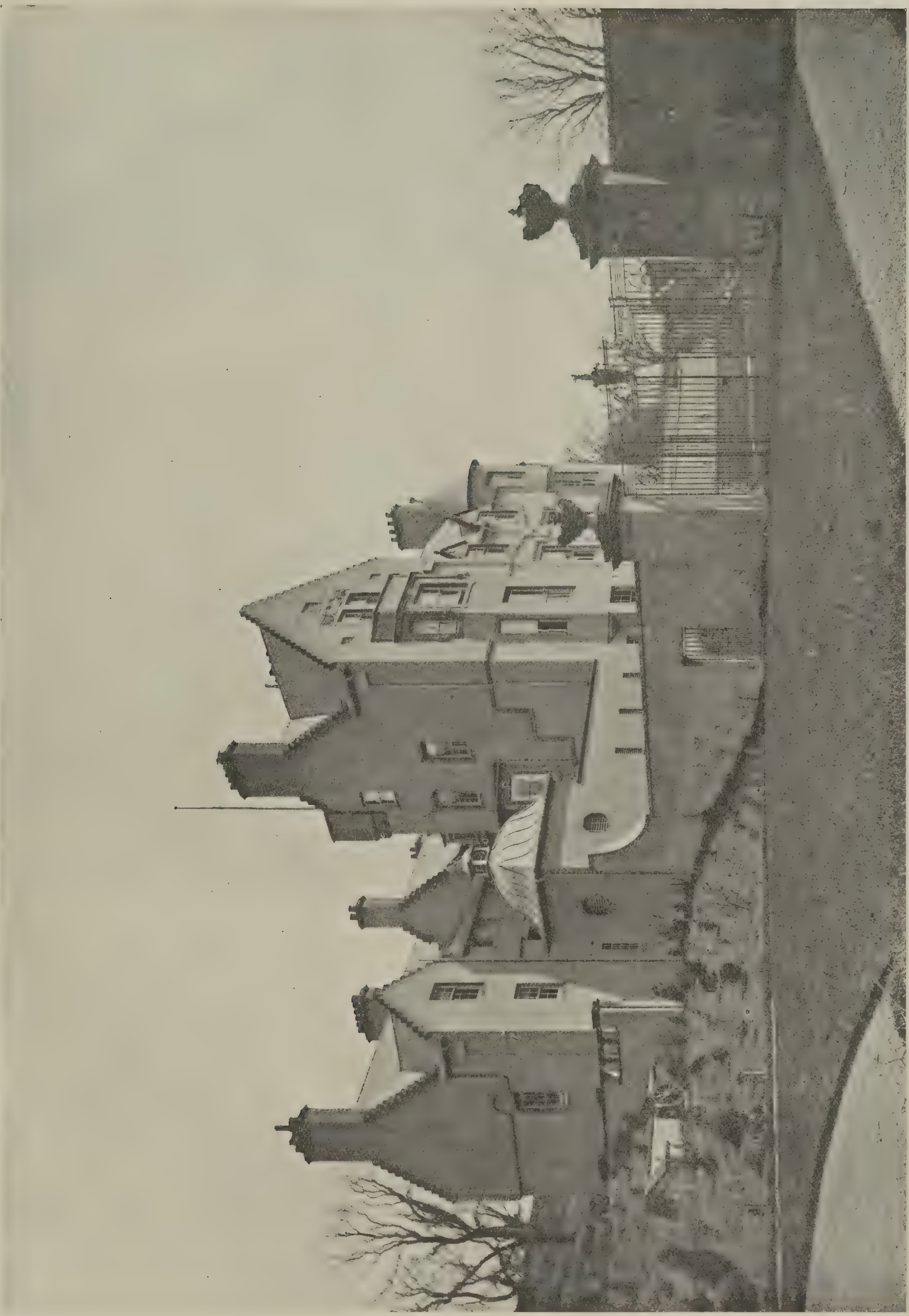
FRONT ELEVATION.

BACK ELEVATION.

THE ATHENÆUM, BUCHANAN STREET, GLASGOW (1891). . SIR JOHN BURNET, A.R.A., ARCHITECT.



FAIRNALIE MANSION HOUSE, NEAR SELKIRK (1904-6). SIR JOHN BURNET, A.R.A., ARCHITECT



FAIRNALIE MANSION HOUSE, NEAR SELKIRK (1904-6). SIR JOHN BURNET, A.R.A., ARCHITECT.

Photo: Annan.

THE WESTERN INFIRMARY, GLASGOW (1894-6).
SIR JOHN BURNET, A.R.A., ARCHITECT

I fear, Mr. President, in the all too complimentary remarks which you have made regarding my work—tempted, perhaps, by the splendid command of language which we all admire and which we wish we possessed—you attribute to my work qualities of which I was never conscious.

Simple as architecture was at the beginning of my practice, now municipalities, with a new realization of their responsibilities, aspire to the healthy housing of the working classes. Curative establishments are as numerous as they are complex, and merchants and manufacturers are housing their great and ever-changing organizations with a new responsibility towards their numerous employees. Thus, from being a simple problem it has become a complicated one.

If it is true that an architect is here to serve his day and generation—and I think he is, and that it is at once his duty and his pleasure—what qualities must he not possess if he is to master all his client's requirements and produce a building efficient for its purpose, suitable for its site, and so simple in its conception that it appears a perfect harmony, created without effort, a simple and beautiful monument to the integrity of purpose of the generation in which it was built. There is no spurious originality in such work, no conscious individuality on the part of the designer.

Our late colleague, Mr. Ernest Newton, speaking on architectural education, referred to his belief that there is all the difference in the world between the acquisition of knowledge of the art of architecture and the ability to apply that knowledge to the varied purposes of the day, and urged that the power of applying the knowledge will best be obtained by the young architect serving the older and more experienced man of the day. I cordially agree with him and believe that as the work becomes more advanced the truth of his remarks will become more obvious. During my long practice I have had many and varied opportunities, each seeming to be instinct with the life and thought of the day, and I have done my best to give each and all architectural expression, compatible with its purpose, and that with such measure of artistic feeling as it was in my power to give. I have been favoured with the companionship of clients each keen on the purpose he had in view in building, with the enthusiastic and sympathetic assistance of my brother artists, sculptors, and painters, and in the execution of the work generally with skilled craftsmen whose devotion, each in their own craft, went beyond payment. Could any architect desire more? Is it astonishing that he enjoys his practice, that he finds it difficult to do anything else than constantly by travel and study to make and keep himself equal to such work.

I again thank you, Mr. President, and through you, my brother architects, for the great honour you have paid me in adding my name to the list of Royal Gold Medallists, containing as it does the names of so many illustrious men, and you I know will understand me when I say that you could not pay me a greater compliment than to place me on a list containing the name of my professor and lifelong friend, Jean Louis Pascal.

M. J. Godefroy in the course of a short speech, in which he spoke eloquently of the achievements of Sir John Burnet, observed : Après des années si mouvementées, au cours desquelles nous avons écrit quelques grandes pages de l'Histoire ensemble, nous voici réunis tous, une fois de plus, dans la belle capitale de l'hospitalière Angleterre.

Avec quel plaisir renouvelé nous venons vous visiter, chers amis anglais, vous qui êtes les plus hospitaliers des hommes, vous qui avez l'hospitalité si franche, si cordiale; et quand on vous a vus chez vous, dans votre intimité, dans votre *home* où vous semblez avoir disposé toutes choses pour le bonheur honnête et paisible, il nous semble qu'à vous fréquenter nous nous complétons en votre compagnie.

C'est que nous savons bien ce qui nous manque : un peu de votre esprit pratique, si aimable, qui vous rend plus facile la vie aussi bien dans le plus somptueux des palais que dans la plus humble demeure. Il n'est pas jusqu'à vos campagnes dont les paysages mêmes semblent ordonnés pour le repos de l'esprit, qui ne donnent une leçon de calme, d'ordre; et rien qu'à voir vos charmants cottages on aspire au bien-être et à l'existence heureuse.

Que de beautés nous avons encore à découvrir chez vous! A chaque visite nous faisons connaissance avec de nouvelles. Rien que vos superbes collections valent plusieurs voyages! Vous, vous n'ignorez rien des nôtres pas plus que vous n'ignorez notre belle langue dans laquelle je dois vous parler aujourd'hui puisque je ne connais pas la vôtre. Mais, je le regrette, car je sais qu'elle est celle d'admirables poètes, celle dans laquelle votre Shakespeare atteignit aux plus hauts sommets du génie; celle de quelques uns des plus beaux lyriques de tous les temps.

Tout cela vous dit assez, je crois, que nous ne nous fréquenterons jamais trop. Je le pensais avant la guerre. Comment ne le penserions nous pas tous, depuis que le sang versé ensemble a créé entre nous d'indissolubles liens.

Mr. Arthur Keen, hon. secretary, then referred to the fact that the presentation of the Royal Gold Medal was the last official act of Mr. Waterhouse's presidency, and paid a tribute to the value of his services during his term of office. In reply, Mr. Waterhouse observed that he had approached the presidential chair with shrinking, and had been shrinking ever since.

Some Minor Aspects of Town Planning.

3.—Public Buildings

By H. J. BIRNSTINGL, A.R.I.B.A.

LIKE everything else connected with town planning, the consideration of public buildings is not an isolated matter, but one that must take its place in the texture of the city. Public buildings fall roughly into certain groups: Governmental, which includes central and local government, law courts, and police courts; educational, including universities, schools, and academies; artistic and literary, comprising public libraries, museums, and art galleries; amusements, including theatres, opera-houses, exhibition buildings, cinematograph theatres, and concert halls; places of worship; and finally, utilitarian, a group containing markets, the bourse, chambers of commerce, stations (rail and road, the latter a type of building yet to be devised), baths, power-stations, and the like. There would seem to be three factors governing the success of a public building; first, its position in the town, secondly, its relationship with its surroundings, both natural and architectural, and thirdly, its success *qua* building in fulfilling the function for which it is intended. It will be seen that the influence of the town planner diminishes successively with these three factors. His control is greatest over the position of the building. He may, through the body for whom he is acting, be able to insist that public buildings arranged *en masse*, as in a civic centre, become part of some unified architectural scheme, but unless he is actually designing the building his influence will not extend to convenience in planning and the like.

Clearly there can be no rules for general application governing the disposition of the various public buildings in a town, but a similarity in some of the prevailing conditions in types of towns may indicate the most suitable disposition for certain buildings. The governmental buildings are the most important, and they will, more than any other, tend to give the tone to the city. In other than capital cities they comprise the various municipal buildings, and they are symbolic of the city's corporate existence. The most suitable treatment for them, then, is to group them around a civic centre, and it is essential in a growing town that there be adequate space for expansion. It is not sufficient to allot sites for the immediate needs only, otherwise scattered sites are subsequently acquired about the city from time to time. This not only wastes a great architectural opportunity, but hinders efficient administration. Cardiff affords an excellent example of a civic centre to a growing town. The addition of each building adds to the grandeur of the whole, than which nothing is more certain to engender that pride in a city which is a first essential towards a beautiful town. Whether or no the civic centre should form one of the traffic foci is open to discussion. There are those that feel that the civic centre should stand symbolically as the heart of the city with the unceasing throb of its traffic passing through it and out into its arteries, and there are those who feel that the buildings should have a more reposeful setting; that one should enter their midst as into a close, that they should be protected from the noise and turmoil of the day. For those holding this view there is, perhaps, no better place than along the banks of the river, for this, with all its placidity, is the most ancient traffic route and connects the town with the ends of the earth. But whatever position is chosen it is clear that it must at least be adjacent to a traffic focus.

Just as we have a civic centre, so, too, it may be desirable to plan an educational centre. This does not, of course, mean that all the schools in a town must be gathered together, which would be manifestly absurd, but that art and technical schools, academies, research laboratories, might be grouped with the foremost school or college of the town, forming, with its playing fields, what would indisputably be an educational focus. The university, where such exists, would naturally dominate such a group, and its place would be on the outskirts of the town. There have been sufficient examples during recent years of the folly of placing the educational centre in the midst of the town. It is contrary to both health and economic interests. A good position for these buildings would probably be on one of the ring roads adjacent to a junction, with a main radial road. This would ensure one direct route to the centre of the town and accessibility from any part of the town by striking the ring road at the nearest point. In addition to this main educational centre, each district will, of course, have its school. These, too, require careful placing. For the requirements of a school site are that it shall be easily accessible from all parts of the district which it serves; that it shall have an open space around it, and yet not waste valuable building frontage; that it shall be well served by public traffic routes and yet not so be set as to make the approaches dangerous for children.

The museum and art gallery may, perhaps, form part of the municipal group of buildings comprising the civic centre, but if this centre is arranged around a main traffic focus it will probably be better to separate these buildings. Works of art are best contemplated under restful conditions, moreover, the land around a traffic focus will acquire a value which can better be realized by devoting it to other purposes. Here again the river embankment suggests itself as a good place for these buildings, or they may be grouped round a small park or public square. If the town be large there will be more than one public library, and the smaller libraries may serve as a nucleus for small ward centres, for not only the town itself, but also its component parts require points of concentration. These would probably occur at the main traffic intersection of the district. A parish or ward is a unit of the town, having its own affairs and interests; it must, therefore, have its own centre indicative of its public life, and in this centre, which must be definitely planned, will be the local library together with the local administration offices, possibly all in one building.

Theatres are, for the most part, worse placed in England than any other class of buildings. Is it owing to the submerged state which the theatre endured for many years owing to Puritan influence? Whatever the cause the result is lamentable, and it behoves the town planner to see that in future the theatre and opera-house have sites worthy of their purpose. The necessity for a parking space for the vehicles of those attending these buildings was discussed in an earlier article. This necessity will, of course, influence the choice of site. The opera-house or chief theatre is, perhaps, best placed so that it closes the vista of one or more important streets; here sufficient space can be arranged about it to accommodate vehicles. An appropriate site will also be found for a concert hall, preferably in connection with an open garden, for there is no reason why the amenities met with at watering places whereby the inhabitants are able to enjoy the advantages of indoor and outdoor concerts should be reserved for such towns. Each town should have its concert hall, formal garden with statuary, and an in- and outdoor restaurant. The growth of exhibitions, both commercial and artistic, leads one to expect that the inclusion of some sort of permanent exhibition grounds and buildings will be required in most towns of even moderate size. These buildings might be grouped on the outskirts of the town, in or near a park, and might include, in addition to a range of permanent exhibition buildings, a sports arena, stadium, athletic grounds. This, in fact, would be the centre for every kind of contest and exhibition, from inter-town athletics to music festivals, from housing, art, and mechanical exhibitions, to agricultural and flower shows.

An examination of the position of the chief house of worship in various towns indicates that two different ideas have in the main actuated in the selection of the choice: broadly divided they are the continental and the English. The former seems to have as its motive the desire for the church to live with the people, to stand in the midst of their most mundane affairs; a ready refuge and a constant reminder. The latter desires rather to isolate the church, to remove it and to keep it inviolate from the sordid toil and labour of the week; it must be something apart, and the dust of temporal affairs must be well shaken from the feet before entering. In the cathedral towns of France the humbler dwellings nestle against its flanks and buttresses; in England the cathedral is isolated in a spacious close; the centre of a sanctuary of repose. The generalization will not bear too close an examination, for here in England, although the desire for isolation predominates, it is not exclusive. Of post-Gothic cathedrals Liverpool Cathedral typifies the isolated, and St. Paul's, London, the intimate position. In selecting a site in a town plan these two ideas require consideration. The selection will, of course, depend largely on local circumstances and the configuration of the town. A slight eminence may suggest the placing of the chief church there so that it dominates the town; a landmark from every quarter, and a spiritual reminder. It must be remembered, however, that a building is often not seen to the best advantage in isolation. It requires the framing that only adjacent buildings can give to it, and without which there may be a loss of scale, which destroys its emphasis. A very favourable position for a church is on one side of an open square; if on the shorter side then the west end will face the square, and if on the long side then the north or south will face the square. If several streets converge into the square they can be made to align on to the church, which will then be seen from a distance, closing a vista and framed by other buildings, while the open space in front of it will give it the requisite dignity of position. There will, of course, be a number of sites required in different parts of the town, and the various denominations will want their appropriate churches. A certain number of sites must, therefore, be definitely retained for these buildings in order to avoid the all too common spectacle of a church placed on any available and hitherto derelict site with utter disregard both to its surroundings and to its special significance.

Finally, we have to consider public buildings of a business and utilitarian character. We considered the alternatives of grouping the governmental buildings round a traffic focus or placing them a little away in a quieter position. Whichever of these plans is adopted it should not interfere with the formation of a business centre, which should fittingly be in the heart of the town, and should include the bourse, chambers of commerce, exchanges, the principal banks, and the head post office. These buildings should all be grouped into an impressive array indicative of the town's material prosperity, just as the civic centre is indicative of its communal life. The treatment of the railway station is a matter of great importance, and one that has hitherto been shamefully neglected in England. Strangers build up their first impressions of a town from the moment of their alighting from the train, and nothing is more detrimental to their impression than the sordid confusion which usually in England awaits them. The actual position of the station relative to the town is often predetermined, and hitherto this has been, for the most part, on the outskirts, although the tendency of the future will be to plan the station more centrally by means probably of low-level tracks. But wherever the station is, it is essential that it debouch its passengers into a fine open space, giving a sense of welcome and generosity. Here will naturally be accommodation for waiting vehicles; it will be a traffic point, and it should, if possible, be connected by one fine street directly to one of the town centres. Indeed, direct emergence from the station should give a view down this street to some important building in the town. In this way travellers obtain a quick idea of the relative position of buildings in the town and of its general lay-out, whereas a tortuous approach from a cramped, ill-designed and dirty station to the town is both confusing and depressing. The railway station square will also probably be a fitting place for the erection of a char-à-banc station, a building whose advent cannot now be long deferred. The site for the power-station will be largely determined by local circumstances. Hydraulic power is rare in England, and proximity to the railway will probably be essential. There is no reason, however, why the building should not be finely treated. What could be more impressive than the suggestion made in "Dublin of the Future," for a vast power citadel at the mouth of the harbour, with its great chimney worthily symbolic of the city's "material sanity"? The central consumption of fuel and its subsequent distribution as gas or electricity will soon become general; the central power station therefore assumes more importance in the city's hierarchy of public buildings. In connection with hospitals we again find two opposing theories. Either they should be placed in the most densely populated areas, and in districts where casualties are likely to be most frequent, and therefore the demand greatest, but the surrounding conditions least favourable, or they should be relegated to the outskirts of the town with casualty wards or joint clearing stations in the town itself. Equally forcible arguments can be advanced for either policy, as that the tendency of towns towards increased healthiness supports the retention of the hospitals where they are most needed, that is, in the town; or, that with transport facilities improving and the curative effects of fresh air and sunshine for every ailment being better realized, all hospitals should be removed to places where these better conditions more consistently obtain. The town planner having decided on one or a compromise of these ideas must retain sites accordingly.

It is not to be supposed that this is an exhaustive list of the various public buildings, for many others at once suggest themselves: law courts, police courts, police stations, fire stations, workhouses, are some of these. Each town makes its particular demand. It is hoped, however, that some indication has been given of the matters which must receive consideration in placing public buildings and in reserving sites. For the full realization of the ideas underlying any plan it is obvious that some control of the form of the building must be retained by the planner. This opens up a controversial matter which cannot now be discussed. Yet it will have to be faced before the town beautiful is a reality; unchecked individualism must lead to chaos and disaster, and discipline is as necessary in the practice of civic architecture as it is in the conduct of civic life.

[*The previous articles in this series appeared in the issues for May* 16 *and June* 13.]

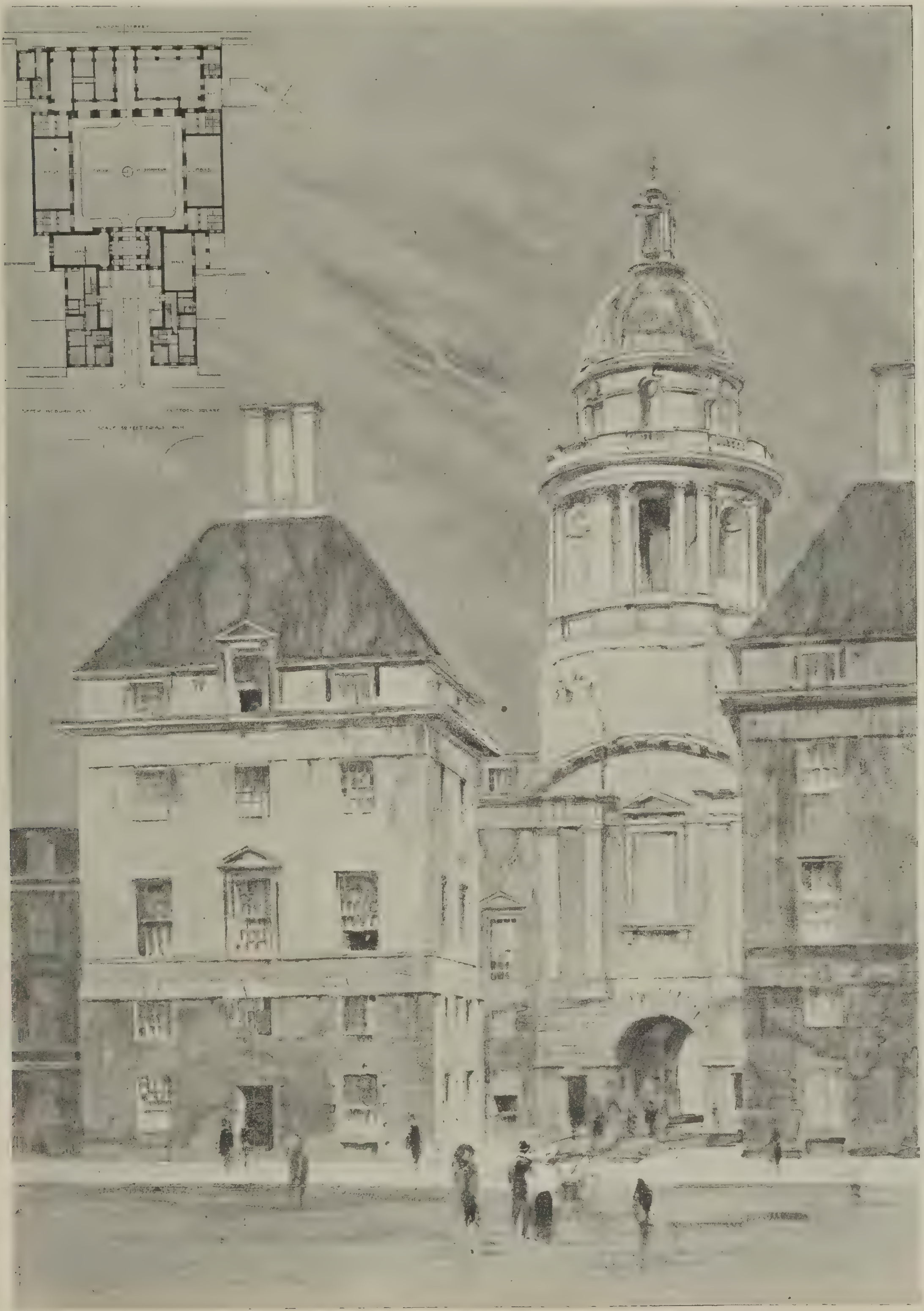
The Theosophical Building

This building was designed as the headquarters of the Theosophical Society, and was erected during 1912–16. The foundations and superstructure up to the first floor level were carried out by Messrs. Cubitts, Ltd. At that stage, owing to labour difficulties, the erection of the building was continued by labour employed directly, working under a committee composed of representatives of the owners and the workmen. When the work neared completion the building was taken over by the Government, and considerable alterations of a temporary nature were made.

The stone carving was carried out by Mr. Joseph Armitage, and Mr. F. C. Mears, of Edinburgh, was associated with Sir Edwin Lutyens, R.A., as joint architect during the period when building was being carried on by direct labour.

Current Architecture. 179.—Building designed as the Headquarters of the Theosophical Society, London

Sir Edwin L. Lutyens, R.A., Architect

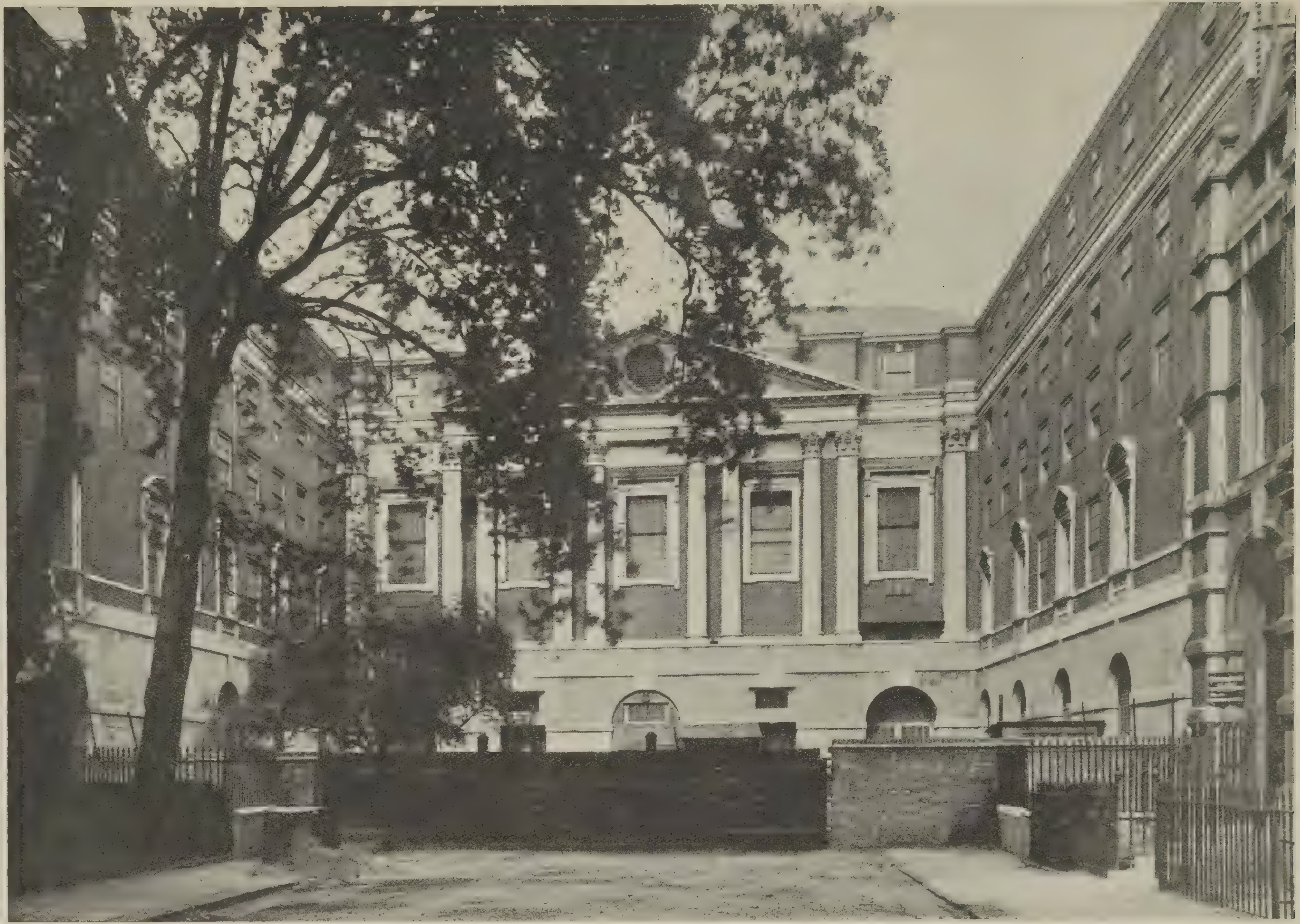


Sir Edwin Lutyens's original design for the Theosophical Building, shown above, has not yet been carried out in its entirety. The present condition of the building is shown in the illustration given as the frontispiece to the present issue and in those on pages 15 and 17.

THE LIBRARY
OF THE
UNIVERSITY OF ILLINOIS

Current Architecture. 180.—Building designed as the Headquarters of the Theosophical Society, London

Sir Edwin L. Lutyens, R.A., Architect

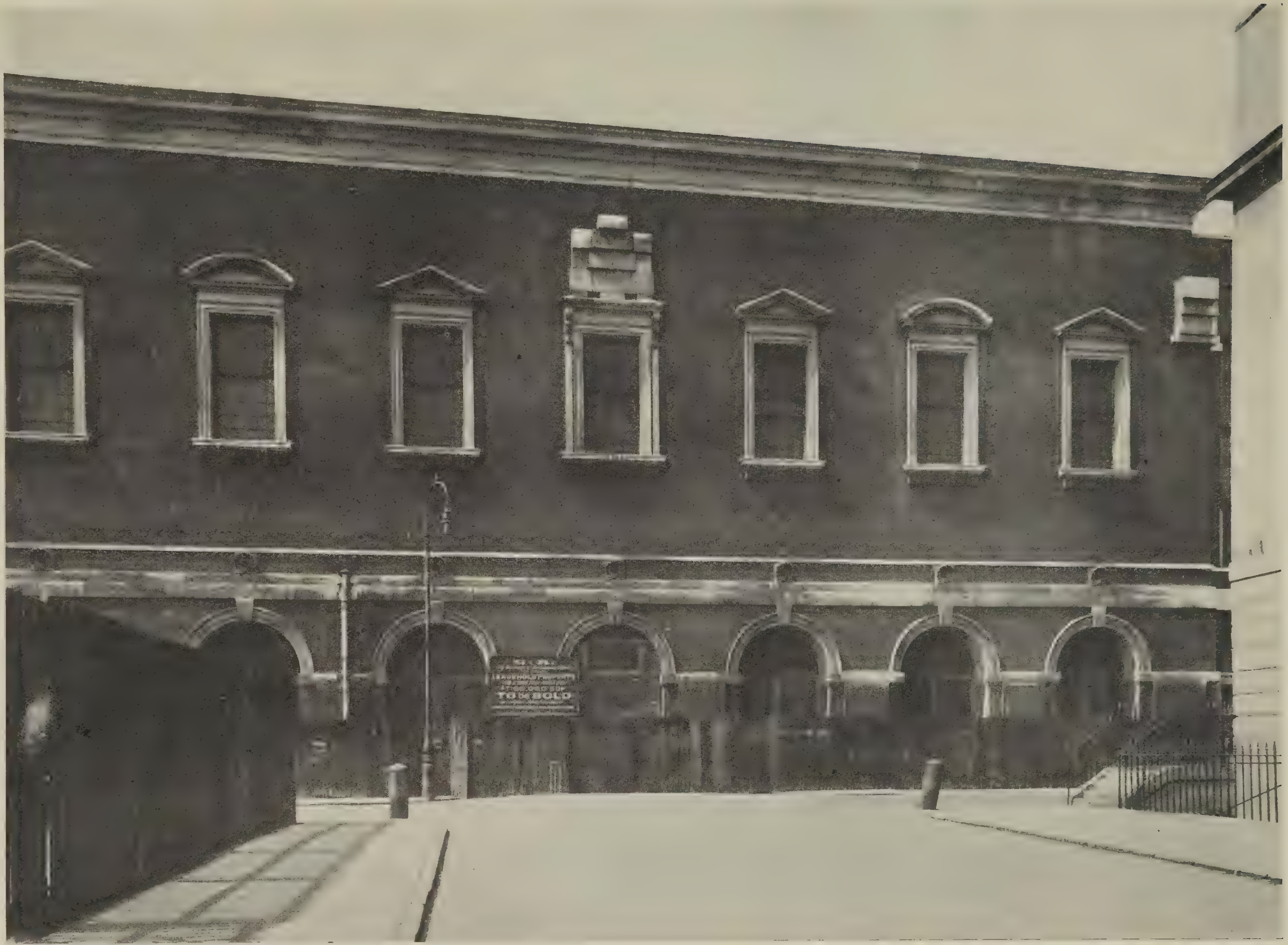


The original design for the Theosophical Building provides for an internal court, of which three sides have now been completed, as shown above. A small plan of the building is given with the perspective drawing illustrated on the preceding plate.

THE LIBRARY
OF THE
UNIVERSITY OF ILLINOIS

Current Architecture. 181.—Building designed as the Headquarters of the Theosophical Society : Elevation to Burton Street

Sir Edwin L. Lutyens, R.A., Architect

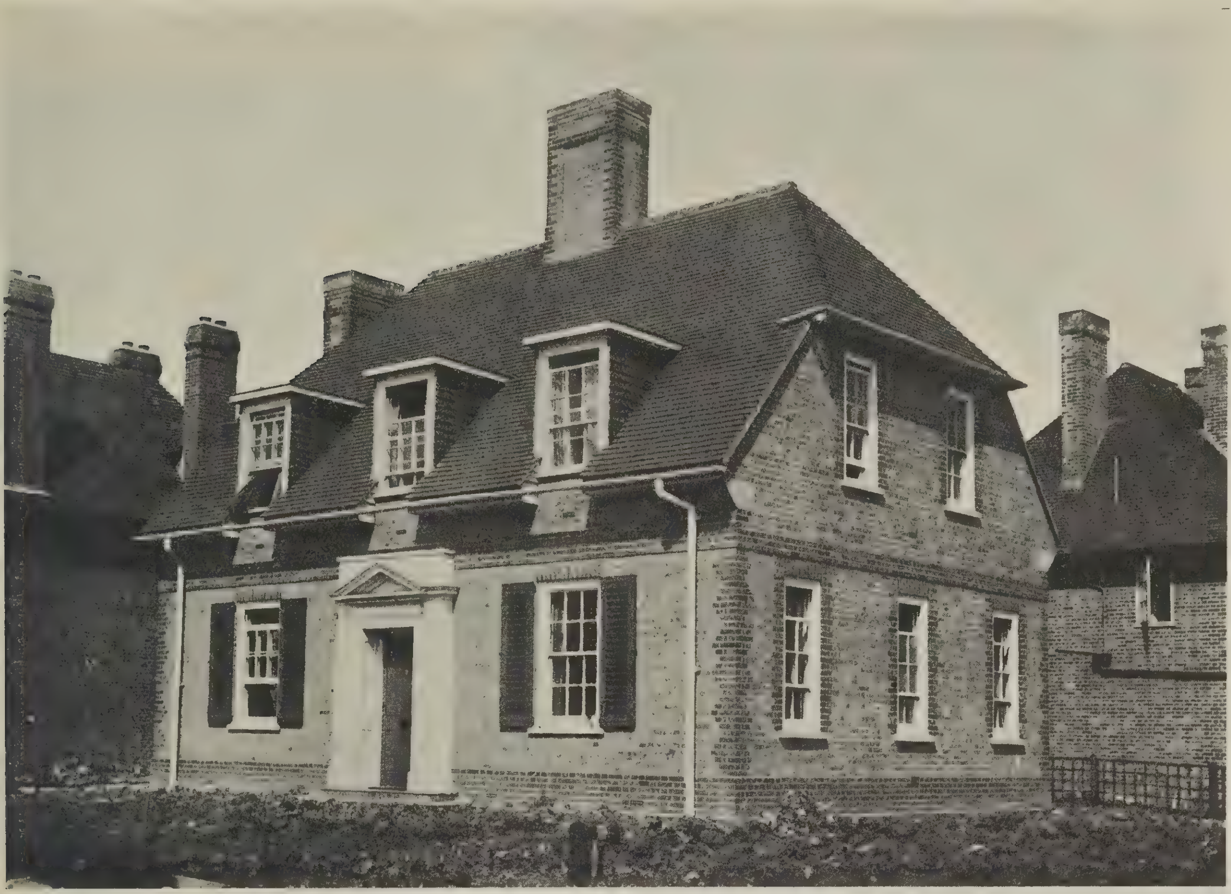


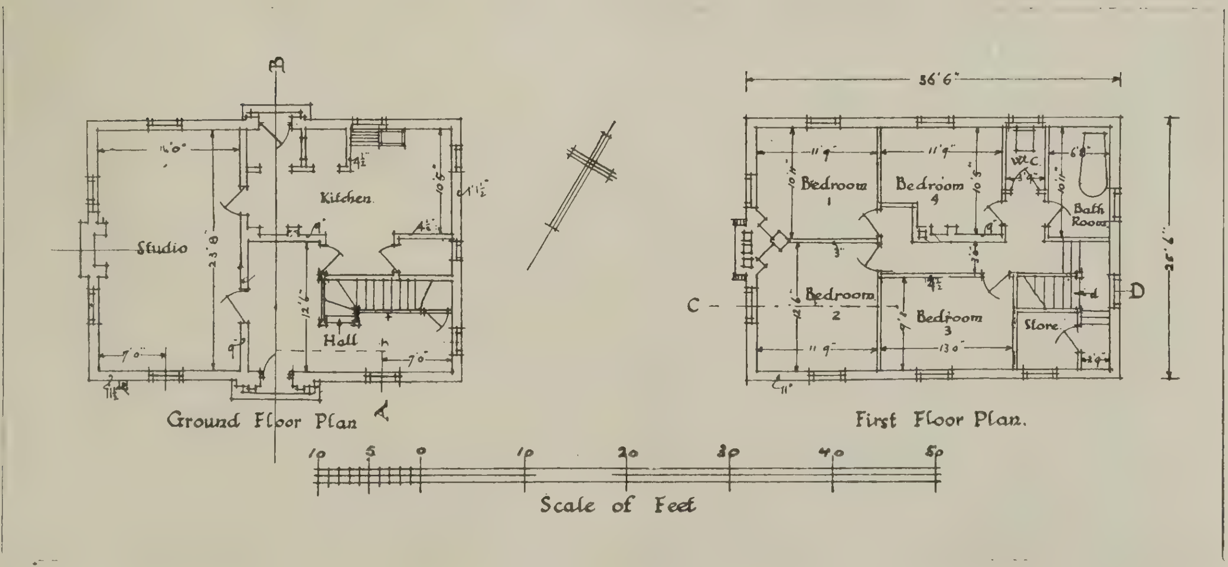
The rear elevation of the Theosophical Building is notable for the simplicity and effectiveness of its design. Though on a somewhat larger scale, the façade has a good deal in common with the delightful little church hall erected in Tufton Street, Westminster, from Sir Edwin's designs some ten or twelve years ago. A plan of the Theosophical Building is given with the perspective reproduced on page 13.

THE LIBRARY
OF THE
UNIVERSITY OF ILLINOIS

A House in Constable Close, Hampstead Garden Suburb

S. N. Cooke and E. C. Davies, F. and A.R.I.B.A., Architects





(See also pages 20-23.)

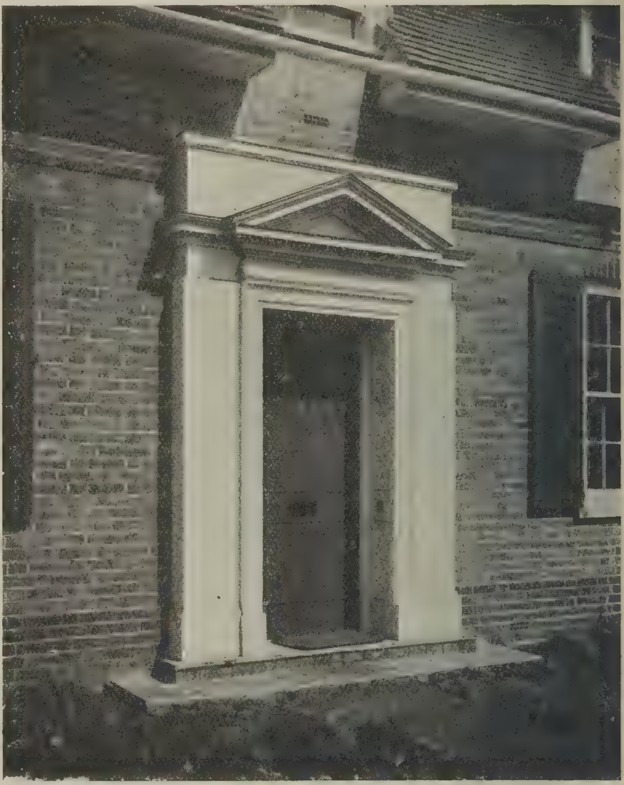
A House in Constable Close, Hampstead Garden Suburb

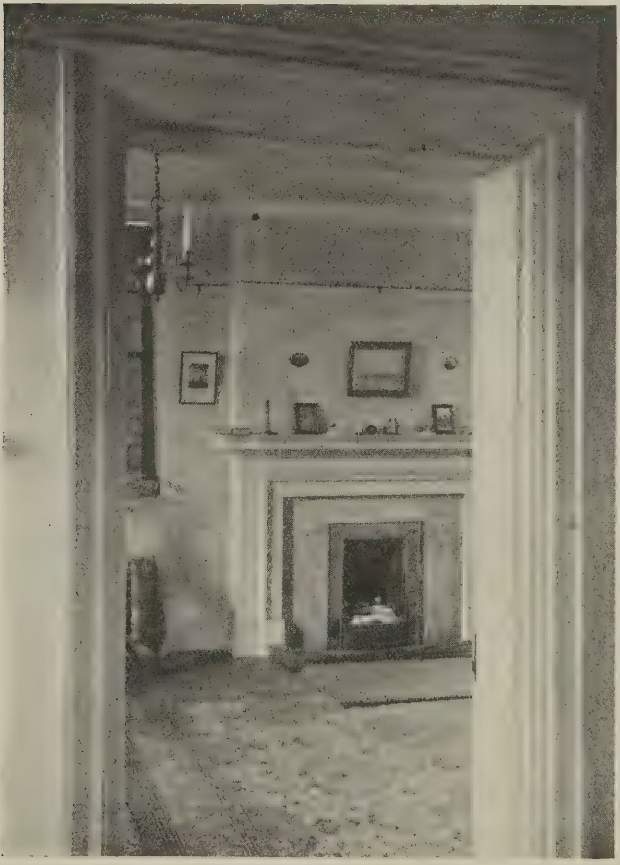
S. N. COOKE and E. C. DAVIES, F. and A.R.I.B.A., Architects

THIS house stands on a corner site between Wildwood Road and Constable Close, Hampstead Garden Suburb. The purpose of the building was chiefly to provide a good-sized studio, suitable for illustrative work and painting, and domestic accommodation for a small family. Although the area available for the house was limited and strictly enclosed by a rectangle, no small elements were introduced with a view to providing a "three reception rooms" plan, with the result that the hall, kitchen, and staircase are really spacious, and the circulation of light and air is complete.

The studio is placed with three sides facing respectively north, south, and west, the windows being arranged to admit ample light from each side. It is found that the varying quality and degree of light which may be obtained at will are admirably suited for the work for which it was intended. The general facing-bricks are picked light-grey hand-made bricks from Great Missenden, the quoins, dressings, plinth, and frieze band being picked out in orange, all laid with a full rough joint and not pointed.

The windows are sliding sashes in cased frames. All the external joinery is painted white with the exception of the shutters and the front door, which are enamelled green, and hung on wrought-iron hooks and broad strap hinges. The fittings to the front door are of bronze and of the simplest form. The roof is covered with plain, dark hand-made tiles, with a bonnet hip, and half round ridges.


A DETAIL OF THE FRONT ENTRANCE.


A VIEW IN THE STUDIO

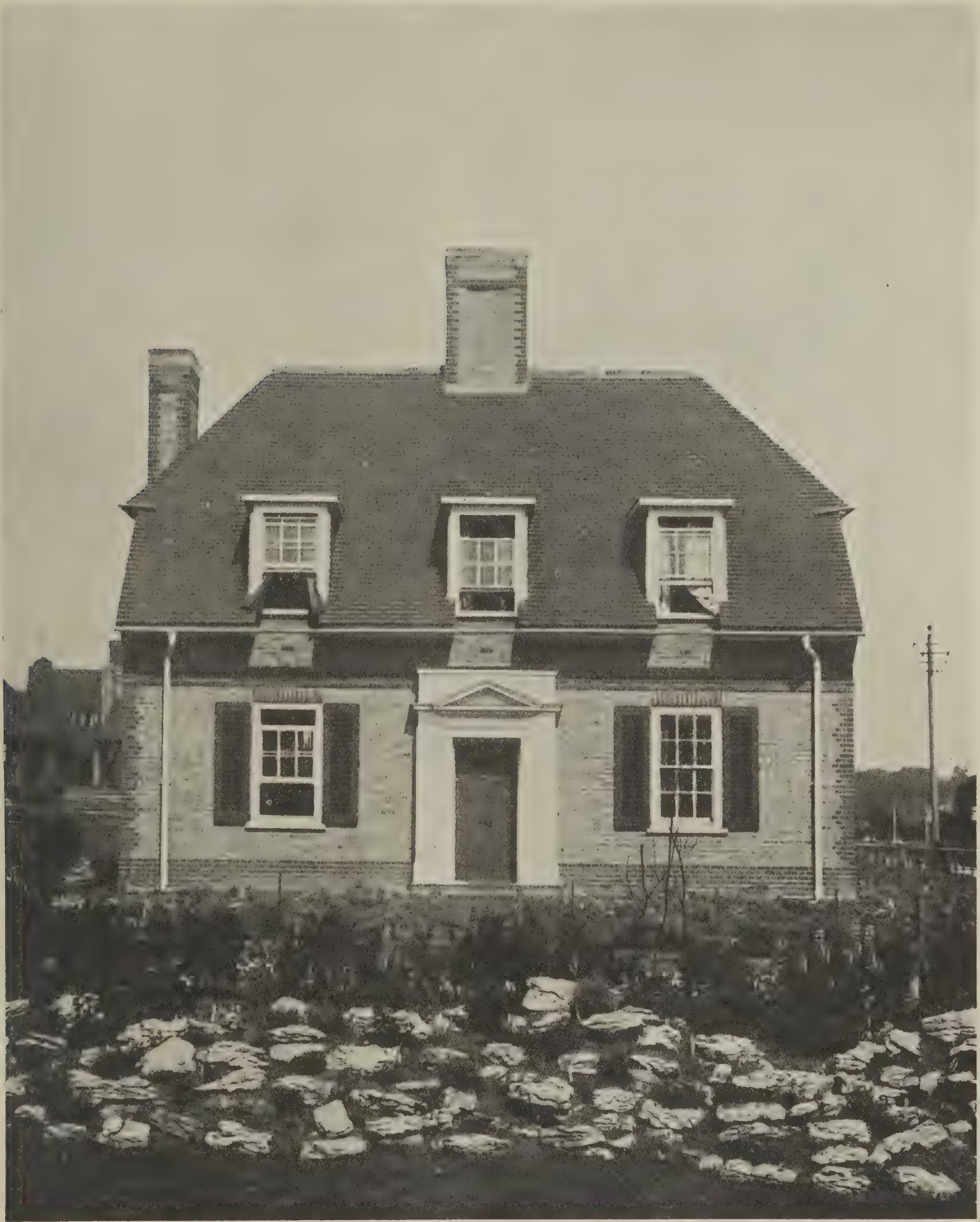
As will be seen from the plans, the accommodation has been compactly and efficiently arranged. The main entrance opens into the hall, from which easy access is obtained to the studio and the kitchen. A staircase from the hall leads to the first floor, where there are four bedrooms, bathroom, w.c., and a store, cleverly planned over the hall. In planning the first floor advantage has been taken of the opportunities offered by the lower one. The bathroom and the w.c. have been kept on the north corner of the house near the kitchen sink below to enable the water supply and other sanitary fittings to be grouped in a practical and economical manner.

The interior is carried out in a very simple style, decorative features everywhere being reduced to a minimum. A plain coved cornice finishes all the rooms, and the architraves, skirtings, and panelling are all simple in section, though stout in material. The same characteristics apply to the staircase detail, which is carefully proportioned and easy rising. The floors are wax polished and dark in colour.

The whole of the interior details are painted white, and the finished surface of the plaster was treated with a coarse wood float in order to break up the illumination on the pale grey-green distemper. The door furniture, finger plates, electric switches, the six-light pendants to the studio, and the bell pushes are in bronze. Hot water is supplied by an independent "Glow Worm" boiler, and cooking is by gas. Ample accommodation is provided in the larder and its shelving, and in the coal store, to both of which there is intermediate access from the kitchen. Linen and other cupboards are liberally provided in the bedrooms and the bathroom.

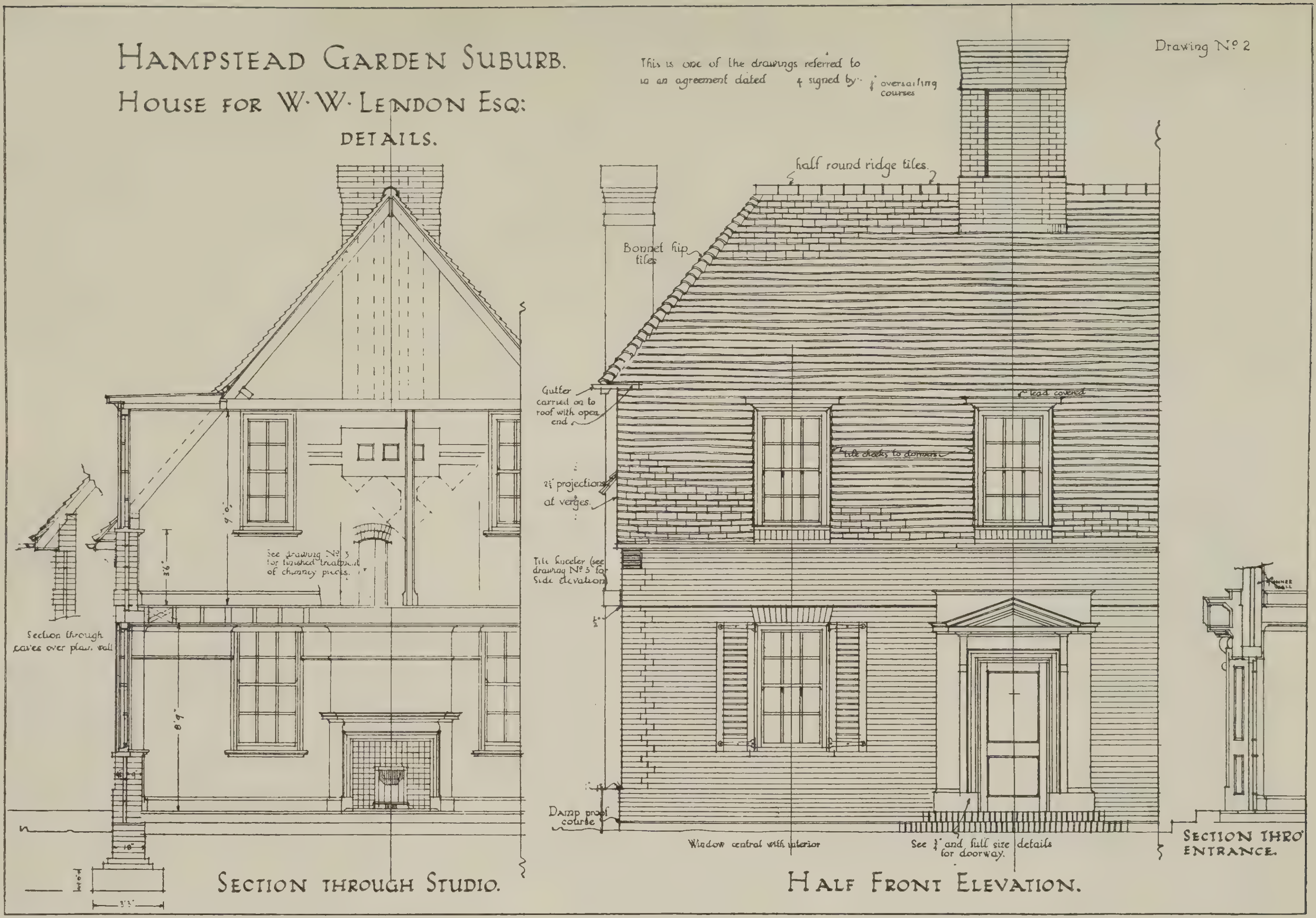
Modern Domestic Architecture. 52.—A House in Constable Close, Hampstead Garden Suburb

S. N. Cooke and E. C. Davies, F. and A.R.I.B.A., Architects



This little house has been designed to provide a good-sized studio and domestic accommodation for a small family. It is built of picked light-grey hand-made bricks, with quoins, dressings, plinth, and frieze band picked out in orange. The roof is covered with plain dark hand-made tiles. Plans are given on page 19.

THE LIBRARY
OF THE
UNIVERSITY OF ILLINOIS


HAMPSTEAD GARDEN SUBURB.
HOUSE FOR W·W·LENDON ESQ:
DETAILS.
This is one of the drawings referred to in an agreement dated & signed by
Drawing Nº 2
¼" oversailing courses
half round ridge tiles.
Bonnet hip tiles
Gutter carried on to roof with open end
lead covered
tile cheeks to dormers
2¼" projection at verges.
Tile kneeler (see drawing Nº 5 for side elevation)
See drawing Nº 3 for finished treatment of chimney pieces.
Section through eaves over plas. wall
Damp proof course
Window central with interior
See ¼" and full size details for doorway.
SECTION THRO' ENTRANCE.
SECTION THROUGH STUDIO.
HALF FRONT ELEVATION.
9'·6"
3'6"
8'·9"
3'3"

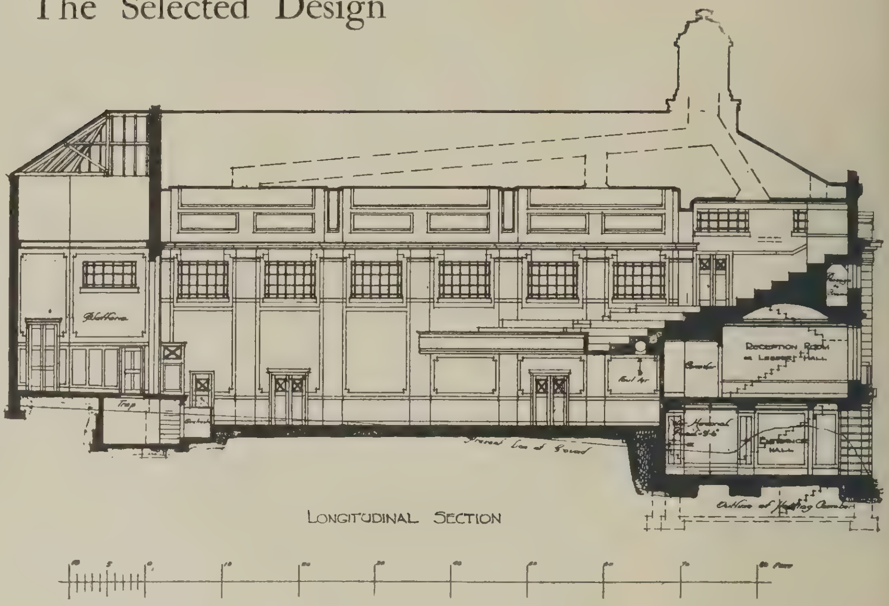
HOUSE IN CONSTABLE CLOSE, HAMPSTEAD GARDEN SUBURB: SECTION THROUGH STUDIO, AND THE HALF FRONT ELEVATION.

S. N. COOKE AND E. C. DAVIES, F. and A.R.I.B.A., ARCHITECTS

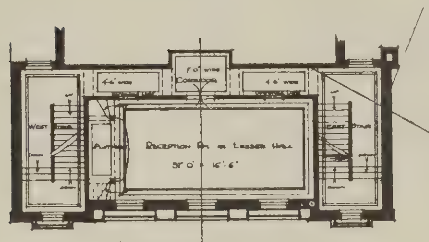
Lanark War Memorial Competition

The Selected Design

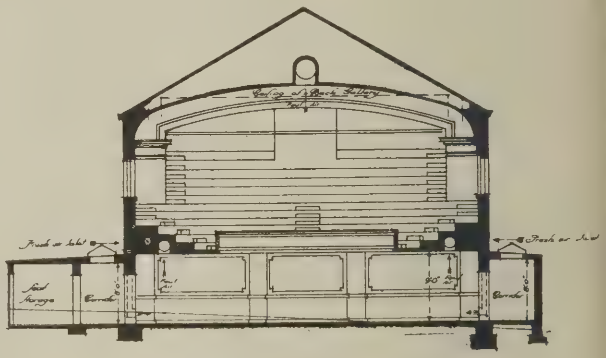
In a limited competition for a war memorial hall at Lanark, the design of Messrs. Cullen, Lochhead, and Brown, architects, of Hamilton, has been placed first by the assessor, Mr. George A. Paterson, F.R.I.B.A., of Glasgow. The conditions provided for a hall to seat 1,000 persons, together with the usual accommodation, including a reception room or lesser hall, and provision for a war memorial panel in a prominent position. The site was a difficult one in one of the principal streets, the levels being very irregular. The front of the building is to be built of stone, and the hall and rear portions of brick. The estimated cost of the building, exclusive of furnishings, fees, etc., is £8,000.



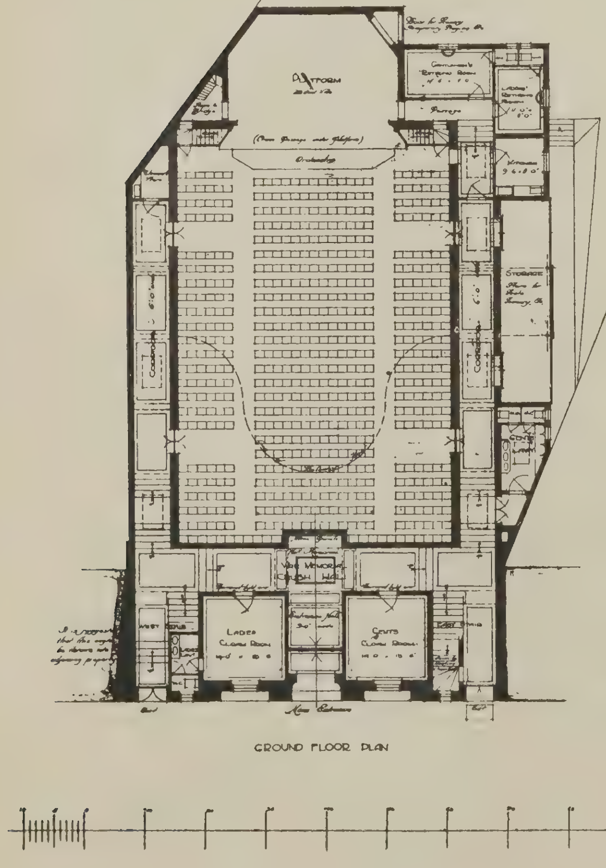
LONGITUDINAL SECTION



PLAN OF ENTRESOL OVER CLOAK ROOMS

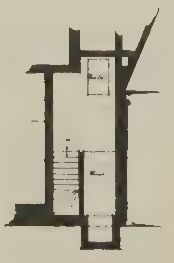


CROSS SECTION

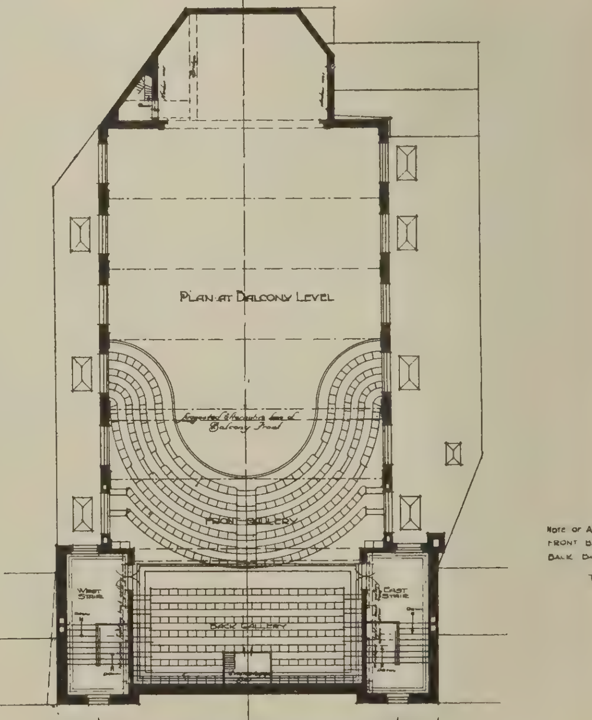


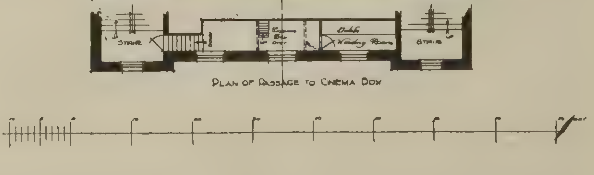
GROUND FLOOR PLAN

NOTE OF ACCOMMODATION	
AREA	610
ORCHESTRA, PLATFORM	30
BALCONY	360
TOTAL	1000



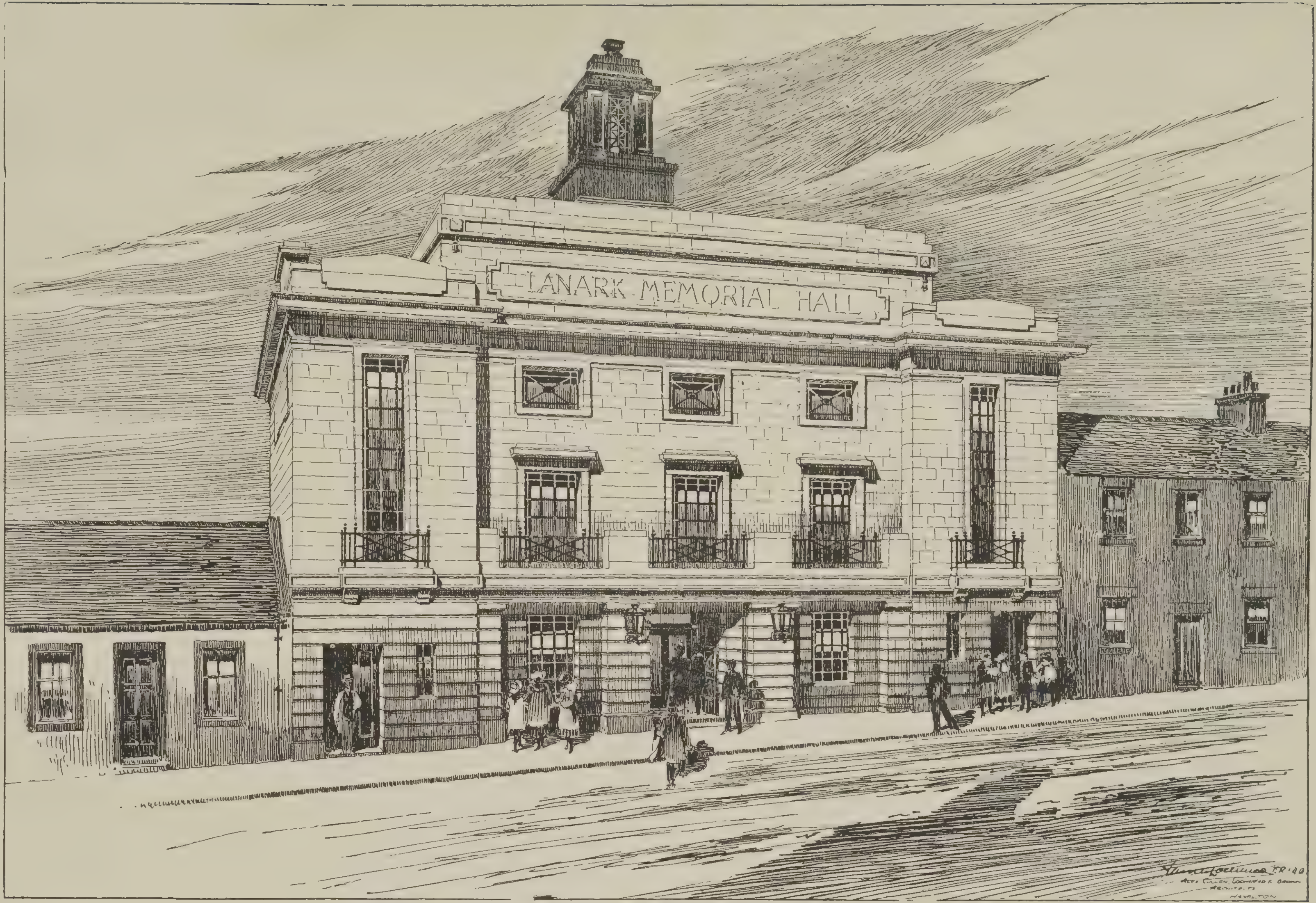
PLAN OF HEATING CHAMBER UNDER EAST STAIR.





PLAN OF PASSAGE TO CINEMA BOX

NOTE OF ACCOMMODA
FRONT BALCONY ·
BACK BALCONY ·
TOTAL



LANARK WAR MEMORIAL COMPETITION: A PERSPECTIVE VIEW OF THE SELECTED DESIGN.

CULLEN LOCHHEAD, AND BROWN, ARCHITECTS.

The British Confederation of Arts

Last Week's Conference

A CONFERENCE of Arts was held by the British Confederation of Arts at University College, London, on Saturday of last week, under the chairmanship of Mr. H. V. Lanchester, president of the Town Planning Institute. The morning session opened with introductory addresses by Messrs. Cloudesley Brereton, Malcolm Thomson, George Latham, and Austin Harrison.

Mr. Cloudesley Brereton's address dealt with the work of the French Confédération des Travailleurs Intellectuels, with the new-founded Confédération Internationale, which had been called into being by it and other international federations, and with the lessons they conveyed for those who were proposing to found the British Confederation of Arts. He said that the French Federation had been evolved by the French brainworkers to prevent the intellectual élite of the country being crushed between the upper millstone of the associations of employers and the nether millstone of manual workers. It was opposed to neither, in fact it might ultimately act as a sort of mediating force between these two hostile parties. It was composed of societies, not individuals, and these societies were grouped in sections—literature, the plastic arts, music, medicine, law, education, civil service, and employees in the higher walks of industry and commerce. The societies of which it was composed included the great majority of the most distinguished people in France. Similar confederations, he said, had sprung up in other countries, notably in Austria, Italy, Poland, Czecho-Slovakia, and Belgium. He pointed out that organization was the only defence against the powerful economic forces at work to-day. The best way of securing the artistic and cultural worker from the oppression of commercialism on the one hand, and its temptations on the other, was to help to make him sufficiently independent of it by seeing that he had enough to live the life he had to live. With every true artist, creation was a passion, money-making a necessary evil. Combination would help to reduce that evil to a minimum and give him a chance of realizing his deepest and truest conceptions.

Mr. O. Raymond Drey said that at no time had the position of the artist in this country been so bad as it was to-day. There were many directions in which the artist should make his presence felt. Consider, for example, the administration of public and semi-public trusts, such as the Chantry Bequest. It was true that in recent years that particular trust had been administered in a more enlightened spirit, but that change for the better was a piece of sheer good fortune with which artists had had nothing to do. Then, and this was an especially urgent problem, there was the question of war and other memorials. It was his unhappy lot to have to pass quite often a war memorial which was really an appalling eyesore. But unfortunately the evil did not end with the war memorials. They were also inflicted with lamp-posts, drinking fountains, public gardens, parks, and recreation grounds, and the common crop of statuary. What say had the artist in the commissioning of these important public works? What could the confederation do to remedy such a state of affairs? Well, they could at least go to the perpetrators of these horrors and say to them: "We can provide you with artists; we do not guarantee them to be geniuses, but at any rate they are not assassins!" One cause of the trouble was a popular misconception as to the meaning of this terrible word "art." Art was considered as something supplementary to life, something that could be laid on or taken off at will. What should be understood was that a good machine, or even a good pair of boots are more "artistic" than a bad picture. But the real root of the evil laid in false ideas of education, and here was a furrow waiting to be ploughed by the confederation. And last, there was the question of exhibitions at home and abroad. Artists must combine to provide their own exhibition halls; they must press politically for public grants in aid. And they must see to it that British art is worthily represented in foreign exhibitions.

The afternoon session was devoted to a discussion of sectional questions in their relation to the movement.

Mrs. Violet Rawnsley, speaking on the need of unity with regard to the People's Theatre movement, said she believed the question of the theatre was the focusing point of the artists' movement for unity, by reason of the wide and universal nature of its appeal. She appealed to every society there represented, and to every individual who shared in that belief, to rally round the idea which perhaps more than any other at the moment stood irradiated by the light of a great hope—the idea of a People's Theatre. Very briefly she summed it up thus: a people's central theatre—a central theatre in the sense that from it would naturally radiate, in organized succession, both drama and drama productions to other centres wherever they exist, so linking up the whole in one great all-embracing organization. This "Central Theatre," or a site for it given by the State, but run and maintained by the people, for the people, in direct contact with the artist, independent of the middle-man and free of the caprices of any given section of the community. By "People," in this connection, was meant a Confederation of Societies—artists, cultural and intellectual workers, arts, crafts, guilds, and fellowships, plus the societies of manual, technical, professional, and supervising workers, in short, the bulk of the organized sections of the community up and down the length and breadth of the land; such confederation undertaken for a definite end—in the instance with which they were now dealing—a People's Theatre. She appealed for a mass-movement to be organized in support of a people's theatre, based on mass propaganda, mass principles, mass methods, mass contribution, even if only 6d. per head per annum, and that the organization for this be set on foot at the earliest moment, with the definite resolution that action be taken between now and October to ascertain the extent of the support forthcoming from all the different societies concerned, and prepare statements accordingly.

Speaking on the place of education in the present movement Mr. Cloudesley Brereton said that a complete system of education, no matter at what age it ended, fourteen, sixteen, eighteen, twenty-one, or—death, should start with training in the art of living and end with training in one of the divers crafts which lead to livelihood. When the real artist left the art or craft school he went on learning, or, in other words, he continued his education with this dual aim of more abundant living and more adequate livelihood, and from that point of view the great artist was a man whose self-education was never finished. If life and livelihood be the dual aim of the teacher, or in other words, if his work be the production in all classes of society of the honest citizen and the competent worker, then surely his art was the highest of all arts, higher than that of the lawyer or the doctor; he was, or should be, the greatest among artists, for he was, or should be, the maker of men. But that left open the question: Should educational societies unite in a single Federation of Art or should they form a separate federation of their own in close relation with the former, or should they join the existing Federation of Professional Workers? In a word, should there be fusion or entente? France had gone still further and had embodied in a single federation not only artists and educational people, but also technicians in commerce and industry.

In the course of an address on the part of the plastic arts in the Confederation of Intellectual Workers, Miss Amelia Defries, member of the Royal Institution, member of Council, B.C.A., and Associate of the American Federation of Art, said that to improve the trade in art two things were needed; first, better working conditions for the artist, so that the art itself might improve, and, secondly, better gallery accommodation on better terms, better general facilities for showing art to a larger public, better understanding on the part of the country as to the function of art in the life of the nation. But for this, organized effort on a large scale was wanted, in which all the professions, all the societies pull together on a common programme. To make the arts worthy of the nation changes were required, and they had received valuable schemes for the establishment of workshops, post-graduate colleges for artists, and for the setting up of workplaces and of both local and central market-places, which only needed their help to come into being. Without these the life of artists in this country no less than the education of the nation and of its artists, was obsolete and stagnant.

An indication of what could be done was found in the fact that the education officers of the County of Bucks came to them for examples of works of art suitable for use in the national schools, and to-day at Aylesbury there was on view a little show of these that they had been able to supply; one county alone could take 200 copies of a picture, and that would spread to every county and to the whole country, even to the whole Empire. Not only would a market be made in this way, but a public would be educated which in a few years would be satisfied only with the best. The question of a central market-place in London could be solved only by co-operative effort of artists and their societies on a large scale.

In the evening a social gathering was held at the Society of Architects. Mrs. H. V. Lanchester was the hostess, and the programme of music was arranged by the United Guilds of Service.

Contemporary Art

The Architectural Association.

Architectural colour decoration is treated as part of the three-year student's course of the Architectural Association's School of Architecture, and considerable prominence is given to it in the graduate courses of the fourth and fifth years. The results are to be seen at the exhibition now being held at 34 Bedford Square. The student's colour work begins in the first year with patterns, mostly geometrical, wholly conventional, showing the relationship of colours, the effects of one colour on another, and the results of shadows. The second-year course is historical and practical to the extent of the treatment of different coloured materials, as well as colour applied as in Pompeian work. In the third year the student begins to design architecture in colour, and the exhibition shows some essays in colour design for a bathing establishment. There is one with an orange basis which is very pleasing. Of course, at this stage of the course, colour is not used *per se*, but as part of the general design upon which the student is engaged in the other sections of his work. The sheets offered in the graduate course were interesting if unequal; the attempts at originating new pattern designs were not successful. The restaurants would, if achieved, be painful to dine in. It was quite otherwise with the council chambers, not only were the architectural features good, but the application to them of colour was discreet and restful, and continued so as to include the upholstery and hangings. One was treated in red, orange, and yellow; another in blue as to furnishings, amber as to the ceiling panels, and brown as to the woodwork; a very pleasing and successful combination. The courses at the school are, I believe, pioneer work in this direction and are, therefore, the more to be applauded. Colour is life-giving, stimulating, and healthful, and cheering to the spirits when used æsthetically. We want more exterior colour where suitable; the more extensive use of coloured materials, preferably natural ones, in well-designed sequences. It would be a pity if architectural colour was taken to mean only the work of the paper-hanger, and the wall-washer. I should say that is colour work of a subordinate character, and, therefore, I would venture to suggest a still greater stress, in the architectural colour course, on the exploitation of natural resources in this direction.

Frank Partridge's Galleries.

More than 200 pieces of Staffordshire pottery form a magnificent collection at Frank Partridge's Galleries, 26 King Street, St. James's, and they are displayed under the most favourable conditions. They are mostly the work of Ralph Wood and Ralph Wood, Junior, Aaron and Enoch Wood, Thomas Whieldon, and John Astbury, and they were fabricated at the works of the Woods, established in 1740 at Burslem. Technically there is no finer pottery in England, indeed, in the world, for the hardness, durability, and absolute brilliance of the hard, high glaze has never been surpassed. It is to this feature rather than to the artistic merit of the work that its excellence is due. The men who made these pieces were modellers, and sometimes reached to the level of artists, as in the bust of George Whitefield by Enoch Wood (1770), in the very characteristic oval plaques, and in some of the single figures and groups. They were always very fine craftsmen, and the homely nature of the figures of men, women, children, dogs, horses, elephants, deer, foxes, and many other sorts of animals and birds witnesses to their sincerity and singleness of aim. They were artists as well as they knew how, and they loved to bring their work to the highest state both in actual workmanship and in artistic quality to the best of their ability. Even the Toby Jug in their hands became a work of art. This splendid collection consists of the pieces acquired by Mr. Frank Partridge, together with the fine series of objects, which belonged to the late George Stoner. The Woods wares are not well shown in the museums, and the opportunity now afforded of seeing so much of it under such favourable circumstances is not one to be neglected.

Spink's Galleries.

Among the several rare and beautiful works of the Primitives now being exhibited at Spink's Galleries, 5 to 7 King Street, St. James's, are examples of the rare master, Barnaba da Modena, of about 1360; of Sano di Pietro, of the fifteenth-century Sienese school; and a pair of very interesting small Flemish paintings, probably by Lucas van Leyden, of about 1520; a Christ; and a Mater Dolorosa, a work of considerable beauty.

In the Chinese exhibition at the same galleries there are some primitives too. There is a hard-stone head of a priest or immortal, with the large elongated ears and tender mouth, with wonderfully sensitive carving of the lips; a wise and placid head. There is a statuette in terra-cotta of a martial figure in full close armour, with forbidding hand upraised, which is probably a guardian of a grave, serene in its expression and showing traces of the original colouring which must once have adorned it. There is an embracive collection of carvings in jade, other stones, ivory, horn, and wood, all of great interest and historical value.

The Carroll Gallery.

N. H. J. Baird, the Scottish water-colour artist shows, at the Carroll Gallery, 10 George Street, W.1, some clean, glowing drawings of horses and country scenes, mostly in Sussex and Devon. His horses are live, rustic animals, at work and at rest, and studied from the picturesque point of view without any attempt at formal realism.

Walker's Galleries.

The racing caricatures made by "The Tout"—nearly one hundred of them—are excellent. Without knowing many of the prototypes the casual observer cannot help being moved by the obvious humour of these drawings. To those in the know they must be a perfect treat.

There is something quite fresh in Mary Helen Carlisle's "British and American Gardens." They are made without reference to atmosphere, and the sunlight is conventionalized. Yet in their quiet low tones they possess a distinct charm.

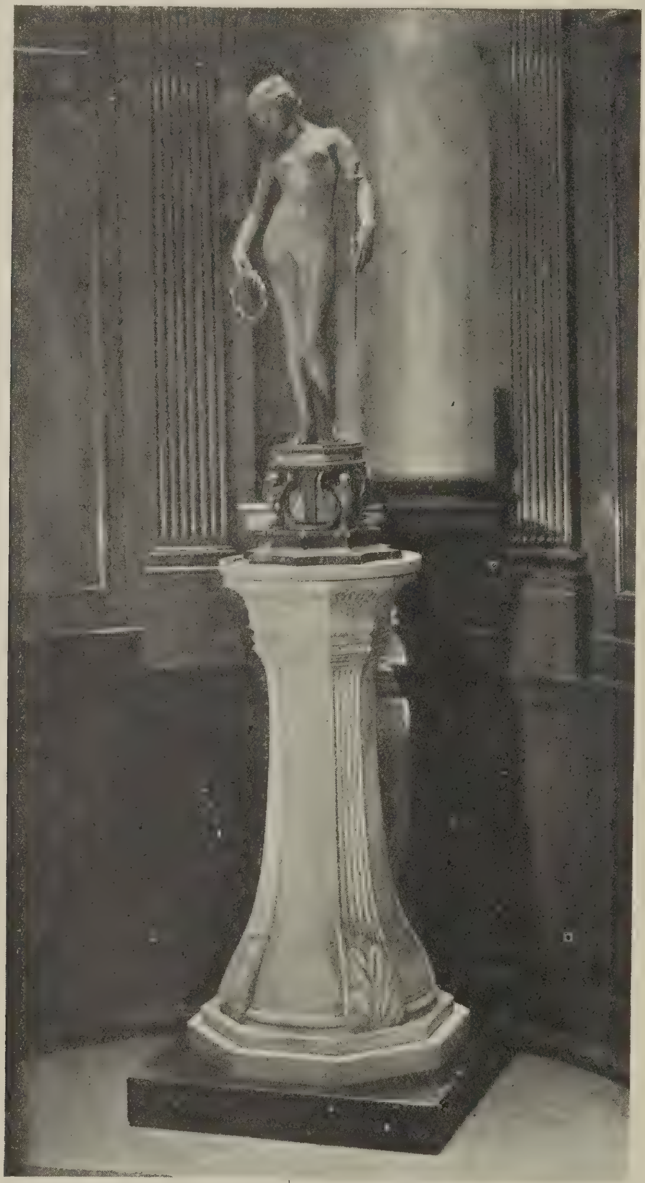
Cooling's Gallery.

An exhibition of Sussex landscapes (Cooling's Gallery, 92 New Bond Street) in oil, by the late José Weiss, of sound character and quite in the English style, recalls an astonishing character in art. Weiss was born at Roubaix, and came to England when he was twenty-five years old. He settled at Houghton, near Arundel, and painted nearly 4,000 pictures of the beautiful county through which the river Arun flows. He photographed many of these, and made a numbered list of them all. He was a regular contributor to the Academy and other exhibitions, and, incidentally, in 1907, he was perfecting practicable aeroplanes and gliders, the trials of which were illustrated in the papers. He died in 1919.

A Statuette by E. Onslow Ford, R.A.

The very beautiful statuette in bronze, with the green patina peculiar to Onslow Ford's small works of this class, entitled "Glory to the Dead," is on view at Messrs. Spink and Son's Gallery, 5 to 7 King Street, St. James's. The figure holding torch and wreath is that of a girl, nude, the body slightly bending to the right. It stands on an ornamental base of bronze, lapis lazuli, Irish green marble, and gold and silver, which is supported on a pedestal of statuary marble with beautiful carved work, standing on a black marble base. The whole forms a very handsome piece of decoration, the total height of which is about 7 ft. It was made by the sculptor for Mr. William Vivian, of Queen's Gate, in 1901, and the price was £1,000.

KINETON PARKES.



A STATUETTE BY E. ONSLOW FORD, R.A.

Correspondence

"Building Heights and Ancient Lights"

To the Editor of THE ARCHITECTS' JOURNAL.

SIR,—In the leading article on my paper on the above subject, published in your issue of June 6, you say: "The author asked for the sympathy of his audience on behalf of architects and owners, who 'are forced to build in strict accordance with the rights of their neighbours.'"

There was no such appeal and no such phrase in the paper I read before the R.I.B.A. What I said was: "The law having given certain rights they must be duly respected, but there is every reason why the present haphazard method should be superseded by a method which would enable the building owner to know precisely before he started his works, what are his neighbours' rights, how those rights may be met, and how and on what terms they could be acquired."

With regard to the proposed increase of building heights and the proposed new machinery for dealing with ancient lights, you say: "The attitude of the Institute is therefore all the more creditable. No formal vote was, of course, taken, but the discussion disclosed emphatic opposition to all three proposals."

This statement does not fit in with the facts: Three or four members spoke against the proposals, but the actual attitude of the Institute is indicated by the fact that its Building Act Committee is studying the question of higher buildings, while its Ancient Lights Committee is studying the question of ancient lights. Until the reports of these committees have been before the Council, and, in turn, before general meetings of the Institute, you are not entitled to infer opposition by the body, as a whole, from the opposition of a handful of members.

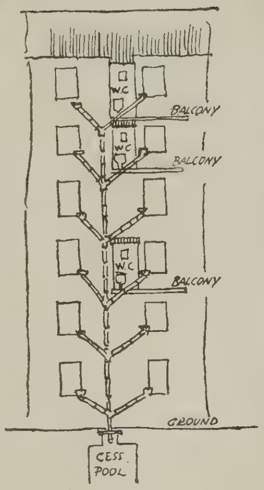
Every movement for reform has been met with the cry of "impossible" by those who think that "whatever is, is right." I am, therefore, not discouraged either by opposition or by criticism, but shall pursue my way in advocating the modifications of the laws governing building heights and ancient lights in the belief that, by so doing, I am rendering a service not only to the community, but to the profession.

DELISSA JOSEPH, F.R.I.B.A.

Sanitation!

To the Editor of THE ARCHITECTS' JOURNAL.

SIR,—The snapshot and diagram are of the sanitary arrangements in a certain interesting and very picturesque town in Europe. They show a typical back elevation of a block of apartments. The windows are in each case those of the kitchens. The small buildings on the balconies are w.c.'s—water in name only, as it is very seldom laid on. Fireclay pipes are spiked to the tenement wall leading untrapped to a cesspool in the street or court. The stone cover is frequently ajar to let the smell out, and the fireclay stack is often damaged and leaking about the street level. There are no sinks in the houses, but wide-mouthed branches are taken to each kitchen window to serve the purpose of scullery sinks. Sometimes these have wooden lids, but they are generally missing. The w.c.'s on the balconies discharge into the same stack, which is not carried to the roof for ventilation, but there is no need as it ventilates beautifully at every window.



BURNETT N. H. ORPHOOT.

The Rome Scholarship Awards

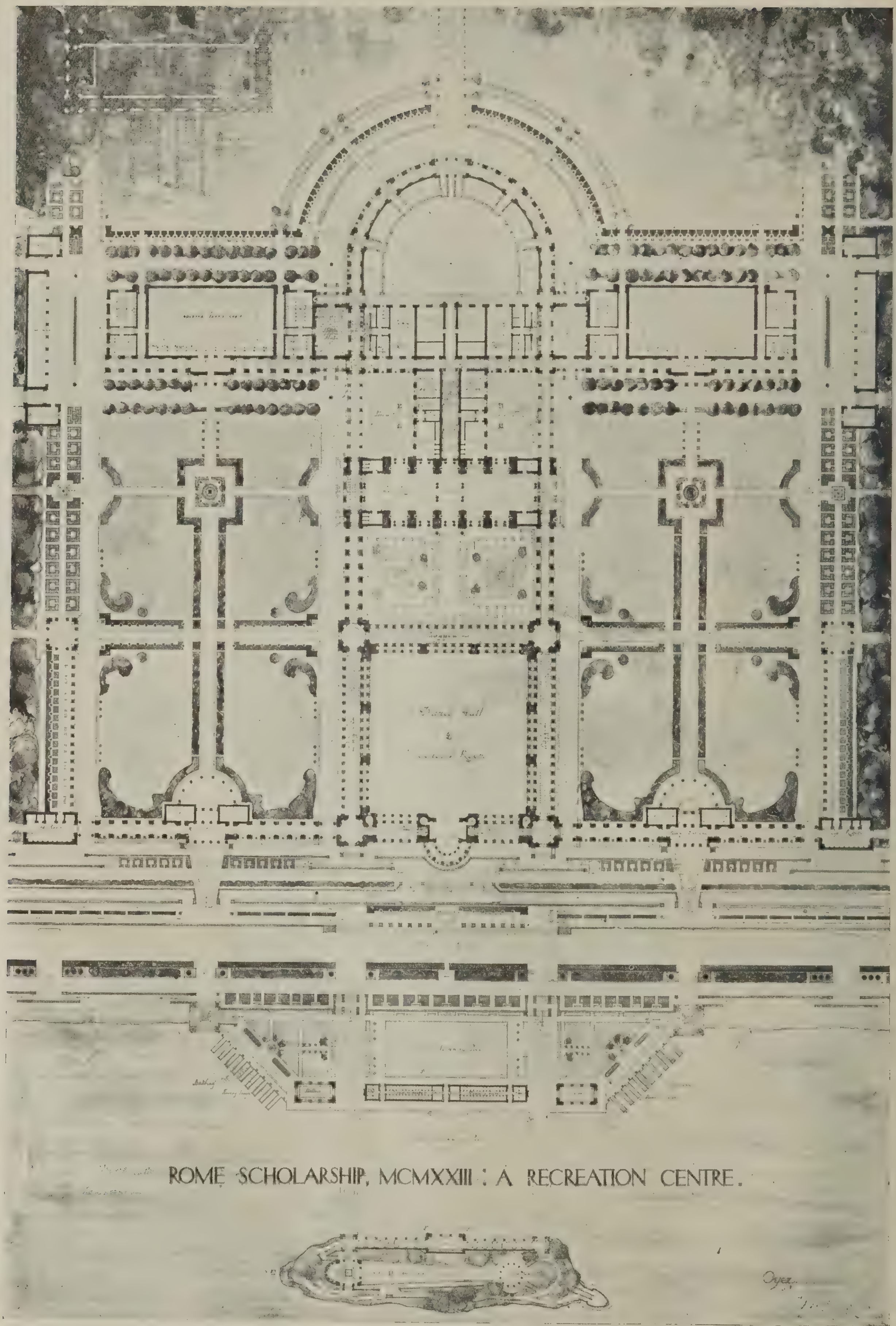
ON the recommendation of the Faculty of Architecture of the British School at Rome the Commissioners of 1851 have awarded the Rome Scholarship in Architecture for 1923 to Mr. R. A. Cordingley, A.R.I.B.A., of the University of Manchester. On the recommendation of the same body the Henry Jarvis Studentship, offered by the R.I.B.A., has been awarded to Mr. Edwin Williams, A.R.I.B.A., of the University of Liverpool.

Mr. R. A. Cordingley is twenty-seven years of age, and was born at Sale, Cheshire. From 1911 to 1914 he was architectural pupil with Mr. Robert J. McBeath, of Sale, and attended the evening course at the Manchester Technical College. He served for four years during the war in the Royal Engineers and the Air Force. In 1919 he entered the School of Architecture of Manchester University, winning the Henry Jarvis Travelling Studentship of the R.I.B.A. in 1920 and 1921, and the Manchester Institute of Builders' Travelling Scholarship in 1922, when he was also elected an Associate of the R.I.B.A.

Mr. Edwin Williams, who is awarded the Henry Jarvis Studentship, is twenty-six years of age, and is a fifth-year student of the School of Architecture of Liverpool University. He has held the Henry Jarvis Travelling Studentship of the R.I.B.A. and the Lever Prizes in Architecture and Civic Design. Mr. Williams served for four years during the war in the 55th West Lancashire Division. He was elected an Associate of the R.I.B.A. in 1921.

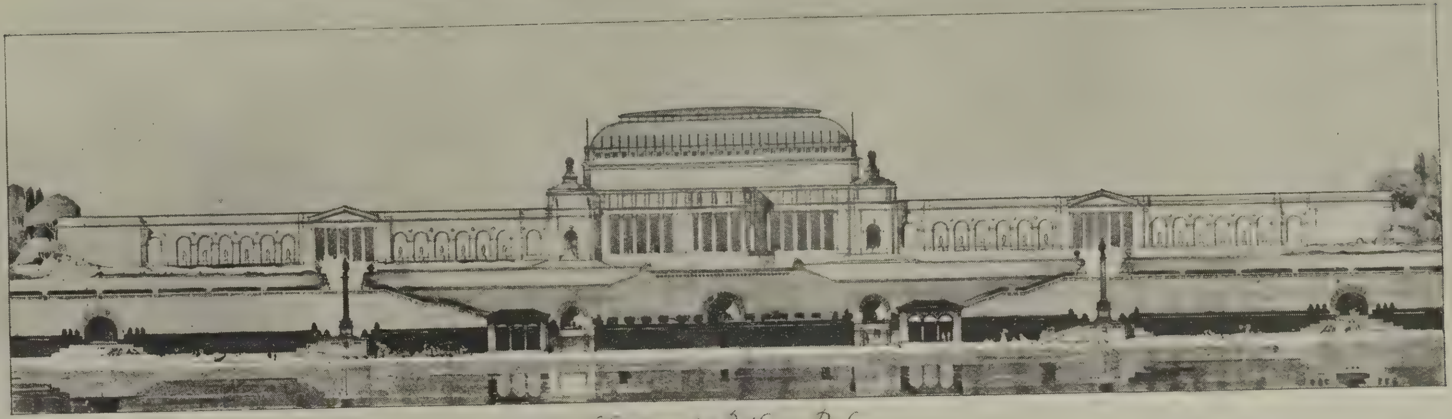
A resolution has been passed by the Faculty of Architecture in reference to the drawings submitted in the final competition for the Rome and Jarvis Scholarship, 1923, as follows: "The Faculty regret to notice that competitors allow themselves far too great a licence in deviating from their esquisses, and in some cases the esquisses are so vague that they are of little or no value in indicating the competitors' designs. In any future competition the main lines and general composition of the design as shown in the esquisse must be adhered to in the final design. Failure to adhere to this condition will in future render competitors ineligible."

(The winning designs are illustrated on the succeeding pages.)

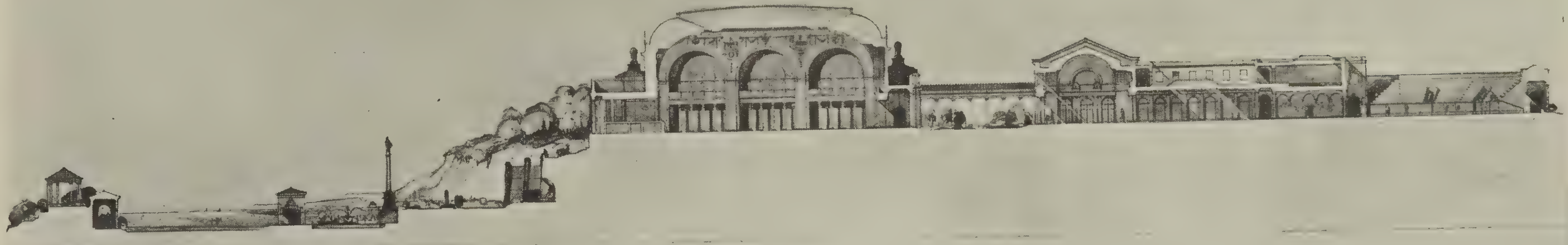


THE ROME SCHOLARSHIP IN ARCHITECTURE," 1923: WINNING DESIGN.
BY R. A. CORDINGLEY, A.R.I.B.A. (MANCHESTER UNIVERSITY SCHOOL OF ARCHITECTURE).

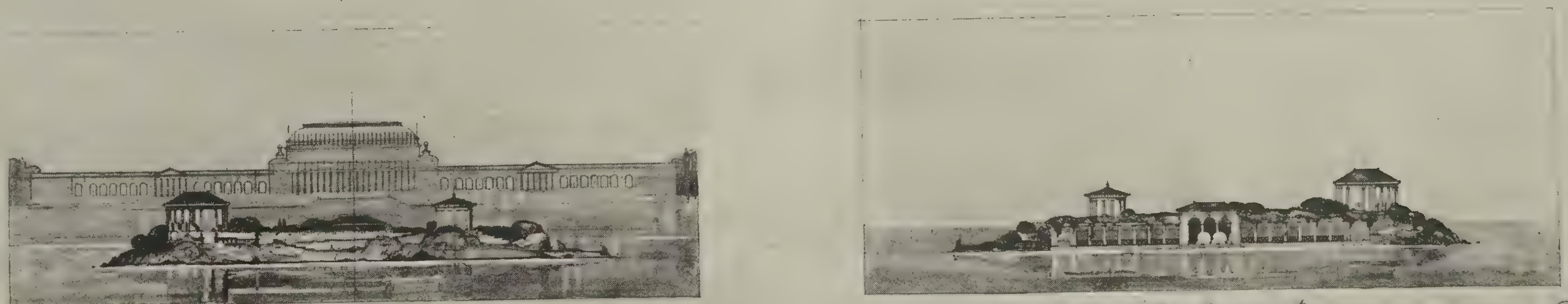
ROME SCHOLARSHIP. MCMXXIII: A RECREATION CENTRE.



Elevation to Bathing Pool.



Long Section



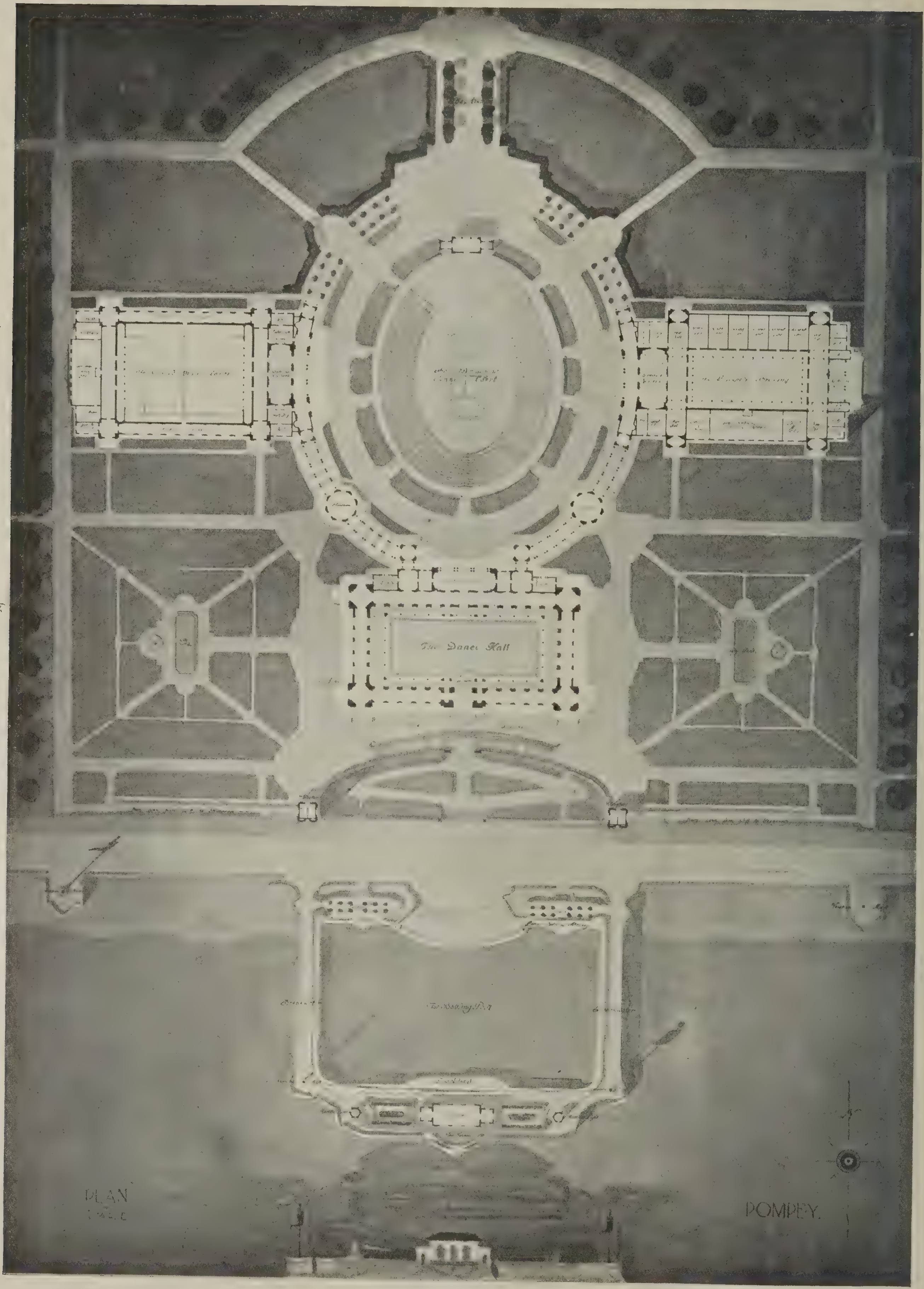
Island from Sea.

Island from Bathing Pool.

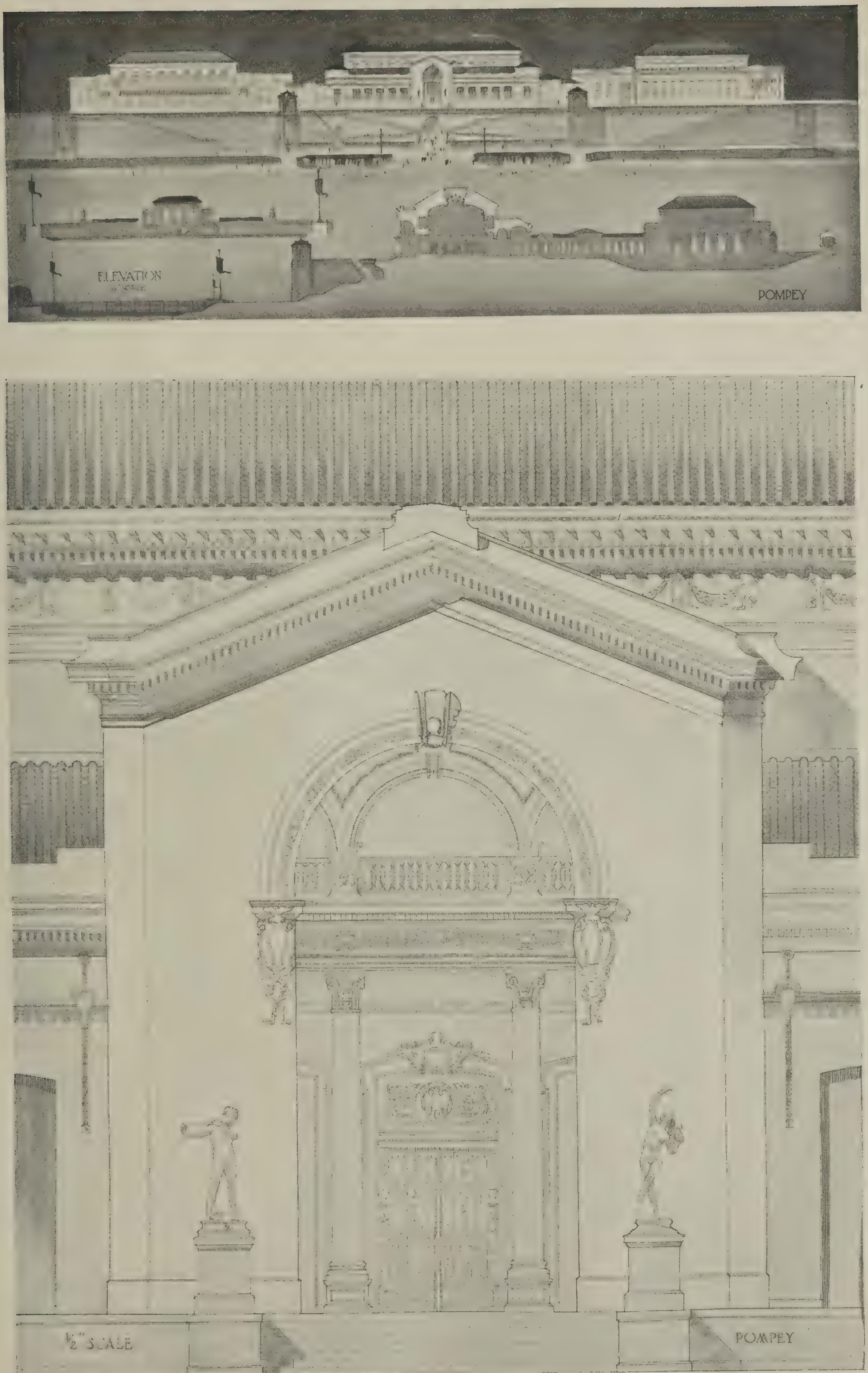
Cyez.

THE ROME SCHOLARSHIP IN ARCHITECTURE, 1923: THE WINNING DESIGN.

BY R. A. CORDINGLEY, A.R.I.B.A. (MANCHESTER UNIVERSITY SCHOOL OF ARCHITECTURE).



THE ROME SCHOLARSHIP IN ARCHITECTURE, 1923: DESIGN AWARDED THE HENRY JARVIS STUDENTSHIP. BY EDWIN WILLIAMS, A.R.I.B.A. (LIVERPOOL UNIVERSITY SCHOOL OF ARCHITECTURE).



THE ROME SCHOLARSHIP IN ARCHITECTURE, 1923: DESIGN AWARDED THE HENRY JARVIS STUDENTSHIP. BY EDWIN WILLIAMS, A.R.I.B.A. (LIVERPOOL UNIVERSITY SCHOOL OF ARCHITECTURE).

Law Reports

Contract for Terra-cotta Cubes—Liability

The Hathern Station Brick and Terra Cotta Co., Ltd. v. *G. Webb and Son, Ltd.*

June 22. King's Bench Division. Before Mr. Justice McCardie.

This was an action by the Hathern Station Brick and Terra Cotta Co., Ltd., of Hathern Station Works, Nottingham, against Messrs. Geo. Webb and Son, Ltd., of Soho Hill, Handsworth, to recover the sum of £950 odd, being the price of certain terra-cotta cubes made for the front of a picture-house which the defendants were constructing for a Mr. Collett, of Taunton Road, Sparkbrook, Birmingham.

The case for the plaintiffs was that before the cubes were required for the picture-house Collett made default in his payments to the defendants, who accordingly suspended building operations, with the result that the cubes were never required. The cubes had, however, been made by the plaintiffs in the meantime, and they said they were useless for sale to anyone else, as they had been made to particular specifications. The question was as to whom the contract was with. It was alleged by the plaintiffs that they received the order from the defendants, but defendants said they merely acted as agents for Collett, and plaintiffs were aware of that fact.

Defendants further said it was an implied condition that if Collett made default in carrying out the contract with defendants before the picture-house should require the terra-cotta cubes no payments in respect of them would be due to the plaintiffs.

His Lordship, after hearing evidence, said he could find no written memorandum of any contract between the parties that would satisfy the Sale of Goods Act. It followed that the claim failed, and there must be judgment accordingly. He was inclined to the view that the contract was between the plaintiffs and the building owner, for whom the defendants apparently acted as agents.

Danger of Infection—Important Decision

Collins v. *Hopkins.*

June 20. King's Bench Division. Before Mr. Justice McCardie.

This was an action by Mr. B. M. Collins against Mrs. E. Hopkins for the return of £88 paid as an instalment of rent for a furnished house—The Poplars, Blenheim Road, St. Albans—and for damages. Plaintiff took the house at six and a half guineas a week rental, and alleged that the house was not fit for habitation because the defendant's husband, who had previously lived in it, suffered from pulmonary tuberculosis. Defendant denied that the house was not fit for habitation.

The facts were set out fully in the judgment.

His Lordship said that in the case of an unfurnished house there was ordinarily no warranty of fitness for occupation. Special circumstances might, however, create such a warranty. In the case of furnished houses or apartments the law implied in the absence of agreement to the contrary a warranty by the landlord as to the state of fitness of the premises. Different phrases had been used in different judgments as to the nature and intent of that warranty. His Lordship expressed the view that not only was the implied warranty on the letting of a furnished house one which sprang from just and necessary implication of the contract, but it was a warranty which tended in the most striking fashion to the public good and the preservation of public health. This was a warranty to be extended rather than restricted, and he hoped the decision in "Humphrey v. Miller," which dealt with a converse case to the present, would be reconsidered by the highest appellate tribunal. It was a decision which was alike opposed to sound policy and to legal principle. There it was held by a Court that there was no implied warranty on the taking of furnished lodgings that the intending tenant was a fit and proper person to take them, and that he was not suffering from an infectious disease. The meaning of the words "fit for habitation" must vary with the circumstances to which they were applied. It was not enough for the landlord to say that he honestly believed that the house was fit and proper for safe habitation. It must, in fact, be fit and safe. The mere belief of the landlord was not enough. Nor, on the other hand, could a tenant renounce his contract because of mere apprehension of risk or through mere dislike to the premises through the fact that a person had died on the premises of smallpox or scarlet fever. He must show more than that. If the risk were serious no one could doubt that the tenant might renounce the contract, but in dealing with bacilli, which might mean illness and death, an appreciable measure of actual risk justified the tenant in throwing up his contract. Having considered the nature of the disease and the risks of infection, his Lordship said he accepted the evidence of plaintiff and his wife as against that of the defendant. The last date on which defendant's husband occupied the house was six weeks before the plaintiff entered into possession. Mr. Thorn Drury, K.C., for defendant, had vigorously contended that the risk of infection had passed. That depended upon the nature of the disease, the precautions taken and the risks run. If the patient were properly trained as to his habits and carried out the medical instructions, and if full regard were paid to ventilation, sunlight, cleanliness, removal of dust, dirt and the like, then the risk of infection might not be serious even to those residing in the house. Still less would the risk be to those who entered the house after the patient had left if proper methods of disinfection had been adopted, particularly under medical supervision, by the use of carbolic acid, lysol, or formalin or by adequate washing, ventilation and exposure to sunlight, and the like steps. His Lordship said he could not accept the defendant's evidence that she left the house free from dust and dirt. He had no doubt the house was left in a most dusty and dirty condition. Dust and dirt were everywhere. He accepted without hesitation the evidence of Mr. Thorpe (the agent who checked the inventory for the plaintiff) that the house was one of the dirtiest and dustiest he had ever visited. His Lordship then gave his conclusions as follows:—

(1) I am not satisfied the house and its contents were free from tubercle bacilli on October 26, 1922.

(2) I am satisfied that there was a substantial risk that the house and its contents were so infected with tubercle bacilli on October 26 as to constitute actual danger to plaintiff and his household.

(3) I hold, if necessary, that in fact the house and its contents were so infected with tubercle bacilli on October 26 as to render it unsafe for occupation.

His Lordship added that in view of what he had said it was unnecessary to deal fully with the further claim of plaintiff upon an express warranty. Plaintiff's wife relied on the statement of the estate agent that defendant's husband was not suffering from consumption but was away in Switzerland on business. "In my view," said the Judge, "that statement should be treated as a warranty." His Lordship did not deal with the question as to whether that warranty was in the nature of a condition or as to the measure of damages for breach. Those points did not call for decision in view of his earlier ruling. No charge of fraud was made against the agent, "although I am bound to say," added his Lordship, "he acted carelessly in giving an answer when desired of information as to the facts."

Judgment was entered for plaintiff for £130 and costs. A stay of execution was granted on the usual terms with a view to an appeal.

The Week's News

New Church for Luton.

At Luton, Beds, a new church is to be erected.

New Church for Cornelly.

At Cornelly, Aberavon circuit, a new church is to be erected at a cost of £1,600.

Abattoir for Portadown.

A public abattoir is to be erected by the Portadown Urban District Council.

West Norwood Public Hall Project.

A scheme has been inaugurated to erect a public hall for West Norwood. The cost is expected to reach £20,000.

Acton House Repairs.

Repairs to new L.C.C. houses at Acton have already cost the ratepayers £13,000, says the district auditor.

New Library for Exeter.

Exeter City Council have decided to expend £30,000 on a new library building in Rougemont grounds.

Housing at Walton-on-Thames.

The Walton-on-Thames Urban District Council have built 50 houses at a cost of £1,200 each, and 150 more are required.

A Southend Builder's Estate.

Mr. John Charles Beale (sixty-four), of Westcliff, Southend, one of the pioneers of the building industry in Southend thirty-four years ago, left £4,599.

More Beeston Houses.

The Beeston Urban District Council have decided to apply to the Ministry of Health for permission to erect a further 100 houses.

Chester-le-Street Housing.

At a conference between the Chester-le-Street Rural District Council and local builders it was stated that at least 5,000 houses are required.

The Scarborough Aquarium.

Scarborough Corporation have received the sanction of the Ministry of Health to borrow £15,200 to purchase the Aquarium.

Brechin War Memorial.

The erection of the memorial to the Brechin soldiers who fell in the war will be commenced at an early date. Messrs. Wright and Wrigley are the architects.

Jersey Improvements.

A large block of buildings in St. Helier has been demolished, and when rebuilt will be a great asset to the town. The new plans include a piazza and arcade, which will lead to a spacious theatre.

Australian Gift to French Town.

The foundation-stone has been laid of a school presented to the municipality of Villers-Bretonneux, near Amiens, by the State school children of Victoria, Australia.

New Buildings at Eastbourne College.

Designs for a new block of buildings at Eastbourne College (to cost about £40,000) have been approved by the council. The central tower will be proceeded with immediately as the war memorial, in addition to a portion of the southern block, which is to be built by the council.

More Houses for Clowne.

The Clowne Rural District Council have decided to ask the Ministry of Health for permission to build an additional 36 houses at Clowne, 30 at Whitwell, and 20 at Barlborough.

Housing at Bolton-on-Dearne.

The Bolton-on-Dearne Urban District Council have decided to proceed with the building of 70 additional houses in Highgate Lane.

Berkhamsted Housing Estate.

The Berkhamsted Co-operative Society have made a contract for making a road through fourteen acres of land at a cost of £3,000 to convert it into a building estate.

£50,000 Building for Pretoria.

The Southern Life have decided to erect a five-story building at Pretoria. This will be the tallest building in the administrative capital. The estimated cost is about £50,000.

Clacton's New Shopping Centre.

At Clacton the triangular block of land at the junction of Station Road and High Street is to be covered with a block of shops and flats. Mr. G. H. B. Gould, A.R.I.B.A., is the architect.

Hampton Court Palace.

The Great Hall at Hampton Court Palace is closed to the public to enable the carrying out of repairs to the timbered roof due to damage done by "death-watch" beetles.

Dorking Drainage Scheme.

Sanction has been obtained to the borrowing by the Dorking Urban District Council of £1,600 for the drainage of that part of the Deepdene estate which is being developed for building.

A Manchester Improvement.

In place of an old block of buildings at the corner of Mosley Street and Charlotte Street, containing over 600 square yards of land, it is proposed to erect a ten-story fireproof modern block of offices.

Charlesworth Sewerage Scheme.

The Glossop Dale Rural District Council are to consider a scheme drawn up by W. H. Radford and Son, of Nottingham, for the sewerage and sewage disposal of the parish of Charlesworth.

Professional Classes Aid Council.

The Queen, who is known to take an interest in The Professional Classes Aid Council (Incorporated), has recently sent a donation of fifty pounds towards the work.

Reims Church Rebuilt.

The Protestant Church of Reims, situated in the Boulevard Lundy, which was completely destroyed by bombardment in September, 1914, has been rebuilt.

An Architects' Cricket Match.

The Architectural Association have challenged the R.I.B.A. to a cricket match to be played at Elstree on Wednesday, July 18. In order that a representative team may be secured the Secretary, R.I.B.A., will be glad if Members and Licentiates who are regular players will kindly send their names to him as soon as possible.

Wireless Station at Rugby.

The Government have acquired about 800 acres of land at Hillmorton, Rugby, for the erection of a huge wireless station in connection with the Imperial Wireless Service.

The Housing Fees Tribunal.

The R.I.B.A. have asked us to give notice that the Housing Tribunal appointed by them to deal with cases for fees in connection with abandoned housing schemes cannot consider any further cases submitted after July 14.

600-Year-Old Inn Doomed.

Ye Olde Rovers Return, the quaint old beerhouse in Shudehill, Manchester, has, after 600 years' service, been marked down by the licensing magistrates as "not required." It is to become a set of offices.

The New County Hall.

The tender of Messrs. Holloway Bros. at £58,126 for the construction of the raft foundation upon which the extension of the new London County Hall is to be erected has been accepted by the London County Council.

Hendon Infirmary.

Hendon Board of Guardians propose to erect a new building to accommodate 120 infirmary cases. £9,000 is to be spent by Hendon District Council in carrying out works of improvement in the vicinity of the new Hendon Central Tube Station.

Maidstone Museum and Art Gallery.

Lady Bearsted at Maidstone laid the foundation-stone of a new wing to the museum and art gallery. It is being built by Lord Bearsted to house the collections of Baxter prints and of Japanese colour prints, etc., presented by the Bearsted family to the borough.

National Coal Resources.

In pursuance of the policy of carrying out the physical and chemical survey of the national coal resources with the help of local committees, the Fuel Research Board have appointed a committee to deal with the coal seams in the South Yorkshire area.

Ventilation of the Commons.

Mr. George Hardie, Labour M.P. for Springburn, intends to call attention in Parliament to the insanitary condition of ventilation in the House of Commons. An expert on heating and ventilation, he has a number of reforms to propose, having been over the buildings to obtain data for his suggestions.

Ironmongers' New Hall.

The foundation-stone of the new hall to be erected by the Worshipful Company of Ironmongers in Shaftesbury Place, Aldersgate Street, E.C., was laid recently. The first hall of the Ironmongers' Company, in Fenchurch Street, was purchased in 1457, rebuilt in 1587, escaped the Great Fire of 1666, and was again rebuilt in 1750. It was destroyed by German aircraft on July 7, 1917, and the site was afterwards sold. In 1922 the company purchased a site in Shaftesbury Place, Aldersgate, for the erection of a new hall. The architect for the new building is Mr. Sydney Tatchell, F.R.I.B.A. (the surveyor to the Ironmongers' Company), under whose supervision the work will be carried out by Messrs. Holland and Hannen and Cubitts, Limited.

New Houses for Carlisle.

Carlisle City Council have approved the proposal of the Housing Committee to erect 200 additional houses on the Blackwell Road and Wigton Road estates. One hundred will be of the three-bedroom non-parlour type, 50 of the two-bedroom non-parlour type, and 50 with three bedrooms and a parlour.

Another 600 Houses for South Shields.

With just over 600 houses occupied or nearing completion, and nearly 1,700 applicants for houses on the Cleadon Park estate, South Shields Town Council have agreed to the erection of another 600 houses on the estate as something towards the solution of the housing problem.

Excavation of an Ancient Bell.

In the course of excavation work at the ruins of Nendrum Abbey, in Ulster, workmen, while clearing debris from the foundations of walls, found hidden in an angle the ancient ecclesiastical bell of Nendrum. There is little room for doubt, states the Ulster Association, that the bell is actually that of St. Mochaoi, given him on his ordination by St. Patrick.

£7,000,000 Bridge.

Sydney is about to spend £7,000,000 upon erecting a cantilever bridge which, it is claimed, will have the largest single span of any bridge in the world, namely, 1,650 ft. The structure is to connect Sydney and North Sydney, and will cross the harbour between Hawes Point and Milson Point. The construction of the bridge will occupy about six years.

Brighton Aquarium.

The Brighton Aquarium Committee has called in Professor S. D. Adshead, who has suggested two schemes for the use of the aquarium. One is to abolish the present building and to place terrace gardens on the site. Alternative plans provide for retention of part of the aquarium and the erection of a concert and dancing hall surmounted by Oriental gardens.

St. John's Church, Walthamstow.

Archdeacon Bayne, secretary of the London-over-the-Border Fund, has received a promise from Mr. Harry Lloyd to contribute £2,000 towards the cost of building the chancel and one bay of the nave of the new church of St. John, Walthamstow. Mr. Harry Lloyd has previously given £2,000 to the building fund.

New Nottingham Generating Station.

The foundation-stone of the powerful generating station in the East Midland electric scheme, the first section of which is to cost three-quarters of a million, has been laid at Nottingham. The new station is to be erected by the River Trent, the water of which will be utilized, thus making cheaper electricity possible. The area scheme will provide power for forty towns and villages, and will link Nottingham with Derby and Leicester for electrical purposes. The station will be one of sixteen mammoth undertakings to supply the whole of England.

Planning to Improve Halifax.

The Halifax Rotary Club was addressed by Mr. C. E. Fox, architect, who submitted details of a scheme he had prepared for planning the centre of Halifax, and particularly the vacant Bull Green site. This scheme, he said, might take a century to complete, but some such scheme should be kept in view in order that present improvements would not jeopardize further developments.

600-Years Roof.

A roof of wattle and daub has been discovered during renovation work at the White Horse Inn, Shere, Surrey. Mr. John H. Howard, of Haslemere, the architect carrying out the work, thinks the roof was built in the late fourteenth century, at the latest, and possibly in the thirteenth or twelfth century.

Chinese Furniture.

The Victoria and Albert Museum have acquired a particularly fine group of Chinese lacquered furniture, which has now been placed on exhibition in Room 41. All the furniture came from the Palace of Nan-Haidze, near Peking. The gilt torchères, in the style of Robert Adam, recently purchased at the Brownlow Sale, are now exhibited in Room 58 of the Museum.

Earl's Court as an Open Space.

A deputation of Fulham residents have presented a memorial to the Fulham Council, praying for the acquisition of the old exhibition grounds at Earl's Court as an open space for the health and welfare of the inhabitants. The Council were informed by a member of the deputation that in the immediate vicinity just recently over 500 families had been housed in tenement buildings, without any garden facilities.

Liverpool's Need for New Houses.

It is estimated that Liverpool needs at present at least 10,000 artisans' dwellings. It is understood that the Liverpool and District Association of House Builders are prepared to resume building operations providing satisfactory terms can be arranged with the Corporation, which, under the new Housing Act, is empowered to make loans in respect of cottages and also of houses ranging from £750 to £1,500.

£35,000 for London Hospitals.

Mr. Alfred James Hamilton, of London, textile manufacturer's agent, chairman of the Sumtravalle Estates, Limited, who died on May 12, left the ultimate residue of his property, subject to life interests, to the London Hospital, conditional upon that hospital building, within a period to be arranged with the Public Trustee, a paying ward for lower middle-class people, to be called the Dorothy Fraser Hamilton Ward. Failing the acceptance of this bequest by the London Hospital, it is to be similarly offered to either St. Bartholomew's, St. Thomas's, or Guy's Hospital, and in the event of it being rejected by all of these hospitals it is t
revert to King Edward's Hospital Fun
for London. The amount of reversio
exceeds £35,000.

Moving a 250-ton Bridge.

A bridge 120 ft. long and 250 tons i
weight is to be towed from Southampto
to Harwich—about 200 miles. Th
removal of a structure of these dimen
sions bodily is believed to be one of th
biggest contracts ever carried out b
water. The bridge will be placed o
specially strengthened barges for th
journey. A powerful tug will take th
craft in tow, and the journey is expecte
to take three days.

Bolton Housing Grants.

To encourage private builders to erec
workmen's houses Bolton Corporatio
have decided that when the new Housin
Bill becomes law—and until the com
mittee otherwise decide—they will gran
a lump sum of £100 per house to person
erecting houses of the type and size men
tioned in the Bill, and completed befor
October 1, 1925. This offer of £100 t
builders is about £25 in excess of th
amount the Corporation expect to receiv
from the Government.

Big Electricity Scheme at Carlisle.

The Carlisle City Council have decide
to proceed with the erection of a ne
generating station at Willow Holme. Th
estimated cost of the new works i
£200,000, but of this sum £60,000 ha
already been spent on machinery installe
at the existing works, which will be trans
ferred to the new works. The Counc
have also approved a scheme involvin
the erection of 200 additional houses o
the Blackwell Road and Wigton Roa
estates.

New York Building Strike.

The bricklayers' strike in New Yor
City, which began a month ago, stoppin
about £35,000,000 worth of work, ha
ended in a victory for the strikers. Th
Builders' Association, by a majority
one, voted to give in to the bricklayer
demands for a basic wage of £2 8s. a da
and a two-year contract. With the cu
tomary bonuses, this means an actu
scale, in the present emergency, of abo
£3 4s. a day.

Liverpool Housing Progress.

It is expected that in six months th
house-building operations of the Live
pool Corporation under the old Housin
Act will have come to an end. Of th
total of 5,838 which the Housing Com
mittee undertook to provide, 4,860 a
completed and tenanted, 941 are i
various stages of construction, while o
the remaining thirty-seven work has ye
to start. In addition, nearly sevent
new houses have been erected on cleare
areas.

What the London Schools are Doing.

In order that the overseas delegates t
the Imperial Education Conference sha
be afforded an opportunity for a compre
hensive survey of London education, th
Council has decided that, at the close
of the Conference, an exhibition of th
work of the London education service,
a whole, shall be held. This exhibitio
will follow, and supplement, the one to b
held, under the auspices of the Board

ducation, for the country generally. he special exhibition of the work of the ondon schools will be held at the ondon Day Training College, Southamp- on Row, W.C.1, from July 10 to 20, both ates inclusive, from 2 p.m. to 8.30 p.m. aily (Saturday, July 14, 10 a.m. to .30 p.m.). Admission will be free.

Triumphal Arch Designer.

Mr. A. Y. Nutt, M.V.O., I.S.O. (formerly urveyor at Windsor Castle), and Mrs. utt have celebrated their golden wed- ing. Mr. Nutt designed triumphal rches and other decorative features at Vindsor and Eton in connection with ueen Victoria's Golden and Diamond ubilee, as well as her eightieth birthday. He also designed the annexe at Westminster Abbey for the coronation of King Edward VII and King George V. Mr. Nutt retired from H.M. Office of Works leven years ago.

Our Unknown Warriors.

As the best way of perpetuating the nemory of British soldiers, whose burial places are unknown, the Imperial War Graves Commission has decided on the erection of a number of memorials on all the battle fronts, on which the names of those who have no known graves will be engraved with a suitable inscription. The first will be at the Menin Gate, Ypres. Work on this memorial, which was designed by Sir Reginald Blomfield, R.A., has already begun.

British Empire Exhibition.

It is officially announced by the British Empire Exhibition that out of the huge area of space available for United Kingdom exhibits by far the greater part has already been applied for. Only a comparatively few square feet remain to be taken in the Palace of Engineering and the Palace of Industry, and applications are coming in steadily. The allotment of space has already begun and is proceeding as rapidly as possible. In a number of sections the applications already exceed the space provisionally apportioned for the particular industry.

Grange Park Estate.

Messrs. Prickett and Ellis, auctioneers, surveyors, valuers, land and estate agents, have been instructed to dispose of the remainder of the building estate known as the Grange Park Estate, situated between Winchmore Hill and Enfield, and practically adjoining Grange Park Station on the Great Northern Railway. The greater part of the estate has been developed by the erection of good class semi-detached or detached houses, and has also a sufficient number of good class shops. The property will be submitted in one lot, and if not so sold in a number of lots, on July 27, at the London Auction Mart.

Dinner to Professor Pite.

Professor Beresford Pite's retirement from the Professorship of Architecture, which he has held at the Royal College of Art at South Kensington for twenty-three years, is felt to be a fitting occasion for some acknowledgment of his services in the cause of art education. It is proposed to hold a dinner in Professor Pite's honour at Pagani's Restaurant, Great Portland Street, W., on Friday evening, July 20, at 7.30 p.m. for 8 o'clock. Mr. L. M. Austin, A.R.I.B.A., Royal College of Art, South Kensington, is acting as hon. secretary, and will send tickets, 7s. 6d. each, to those who wish to be present.

Housing Progress in Scotland.

The following figures show the progress that has been made in State-aided housing schemes in Scotland to May 31, 1923: permanent houses completed, 17,318; temporary houses completed, 665; reconstructed houses completed, 101; houses completed under the private subsidy scheme, 2,250; a total of 20,334. There are 4,053 houses at present under construction in connection with housing schemes carried out by local authorities and public utility societies. The total amount paid by the Scottish Board of Health in respect of the 2,250 houses completed under the private subsidy scheme is £542,050.

The Late Mr. J. H. Morton.

Well known throughout the northern counties as an architect of considerable ability, particularly with regard to the designing of churches and public buildings, Mr. Joseph Hall Morton, F.R.I.B.A., of Westoe Village, South Shields, died on June 28 at the age of seventy-three. He had offices in South Shields, and in Newcastle, and since 1900 his son, Mr. R. H. Morton, had been in partnership with him. He obtained his earlier training with the late Matthew Thompson, F.R.I.B.A., of Newcastle. He had occupied the presidential chair of the Northern Architectural Association and had designed poor law institutions and infirmaries in various parts of the country, including South Shields, Gateshead, Leeds, Bradford, York, Doncaster, Hartlepool, and Hexham.

Expeditious Building

The truth of the old adage "Time is Money" is nowhere more convincingly demonstrated than in the case of building contracts. Building owners are naturally keen to save money, and to do this they often adopt obvious expedients which are not necessarily calculated to produce the desired result—such, for example, as accepting the lowest of a set of tenders. Expedition in carrying out the work may be a more important consideration than initial low cost, especially in those cases where business has to be carried on during reconstruction. It is obviously more economical to pay a fair price for building work and get possession of your premises quickly than to pay an inadequate price and possibly be held up for a great length of time, with all the heavy loss that inevitably results from dislocation of business.

A practical example of quick work of this kind is the new shop of Messrs. Harvey Nichols & Co., in Knightsbridge. Twenty weeks after Messrs. Higgs and Hill were given possession of the old building, the ground and first floors of the new one were open (June 25) to the public. Only with all the resources of a great business—efficient organization, highly skilled workmanship, adequate transport, the use of labour-saving appliances, and so forth—can such a thing be accomplished. Messrs. Higgs and Hill are to be congratulated upon a notable and extremely creditable performance. Messrs. Williams and Cox are the architects.

"Dekart"

How would you judge whether a piece of oak, apparently 300 years old, was genuine? Usually it is the practice to examine it carefully, to tap it and note the sound, to touch it and to look for any repetition of grain. We examined a panel in this manner a day or two ago wondering where such a charming piece of craftsmanship could have been picked up. After noting the design, the old age dust in the crevices, and the "worm holes," we came to the conclusion that it was at least two centuries old. Experts to whom it was submitted concurred with our decision. The mystery was then solved. It was exactly six weeks old! It was a faithful reproduction in "Dekart," the constituents of which are tough fibre and a hard composition. It is a remarkable invention, and there is nothing to distinguish it from the real thing. Old oak, however, is not the only extent of its possibilities. Any wood can be imitated, and even stone, plaster, glazed tiling, and ornamental metalwork. With this material any desired result may be obtained at, it is claimed, much less cost than the original material. Imitations can be made of the best woods for beautifully carved or plain panelling, mantelpieces, carvings, furniture, picture rails, and all kinds of joinery, of the best tiling, for walling and hearths, and of old beaten iron or other metalwork for lighting fittings.

Perhaps the most difficult test to which the material has been put was in connection with the showrooms of the General Electric Company at Birmingham. Here, among other work, was a 70 ft. sales counter under which steam pipes run, and grill work round the Jacobean room to protect the radiators. In neither case has the heat affected the "Dekart."

On the stand of the manufacturers at the recent Building Exhibition was a chest which was believed by everyone, after careful examination, to be of very old oak. This chest was of "Dekart," and was shown to enable a comparison to be made between this material and real oak. No one but the keenest expert could discriminate between it and a genuine antique. Not only is the detail correct, but the colour, "wear and tear," and surface are faithfully reproduced.

The manufacturers and patentees of "Dekart" products, the Associated Crafts, Ltd., have sent us a profusely illustrated booklet, which shows in an extremely interesting manner how the material can be used to create, among other things, charming interiors in conformity with English traditional design. The head office and works of the company are: Bridge Works, Cricklewood Broadway, London, N.W.2, and the registered offices, 28 Avenue Chambers, Southampton Row, London, W.C.1.

Coming Events

Thursday, July 5.

British Museum. — "The Roman Period." By Miss Claire Gaudet. 3.15 p.m.

Friday, July 6.

A.W.G.—"French Engravers of the Eighteenth Century." 8 p.m.

Saturday, July 7.

Edinburgh A.A.—Visit to Messrs Shanks & Co., Barrhead.

List of Competitions Open

Date of Delivery.	COMPETITION.
July 5	The Slough Urban District Council invite architects who are willing to join in a limited competition for the lay-out and development of a site providing for the erection of new council offices, shops, etc., to send in their names to Mr. F. R. Duxbury, Clerk, Council Offices, Slough, by 12 noon on July 5, together with particulars of their experience, with illustrations of their work, or such other information as the candidate may think likely to advance his claim to be admitted to the competition. It is intended to invite a limited number of selected architects to join in the competition, each competitor to receive a specified sum for the preparation of his design.
Aug. 25	Public Swimming Baths and Washhouses, East Greenwich. Assessor, Mr. Henry V. Ashley, F.R.I.B.A. Premiums: £300, £200, £100. Apply Mr. Frederick J. Simpson, Town Clerk, Town Hall, Greenwich.
Sept. 12	Masonic Temple in Broad Street, Birmingham. Premiums: £500, £300, and £200. Sir Banister Fletcher, F.R.I.B.A., is the assessor The competition is restricted to architects who are masons subscribing to Lodges in the Province of Warwickshire. Apply Mr. J. P. P. Dutfield, 65 Temple Row, Birmingham.
Sept. 30	Designs for a series of plaquettes in bronze illustrative of London as the capital city of the Empire, or of one or more of her main architectural features. Designs should be submitted in the form of models in plaster. The following prizes are offered:—One prize of 100 guineas, two prizes of 50 guineas, three prizes of 25 guineas. Apply Deputy Master of the Royal Mint, London, E.C.1.
Sept. 30	The best colouring of a design for the vestibule connecting 315–317 Oxford Street with 17-19-21 Dering Street, Messrs. Thomas Parsons and Sons' new offices and showrooms. Prizes: 100 guineas, 50 guineas, 25 guineas, and five consolation prizes of 10 guineas each. Assessors—Sir Edwin Lutyens, R.A., F.R.I.B.A., Sir David Murray, R.A., P.R.I., H.R.S.A., Sir John Lavery, R.A., Mr. Frank Brangwyn, R.A., and Mr. E. Guy Dawber, F.R.I.B.A., will adjudicate. Apply Competition Department, Thomas Parsons and Sons, 315–317 Oxford Street, London, W.1. There is no entrance fee.
Nov. 5	Art Gallery for Hull. Assessor, Mr. John W. Simpson, PP.R.I.B.A. Apply (with cheque for £2 2s.) to Mr. H. A. Learoyd, Town Clerk, Guildhall, Hull.
No date	The Student Welfare Committee, University of Glasgow, invite Competitive Designs (limited to Architects having an office in and practising within the Municipal Boundaries of the City of Glasgow) for a Pavilion to be erected on the University Athletic Ground at Westerlands, Anniesland, at a cost of £10,000. Assessor Mr. Alexander N. Paterson, A.R.S.A. Apply Honorary Secretary, Student Welfare Committee, The University, Glasgow.
No date	Erection of a Cenotaph on a site in Paragon Square, Hull, belonging to the Corporation. Conditions of the Competition together with a plan of the site will be supplied by the Town Clerk on receipt of a cheque for one guinea, which deposit will be returned to competitors on receipt of a bona-fide design. The estimated cost of the work amounts to £4,000 and premiums of £150, £75, and £50 are offered for the designs placed first, second, and third respectively. The assessor is Mr. Stanley Hamp, F.R.I.B.A.

Competition News

Bournemouth's New Pavilion.

The awards of Sir Edwin Cooper, F.R.I.B.A., the assessor in the competition promoted by the Bournemouth Corporation for plans for the new pavilion which is to be erected on Belle Vue site, near Bournemouth pier, at a total cost of about £160,000, are as follows :—

1. Mr. G. Wyville Home, A.R.I.B.A., and Mr. Shirley Knight, A.R.I.B.A., of Lincoln Chambers, Portsmouth Street, Lincoln's Inn Fields, London.

2. Mr. H. V. Ashley, F.R.I.B.A., and Mr. Winton Newman, F.R.I.B.A., of 14 Gray's Inn Square, London.

3. Messrs. Collcutt and Hamp and Mr. J. F. Watkins, Associated Architects, of 20 Red Lion Square, London.

Nearly one hundred designs were submitted.

Cork Town Hall.

The design of Messrs. Jones & Kelly, of Dublin, has been placed first in the Cork Municipal Buildings and City Hall Competition. The design of Messrs. M'Donnell & Dixon, of Dublin, was placed second and that of Messrs. W. H. Byrne & Son, of Dublin, third; Mr. Lucius O'Callaghan, F.R.I.M.I., was the assessor.

Anzac Memorial at Port Said.

The High Commissioner for Australia has been officially advised that the assessors appointed by the Commonwealth Department of Defence to make the awards offered for designs for the memorial to be erected at Port Said to the memory of soldiers of the Australian and New Zealand Forces who fell in Egypt, Palestine, and Syria, in the Great War, have allotted the awards as follows :—

First : Mr. C. W. Gilbert (250 guineas).

Second : Mr. G. Gavin Lawson (100 guineas).

Third : Mr. W. L. Bowles (50 guineas).

The competition was open to sculptors and architects of British nationality permanently resident in Australia or New Zealand, and to Australian and New Zealand sculptors and architects resident in other countries.

The Improvement of Industrial Designs.

The Royal Society of Arts have decided to hold an annual competition of industrial designs—one class open only to students of schools of art, the other open to all. The subjects so far arranged are divided into four sections—architectural decoration, textiles, furniture, and book production, and it is hoped at an early date to appoint committees to deal with the remaining subjects into which artistic design may be said to enter. After each competition it is proposed to hold exhibitions of selected designs in suitable centres. The society's diploma will be conferred on any candidate of outstanding ability. It is hoped that this will soon come to be recognized as a hall-mark of excellence, and anyone possessing it will be known to employers as a designer not only of the highest artistic power, but also with a practical knowledge of the materials and processes of his trade. To add to the attractiveness and utility of the competition, the society is anxious to raise a fund to establish money prizes and, if possible, one or more travelling scholarships. The young designer of promise is often prevented by lack of means and leisure from acquiring that education which is the basis of the best original work. It is felt that the establishment of such scholarships would be of immense value in creating a class of select designers, and would eventually tend to raise the general level of design throughout the country. This result would certainly exert a healthy influence on our export trade, for there can be on doubt that wealthy buyers throughout the world will come to those markets where the best taste is to be found. The Council of the Society therefore appeal with confidence to all, who are not only interested in the artistic industries of the country but hope for the general improvement of British trade, to assist them in promoting the scheme outlined above Contributions to the fund may be addressed to the secretary, Royal Society o Arts, John Street, Adelphi, W.C.2.

Victory Scholarship Competition, 1923

Thirty-three entries were received this year for the "Victory Scholarship." Thirty designs were received from competitors sitting at Aberdeen, Bristol Glasgow, Leeds, Liverpool, and London on Saturday, June 9, from 10 a.m. to 10 p.m. The subject set was "A Monumental Fountain." The jury of assessors —Messrs. H. V. Lanchester, L. Sylvester Sullivan, L. H. Bucknell, G. Gordon Hake, and Howard Robertson—after long and careful deliberation selected ten drawings bearing the following index numbers for the final competition : 121, 124, 125, 127, 130, 135, 137, 138, 146, and 147.

The authors of these designs were then declared to be as follows : F. Scarlett, of London, 121 ; B. M. Flegg, of London, 124 ; D. F. Martin-Smith, of London, 125 ; C. S. White, of London, 127 ; J. C. Shepherd, of London, 130 ; R. H. Brentnall, of Bristol, 135 ; A. J. Saise, of Bristol, 137 ; J. A. Coia, of Glasgow, 138 ; J. Addison, of Leeds, 146 ; S. Bradley, of Leeds, 147.

The final competition will be held on Saturday, July 14, the programme for which will not be disclosed until that date. The whole of the esquisses are on exhibition at the Society of Architects, 28 Bedford Square, W.1, from 10 a.m. to 5.0 p.m. daily (Saturdays 12 o'clock), until Friday, July 13.

Trade and Craft

Changes of Address.

Merritt Service, advertising specialists and commercial artists, have moved to 16 Gray's Inn Road, W.C.1.

The Art Metal Construction Co. have moved to Alexandra House, 31 Kingsway, W.C.

Change of Telephone Number.

Messrs. Chas. P. Kinnell & Co., Ltd., of 65 and 65a Southwark Street, London, S.E.1, ironfounders, engineers, and contractors, have changed their telephone number from Hop 372 to Hop 362 (three lines).

Foreign Market for Cement.

A report on the market for cement in the Dominican Republic, furnished by His Majesty's Chargé d'Affaires at Santo Domingo (Mr. Darrell Wilson), has been issued by the Department of Overseas Trade, 35 Old Queen Street, London, S.W.1, to firms on the Department's "special register." United Kingdom firms interested in this matter should apply to the Department at the above address, quoting reference 8190/FL/MC (2).

Publications Received

Catalogue of English Furniture and Woodwork at the Victoria and Albert Museum. Vol. I. Gothic and Early Tudor. Price 2s. 10½d., post free. Victoria and Albert Museum, South Kensington, S.W.7.

R.I.B.A. Council Meeting

Appended are notes from the minutes of the last meeting of the Council of the R.I.B.A. :—

Model By-laws and Regulations for the Prevention of Waste and Contamination, etc., of Water.—Messrs. Max Clarke and Percival M. Fraser were appointed to represent the Royal Institute at the conference summoned by the Ministry of Health to discuss proposals in the model by-laws prepared by the British Waterworks Association.

The Western Avenue.—It was decided to urge the Ministry of Transport and the Middlesex County Council to exercise their powers under the Development and Road Improvement Funds Act, 1909, to purchase immediately a strip of land of a width up to 440 yards in all in connection with the construction of the Western Avenue.

Treatment of Wastes in Rural Districts.—It was decided to urge the Ministry of Health to consider the issue of an appendix to their present model by-laws to the effect that in rural districts where the number of cottages does not exceed eight to the acre, such cottages should be exempt from the by-laws respecting the prescribed treatment of the wastes from sculleries and sinks.

The Association of Transvaal Architects.—The Association of Transvaal Architects were formally admitted to alliance with the R.I.B.A.

The Northern Polytechnic Institute.—The Council accepted a gift from the governors of the Northern Polytechnic Institute of a set of graphs showing the variations in prices of a number of building materials during the war period. These graphs have been placed in the library.

The British School at Rome.—Sir Reginald Blomfield, R.A., was reappointed for a further period of three years to represent the R.I.B.A. on the council of the British School at Rome.

The National Gas Exhibition, 1923.—The Council received and accepted an invitation from the Executive Committee of the National Gas Exhibition, 1923, to allow the Royal Institute to appear as a patron of the exhibition. They also authorized the inclusion of the name of the president of the Royal Institute in the list of vice-presidents of the exhibition.

Die-casting Research

The British Non-Ferrous Metals Research Association has undertaken an extensive series of investigations on die-casting alloys which will spread over at least three years and entail an expenditure exceeding £10,000. Full particulars of the scheme can be obtained from the headquarters of the British Non-Ferrous Metals Research Association, 71 Temple Row, Birmingham. The development and support of die-casting in this country, as a means of rapid production, are recognized as of great national importance for commercial production. The Department of Scientific and Industrial Research, after holding conferences of those interested in die castings, have promised most substantial financial support to the research. The Research Associations of the British Motor and Allied Industries, of the Scientific Instruments, and of the Electrical and Allied Industries, have also afforded their support, and are represented on the committee controlling the investigations. It remains for the industry—makers and users—to provide their quota of the fund required, as without this it will be impossible fully to develop the work, the results of which will be primarily available to those who support the research.

Since die castings serve chiefly as components of plant and machinery, it is not always recognized how important they are, but anyone inquiring into the subject will come across very varied uses in connection with brush gear of electrical machinery, gas meter parts, vacuum cleaner fittings, etc.

Various types of alloys are used in die casting, and recognizing the wide field, the proposed research has been divided into three sections: 1. Brass and bronze alloys; 2. Aluminium alloys; 3. Low-melting point alloys (zinc, tin, lead, etc.). These three branches, with suitable arrangements for co-operation, will be dealt with in separate institutions, under the supervision of recognized leaders of metallurgical research. Every care is being taken in the constitution of the committee which controls the work to ensure that both the manufacturers and the users are represented. Work of this nature demands the close interest of the industry, and it is hoped that no difficulty will be experienced in obtaining the small subscriptions required to assure the substantial Government support, which is only available in a measure dependent on the backing of the scheme by the industry.

The Past and Future of Gas

Mr. J. D. Smith, M.Inst.C.E., chief engineer of the Belfast Corporation Gas Department, in his presidential address to the Institution of Gas Engineers delivered at Belfast recently, reminded his hearers that on August 31 of this year Belfast will have been a gas-lit city for 100 years. Mr. Smith quoted a lengthy and interesting article from the "Belfast News Letter" of September 2, 1823, in which the advent of gas was given a stately and sonorous welcome. The journalist of this bygone day referred to "the mild radiance flowing from the lamps particularly when contrasted, by memory, with the gloomy twilight, or rather darkness visible, which formerly issued from our dull and sombrous globes." "The light now used," the writer went on, "is of the purest kind, shedding on the streets a brilliant lustre—pleasing, but not dazzling—and more resembling the clear effulgence of a cloudless atmosphere illuminated by the moon, than any artificial beams heretofore produced by the imitative power of man."

Mr. Smith then gave a detailed account of the growth and progress of the Belfast Gas Undertaking. Whereas in 1875 the company made 418 million cubic feet of gas, in 1922 the figure was 3,247 million cubic feet.

Referring to the question of smoke abatement the speaker mentioned that although two-thirds of the smoke nuisance was due to domestic fires, yet these sources of evil were still immune from the operation of smoke-preventive legislation. He was not, however, a believer in the efficacy of punitive legislation, at any rate at the present stage. They must rely on education. They must educate people to realize that in gas there was an alternative to smoke-producing fuels, and an alternative equally cheap and much more convenient and much more efficient.

Mr. Smith also dealt with the question of carbon monoxide and deprecated the exaggerated and largely misinformed and inexpert campaign of certain sections of the Press. The Board of Trade Committee of Enquiry had, he reminded them, reported unanimously that it was neither necessary nor desirable to prescribe any limitation of the proportion of carbon monoxide which might be supplied in gas used for domestic purposes. The usual argument of the scare-mongers was that CO was an invisible and inodorous gas. The elementary fact that CO was never supplied alone was always ignored. It would take a very large admixture indeed of blue water-gas with coal-gas to make any diminution in the pungency of the smell; and the smell of all town's gas, as distributed, was very noticeable long before the quantity in the air of a room became in the least dangerous.

New Inventions

Latest Patent Applications.

15199.—Ambrose, J. R.—Support, staging, etc., for building concrete, etc., floors. June 11.

15352.—Bendall, R. L.—Roads, buildings, etc. June 16.

15546.—Berner, C.—Staircases. June 14.

15326.—Bonnet, J.—Automatic jack for supporting walls, etc. June 12.

15406.—Mouchel and Partners, Ltd., L. G. — Bridges and floors. June 13.

15628.—Rohde, C. J.—Reinforced-concrete slabs, bricks, etc. June 15.

Specifications Published.

198611.—Moller, V. F.—Radiators for steam and water heating plant.

198619.—Taylor, A., and Linn, J.—Surveyors' levels and like instruments.

198624.—Lobban, C. H., and Geneve, C. A. — Reinforced - concrete floors.

Abstract Published.

196863.—Building-blocks.—A. Thee, 40 Worthstrasse, Wurzburg, Germany.—Building blocks of a special shape are made of specific relative dimensions, and other blocks are derived from the general form by omitting one or more parts of the block so that a proper bond may be made at the corners of a building.

The above particulars are specially prepared by Messrs. Rayner & Co., registered patent agents, of 5 Chancery Lane, London, W.C.2, from whom readers of the JOURNAL may obtain all information free relating to patents, trade marks, and designs. Messrs. Rayner & Co. will obtain printed copies of the published specifications and abstract only, and forward on post free for the price of 1/6 each.

Demand for Sanitary Ware

A further report in connection with the present demand for sanitary ware in the United States of America has been issued by the Department of Overseas Trade, London, to firms enrolled on its special register. Reference: D.O.T.4970/T.M./M.C.(2) should be quoted in correspondence on this subject.

Rates of Wages in the Building Trades*

The following table, which is published in the first issue of THE JOURNAL for each month, shows the revised rates of wages for craftsmen (bricklayers, masons, carpenters and joiners, woodcutting machinists, slaters, plumbers, plasterers and painters), and labourers in the building trade. The labour rates for London are given in the Table of Current Prices on pages xxiii and xxiv.

Grade.	Craftsmen.	Labourers.	Grade.	Craftsmen.	Labourers.	Grade.	Craftsmen.	Labourers.
	s. d.	s. d.		s. d.	s. d.		s. d.	s. d.
A	1 7	1 2¼	B	1 5	1 0¾	C	1 3½	11¾
A1	1 6½	1 2	B1	1 4½	1 0½	C1	1 3	11¼
A2	1 6	1 1½	B2	1 4	1 0	C2	1 2½	11
A3	1 5½	1 1¼	B3	1 3½	11¾			

Grading of Towns.

The towns in which the above grade rates have been reported to apply are shown below, divided into their main area groups. The principal exceptions are indicated in the notes appended to each Group. In towns marked* the rate for painters is 1d. less than that paid to other craftsmen, and in those marked† it is ½d. less than the craftsmen's rate.

NORTH-EAST COAST :—

Grade A.—Alnwick, Annfield Plain, Birtley, Bishop Auckland, Blackhill, Blyth, Chester-le Street, Consett,* Darlington, Durham, Ebchester, Gateshead, Hartlepools, Hebburn, Hexham, Jarrow, Lanchester, Leadgate, Medomsley, Middlesbrough, Morpeth, Newcastle, North and South Shields, Seaham Harbour, Stanley, Stockton, Sunderland, Thornaby, Tynemouth, Wallsend, Whitburn, and Whitley Bay.

YORKSHIRE :—

Grade A.—Alltofts, Barnsley, Batley, Bingley, Birstall, Bradford, Brighouse, Calder Valley, Castleford, Cleckheaton, Cleethorpes, Colne Valley, Crosshills, Dewsbury, Doncaster, Gomersal, Grimsby, Guiseley, Halifax, Harrogate, Hebden Bridge, Heckmondwike, Holmfirth, Horbury, Hoyland, Huddersfield, Hull, Ilkley, Immingham, Keighley, Knottingley, Leeds, Liversedge, Mexborough, Mirfield, Morley, Normanton, Ossett, Penistone, Pontefract, Pudsey, Rawdon, Rotherham, Scunthorpe, Selby, Sheffield, Shipley, Sowerby Bridge, Stocksbridge, Wakefield, Wombwell, and Yeadon. **Grade A3.**—Barnoldswick, Beverley, Bridlington, Goole, Hornsea, Scarborough, Skipton, Worksop, and York. **Grade B3.**—Kirby Moorside, Malton, Northallerton, Norton, and Wetherby.

NORTH-WESTERN COUNTIES :—

Grade A.—Accrington, Adlington, Alderley Edge, Altrincham, Ashton-under-Lyne, Atherton, Bacup, Barrow, Birkdale, Bispham, Blackburn, Blackpool, Blackrod, Bolton, Broughton (Flints), Burnley, Bury, Carlisle, Chester, Chorley, Church, Cleveleys, Clitheroe, Colne, Connahs Quay, Dalton-in-Furness, Darwen, Denton, Droylsden, Eccles, Farnworth, Fleetwood, Frodsham, Glossop, Great Harwood, Haslingden, Hawarden, Helsby, Heywood, Higher Kinnerton, Horwich, Hyde, Kirkham, Leigh, Leyland, Littleborough, Longridge, Lymm, Lytham, Manchester, Middleton, Mossley, Nelson, Ormskirk, Oswaldtwistle, Oldham, Padiham, Pendlebury, Poulton, Preston, Prestwich, Queensferry, Radcliffe, Ramsbottom, Rawtenstall, Rishton, Rochdale, Runcorn, St. Annes-on-the-Sea, St. Helens, Saddleworth, Sale, Salford, Shaw, Shotton, Southport, Stalybridge, Stockport, Swinton, Thornton, Todmorden, Tyldesley, Walkden, Warrington, Westhoughton, Whalley, Whitefield, Widnes, Wigan, and Wilmslow. **Grade A2.**—Lancaster and Morecambe. **Grade A3.**—Askam, Broughton-in-Furness, Buxton, Cleator Moor, Congleton, Coniston, Crewe, Distington, Egremont, Grange-over Sands, Harrington, Knutsford, Macclesfield, Maryport, Market Drayton, Middlewich, Millom, Mold, Nantwich, New Mills, Northwich, Sandbach, Tarporley, Ulverston, Winsford and Over, Whitehaven, Workington, and Wrexham. **Grade B1.**—Colwyn Bay, Conway, Holywell, Llandudno, Llandudno Junction, Mostyn, Prestatyn, Rhos and Rhyl. **Grade B2.**—Bala, Cockermouth, Kendal, and Penrith. **Grade B3.**—Ambleside, Bangor, Bowness-on-Windermere, Carnarvon, Grasmere, Holyhead, Langdale, and Windermere.

[NOTE.—*In the Liverpool and Birkenhead districts the rates remain at 1s. 10d. for plumbers, 1s. 9d. for other craftsmen, and 1s. 4d. for labourers. The new rate for plumbers at Warrington is reported as 1s. 8d.*]

MIDLAND COUNTIES :—

Grade A.—Alfreton, Belper, Bilston, Birmingham, Blackheath, Burslem, Chesterfield, Coalville, Coventry, Derby, Hanley, Heanor, Hinckley, Ilkeston, Kenilworth, Leicester, Lincoln, Long Eaton, Loughborough, Mansfield, Newcastle-under-Lyme, Nottingham, Ripley, Stoke-on-Trent, Sutton Coldfield, Sutton-in-Ashfield, West Bromwich, Willenhall, and Wolverhampton. **Grade A3.**—Atherstone, Bewdley, Boston, Brierley Hill, Bromsgrove, Burton-on-Trent, Cannock, Coseley, Darlaston, Dudley, Gainsborough, Gornal, Grantham, Halesowen, Hednesford, Kidderminster, Knowle, Leamington, Leek, Lichfield, Louth, Malvern, Market Harborough, Matlock, Melton Mowbray, Newark, Northampton, Oakengates, Old Hill, Peterborough, Redditch, Retford, Rugby, Rugeley, Sedgley, Shifnal, Skegness, Sleaford, Solihull, Stafford, Stamford, Stourbridge, Stourport, Stratford-on-Avon, Swadlincote, Walsall, Warwick, Wednesbury, Wellington, and Worcester. **Grade B1.**—Kettering and Wellingborough. **Grade B2.**—Ashbourne, Bridgnorth, Horncastle, Oakham, Oundle, Raunds, Rushden, Spalding, Thrapston, Uttoxeter, and Wirksworth. **Grade C.**—Buckden, Eaton Socon, Huntingdon, St. Ives, and St. Neots.

[NOTE.—*For plumbers in the Potteries district and at Strafford the rate remains at present 1s. 9d. The rate for plumbers at Leek is reported as 1s. 6½d. and for plumbers at Chesterfield, 1s. 8d.*]

EASTERN COUNTIES :—

Grade B1.—St. Albans, Southend-on Sea, and Westcliff. **Grade B2.**—Norwich. **Grade B3.**—Baldock, Bedford, Berkhamsted, Biggleswade, Braintree, Cambridge, Chelmsford,* Colchester, Halstead, Hatfield, Hemel Hempstead, Henlow, Hertford, Hitchin, Hoddesdon, Ingatestone, Ipswich, Letchworth, Luton, Norwich, Ongar, Sawbridgeworth, Stevenage, Stotfold, Ware, and Welwyn. **Grade C.**—Aldeburgh, Attleborough, Aylsham, Braughing, Clacton, Cromer, Dovercourt, Dunstable, Ely, Fakenham, Felixstowe, Frinton, Gorleston, Halesworth, Harwich, Hunstanton, King's Lynn, Leighton Buzzard, Leiston, Lowestoft, March, Much Hadham, Newmarket, Puckeridge, Renthem, Saxmundham, Southwold, Standon, Stowmarket, Walton-on-the-Naze, Wickham Market, Wisbech, Woodbridge, Wymondham, and Yarmouth. **Grade C2.**—Bungay, Coltishall, East Dereham, Hadleigh, Haverhill,* Royston.

SOUTHERN COUNTIES :—

Grade B.—Leatherhead.† **Grade B1.**—Gosport, Portsmouth, and Southampton. **Grade B2.**—Bournemouth, Brighton (see below), Christchurch, Eastbourne, Fareham, Hove, Poole, Reading, and Tilehurst. **Grade B3.**—Abingdon, Addlestone, Amersham, Ascot, Ashford (Middlesex), Beaconsfield, Bracknell, Byfleet, Chesham, Cremborne, Egham, Eton, Gerrard's Cross, Goring, Gravesend, Guildford, Henley, Laleham, Maidenhead, Marlow, Northfleet, Oxford, Staines, Stanwell, Sunningdale, Sunninghill, Tonbridge, Tunbridge Wells, Wallingford, Windsor, Woking, Wokingham, and Wycombe. **Grade C.**—Arundel, Ashford (Kent), Aylesbury, Bagshot, Banbury, Basingstoke, Bicester, Bletchley, Bognor, Bosham, Brockenhurst, Camberley, Canterbury, Chatham, Chichester, Chipping Norton, Deal, Dorking, Dover, Fareham, Faringdon, Faversham, Fenny Stratford, Folkestone, Gillingham, Godalming, Hailsham, Haslemere, Hastings, Herne Bay, Hythe, Lambourn, Liphook, Littlehampton, Lymington, Maidstone, Margate, Milford, Milton Regis, Newbury, New Milton, Newport Pagnell, Pangbourne, Petworth, Ramsgate, Rochester, Sandgate, St. Leonards, Sevenoaks, Sittingbourne, Strood, Stony Stratford, Thame, Walmer, Wantage, Wendover, Westgate, Whitstable, Winchester, Winslow, Witney, Wolverton, and Worthing. **Grade C2.**—Alton,* Andover, Bishop's Waltham, Farnham, Godstone, Hawkhurst, Hartley Wintney,* Isle of Wight, Rye, Smallfield, Staplehurst, and Uckfield.

[NOTE.—*It is understood that no reduction has yet been made at Brighton and Hove and Eastbourne, the rates remaining at 1s. 4½d. for tradesmen and 1s. 0½d. for labourers. The rate for plumbers at Dorking is reported as 1s. 4½d., for labourers at Basingstoke, 11½d., and for labourers at Folkestone, Hythe and Sandgate, 1s.*]

SOUTH-WESTERN COUNTIES :—

Grade A.—Bristol. **Grade A2.**—Keynsham. **Grade B.**—Plymouth* and Devonport.* **Grade B2.**—Bath, Cheltenham, Gloucester,* Hereford,* Swindon,* and Tewkesbury.* **Grade B3.**—Exeter,* Newton Abbot, Portishead, Stroud† and Taunton. **Grade C1.**—Barnstaple, Bradford-on-Avon* Bridgwater, Brixham, Bruton, Burnham-on-Sea, Calne,* Castle Cary, Cheddar,* Cirencester,* Coleford,* Corsham,* Crewkerne,* Dawlish, Dorchester,* Exmouth, Fairford,* Frome,* Glastonbury, Lydney,* Melksham,* Midsomer Norton, Minehead,* Radstock, Shepton Mallet, Street, Tetbury,* Thornbury, Totnes,† Trowbridge,* Wells, Westbury,* Weston-super Mare, Weymouth,* and Yeovil.*

SOUTH WALES AND MONMOUTHSHIRE :—

Grade A.—Aberavon, Aberdare, Abertillery, Ammanford, Barry, Bridgend, Briton Ferry, Brynmawr, Cardiff, Chepstow, Duffryn Valley, Ebbw Vale, East Glamorganshire and Monmouthshire Valleys, Garw Valley, Gorseinon, Llanelly, Maesteg, Merthyr, Mountain Ash, Neath, Newport, Ogmore Vale, Pontardawe, Pontardulais, Pontypool, Pontypridd, Porthcawl, Port Talbot, Rhondda and Rhymney Valleys, Sirhowy Valley, Swansea, and Tredegar. **Grade A2.**—Abergavenny. **Grade B.**—Brecon, Carmarthen, Llandilo and Llandrindod Wells. **Grade B2** —Fishguard, Hay, Monmouth, and Talgarth.

SCOTLAND :—

Grade A.—Airdrie, Alloa, Alva, Armadale, Ayr, Bathgate, Bellshill, Bridge of Weir, Buckhaven, Burntisland, Clydebank, Coatbridge, Dumbarton, Dundee, Dunfermline, Edinburgh, Falkirk, Glasgow, Gourock, Grangemouth, Greenock, Haddington, Hamilton, Harthill, Irvine, Kennoway, Kilmarnock, Kirkcaldy, Larbert, Largs, Leith, Leslie, Leven, Markinch, Methil, Motherwell, Neilston, Newmains, Paisley, Pencaitland, Perth, Port Glasgow, Renfrew, Stenhousemuir, Uddingston, Uphall, Wemyss, Whitburn, Windygates, and Wishaw. **Grade A2.**—Arbroath, Montrose, and Peebles. **Grade B.**—Dumfries, Galashiels, Hawick, and Maxwelltown.

[NOTE.—*The rates quoted do not apply to plasterers and painters in Scotland, who are not affiliated to the National Wages and Conditions Council. The rate for labourers at Leslie, Markinch, and Perth is reported as 1s. 2d., and at Arbroath, Bathgate, Irvine, and Montrose 1s. 1d. It has been reported that the rceent reductions did not apply to plumbers in the Dumfries, Dundee, and Falkirk districts. The reduction has not been put into operation at Aberdeen.*]

---

* From "The Labour Gazette."

Wednesday, July 11, 1923. Vol. LVIII. No. 1488.

THE ARCHITECTS' JOURNAL & Architectural Engineer

With which is incorporated "The Builders' Journal."

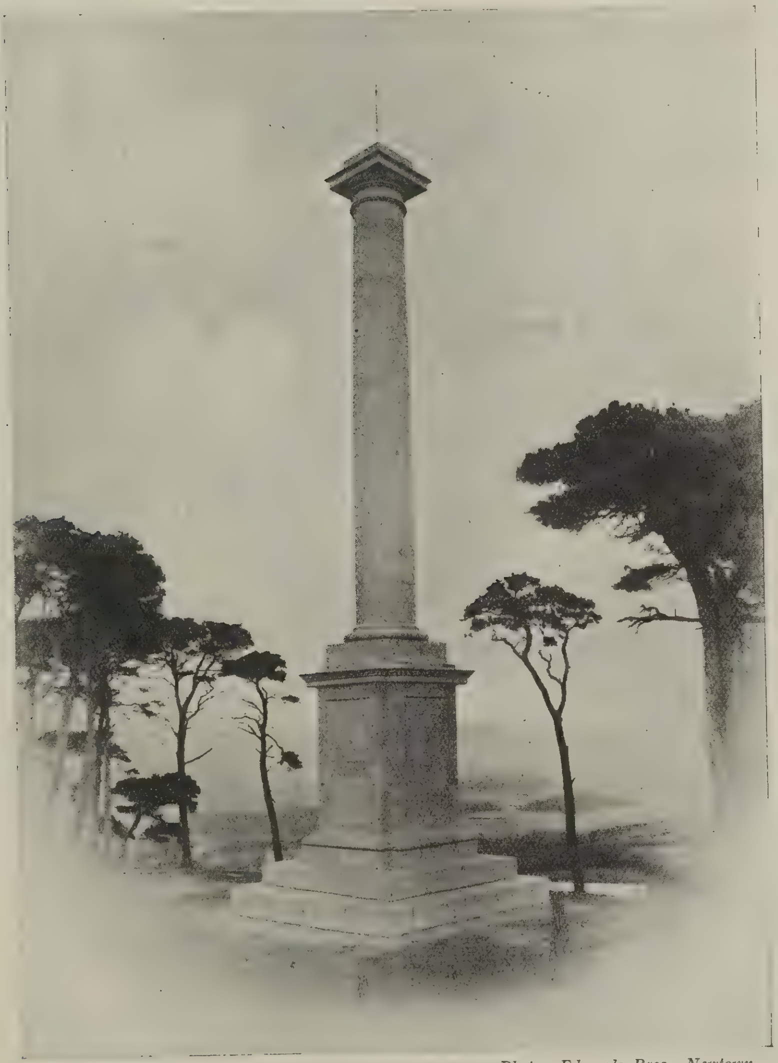


Photo: Edwards Bros., Newtown.

THE MONTGOMERYSHIRE WAR MEMORIAL.
GEORGE HUBBARD AND SON, ARCHITECTS.

This memorial consists of a large Doric column and pedestal standing 50 ft. high. The monument has been placed on the top of a high hill outside Montgomery, and overlooks a large stretch of country.

27-29 Tothill Street, Westminster, S.W.1.

A House in Cheam, Surrey

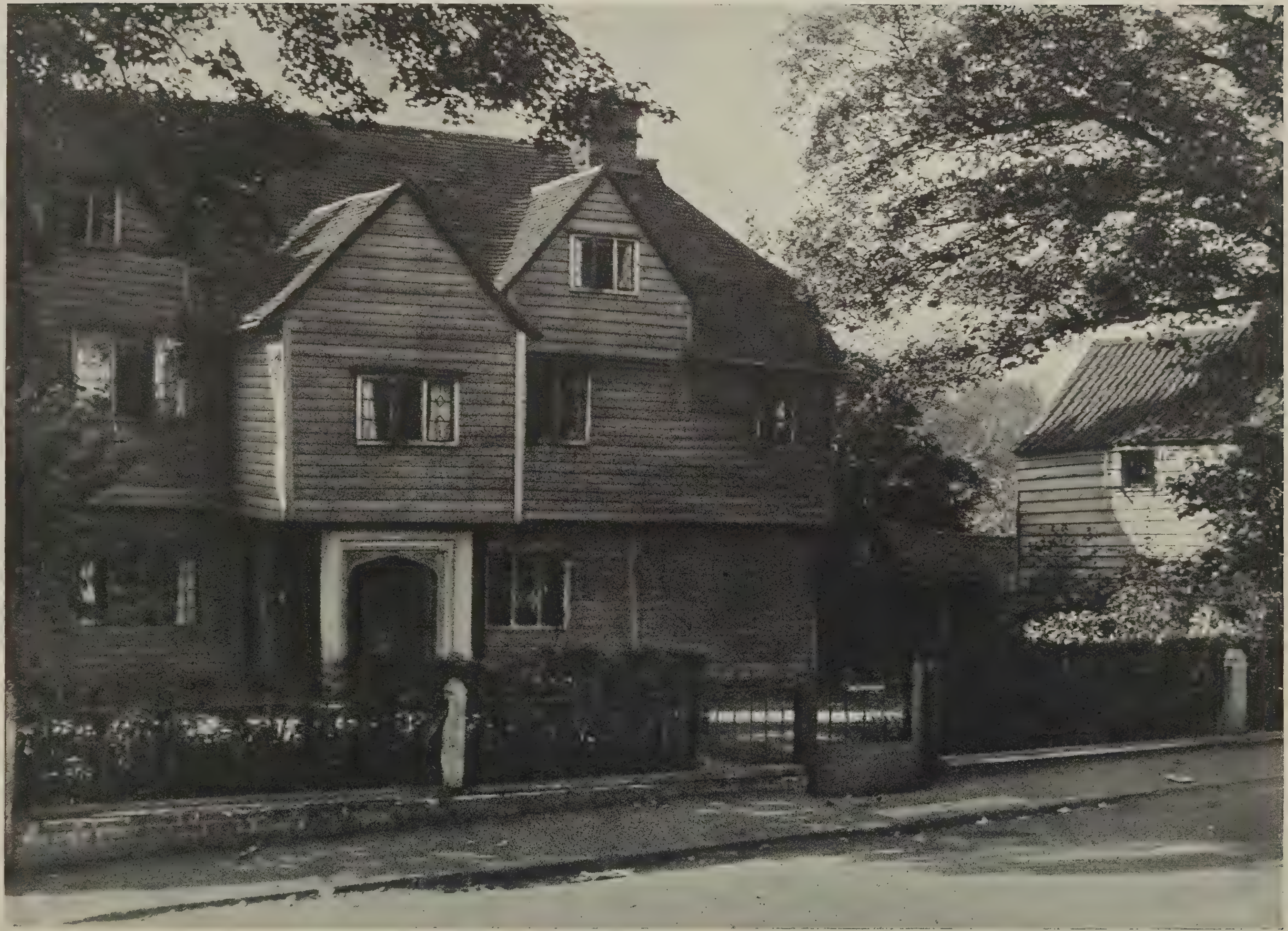


Photo: E. M. Hick.

This fine Tudor half-timber house has been considerably altered in appearance by the weather-boarding with which it was covered in the 18th century. It was erected in 1560, but the porch and room over it rather later, and it was added to in 1665 and again early in the 18th century.

THE
ARCHITECTS' JOURNAL
27-29 Tothill Street, Westminster, S.W.1.

Wednesday, July 11, 1923

Volume LVIII. No. 1488

Waste in Architecture

THERE are certain relationships by means of which, from time to time, an attempt is made to discover some kind of absolute standard of good architecture. The relation of construction to ornament and form to material may be cited as typical examples. Actually, it is soon discovered that good architecture is informed by some ineffable quality rather than any such simply enunciated formulæ. Nevertheless, it is instructive to observe how the decadence of the main European styles of architecture are characterized by a different abuse of these relationships. Thus the decay under the Roman Empire was an abuse of the relation of construction to ornament; the latter being used with a profusion which disregarded fitness. The decay of Gothic was an abuse of the relation of form to material; stone being used almost with the technique of wood or metal. The decay of the Renaissance was an abuse of form to structure; the classic elements being deprived of their real use and significance and being robbed of their virility by the assignment of tasks unbecoming to their original purpose.

Considered from another point of view, all these blemishes constitute different aspects of waste; waste of ornament, of material, or of form. Of these, at the present time, the most prevalent is an unconsidered use of material. With the gradual elimination of distance, due to ever swifter and more efficient transport methods, materials have almost entirely ceased to have any local significance. Stone, brick, or flint districts are becoming archæological terms. Moreover, special materials such as fine-grained marble or delicately-figured timber are to be obtained from any part of the world with comparatively little difficulty. Such a state of affairs not only encourages prodigality but tends to break down traditional methods of handling material. And these traditional methods which have been slowly and laboriously evolved are, for the most part, the antithesis of waste, for they exploit the material to the best purpose.

Bad design almost invariably necessitates waste of material in some way. Thus, if the properties of a material are not understood, a two-fold waste may arise, structural or decorative. For example, lack of precise knowledge as to the tensional or compressional strength of a certain timber might lead to the use of unnecessarily large scantlings, or, again, lack of precise knowledge of the purpose for which a particular timber is most suitable might lead to its use in positions where its weakness rather than its strength was exploited. These are both aspects of waste. As for the decorative waste this arises likewise where the qualities are not understood. Different stones, for example, are best worked with certain tools and in certain ways, and to each, therefore, there is an appropriate form of ornament which exploits the material to the greatest advantage. The same, too, applies to timbers, a beautifully-figured wood is best displayed in large surfaces, whereas another may be more suitable for carving. To ignore these considerations is to waste the material. During the last few years a variety of new materials has appeared, many of which are still in the experimental stage. The structural possibilities of concrete have for long been wasted—often owing to obsolete by-laws; they are now better appreciated. Meanwhile, however, the decorative qualities of the material are, in England, still for the most part wasted. Concrete has its own beauty of colour and texture.

Another aspect of wasted material occurs where a building is designed with so little foresight that it soon ceases to meet the developed needs for which it was erected, and a still greater waste occurs through haphazard and uncontrolled development leading to demolishment long before the normal life of the building is expired. Lack of town planning is, perhaps, the most potent cause of waste of building material and labour.

From what has been said it will be apparent that the more complex conditions become, so do the opportunities for waste of material increase. But the very term waste has no absolute significance. To us the old builders with their thick walls and heavy scantlings may appear wasteful, yet if the supply of material exceeded the demand there was neither need nor incentive to economize. Prodigality of material is a characteristic of nature which mankind has now learnt to cease from following. Nevertheless, to some extent waste may be made a measure of good architecture. The buildings which we most admire are those in which this quality is absent. If we study a plan, that which pleases us is directness and simplicity; the easy interworking of the parts, so that it seems to suggest that, whatever its purpose, whether ecclesiastic, commercial, domestic, or administrative, the work within it will proceed with the maximum efficiency for the minimum output: the elimination of waste. In the elevations, too, we look for the proper use of the materials and the forms, and we are instinctively distressed at a wasteful use of ornament, just as we are by the wasted opportunity afforded by a fine site.

The degree of fitness is but another aspect of waste; thus a use of fine materials or delicate workmanship which may be suitable to a particular building in a particular position, may be quite out of place elsewhere. How often do we hear the phrase that so-and-so, referring perhaps to a sculptured frieze, some mosaic work, or a finely-figured panel, "is quite wasted there!" meaning thereby to imply unfitness in the placing of ornament or the selection of material. But even here it is dangerous to be too didactic. Much of the most beautiful Gothic carving is placed in positions where its real delicacy can never be truly appreciated. Do we therefore say that it represents waste? On the contrary, rather do we admire the supreme conscientiousness to which it testifies. It would seem, therefore, that an assessment of waste cannot be entirely based on reason or logic. It is only when the sense of it obtrudes itself that the design is probably at fault. The fact is, good architecture depends, as we have said, on something ineffable and elusive which evades the confines of logic, and which seems to originate from that part of ourselves from which emanate our absolute standards of goodness and beauty.

However, it is impossible to study modern architecture without being conscious of a sense of waste. We see it in our suburbs in the ugly, feeble, and restless ornamentation of the houses; we see it in our cities, in the inappropriate use of materials, in the degradation of architectural idiom, in the disregard of the relations of buildings to each other so that they are not seen to the best advantage; we see it in the design of our streets, where architectural efforts are wasted through lack of co-ordination.

After a period of war and prodigality the virtues of economy are being preached—although as yet not practised—in other spheres of life, but architecture, no less than these, requires its anti-waste campaign. Economy and parsimony are apt to be confused despite their essential difference. Economy in architecture consists in utilizing every opportunity to its best advantage: in eliminating waste.

Competition Troubles

The abandonment by the Manchester War Memorial Committee of a competition for a proposed war memorial draws attention once again to the old question of competitions, not only as it affects architects, but as it affects promoters themselves. The R.I.B.A. and the Society of Architects rightly seek to make an assessor's award final, but recently a certain restiveness at this condition has been observable among public and other bodies who, since they pay the piper, naturally feel that they should be allowed to call the tune, even if this should mean the abandonment of the entire performance. Competitions, from the architects' point of view, are a very doubtful blessing; some, indeed, regard them as an unmitigated evil. That they are extremely wasteful of time, talent, and money is generally conceded. The disadvantages of the system are wholly felt by architects; the benefits entirely by promoters, who frequently have the advantage of the ideas of a hundred or more architects, of whom only three receive any sort of financial recognition. This is admittedly a grievance, but one that competitors must be content to endure, since they are under no obligation to enter a contest, and mostly do so in the sporting spirit of the man who tries his luck on the Derby. Little can really be said, from the architects' point of view, in favour of competitions. Their one virtue of giving unknown men a chance of proving their mettle under conditions that favour nobody cannot, however, be denied, and for this reason alone the system should be perpetuated. If it had done no more than discover Harvey Lonsdale Elmes it would still be entitled to our respect. An evil, perhaps; but a necessary, occasionally a benignant evil. The question of the assessment of competitions, however, sometimes provides a real grievance. Occasionally a wrong assessor is appointed, as is only to be expected in this very imperfect world, and in this event there can be little satisfaction for either competitors or promoters. In the case of the Manchester competition this complication was, of course, entirely absent, for Mr. Worthington's taste, ability, and fairness command universal respect. Hence the bewilderment that everybody feels at the abandonment of the competition. Given the right assessor, it is practically certain that the competitors will be satisfied with the award, and that the best design will be chosen. What right, then, have the promoters to annul a competition? No ethical right, perhaps, but as things are at present constituted a very definite legal right. The essential requirement, therefore, is to convince promoters of the rightness of the assessor's award. But how is this to be done? Our civic authorities seldom recognize a good thing when they see it, and in view of the present low level of public taste it were unreasonable to expect them to. It is suggested in "The Manchester Guardian" that the only solution of the problem is the appointment of a jury of several judges instead of one or, perhaps, two assessors. There are several objections to this proposal, not the least of which is that the multiplication of assessors means the multiplication of fees, and on this ground alone it is not likely to be accepted with enthusiasm by our economically-minded authorities. A more serious objection, however, is that there is far less likelihood of a satisfactory award with a jury than there is with a single assessor. In a multitude of counsellors there is mostly unwisdom: inevitably there must be a good deal of compromise and reservation which, in the case of an architectural competition, is not likely to end in the selection of the best design. A more interesting suggestion is that the competitors themselves should each be given two votes—one for themselves and the other for the design that they consider the next best. This assumes, of course, that the competitors know better than the assessor himself what the real difficulties are, and in effect means the abolition of the individual assessor. Such a system, even if it could be worked, would lend itself very easily to abuse. We doubt very much whether it is possible to get anything more generally effective than the present system of assessment. Rather than experiment with new methods of doubtful practicability, it would be better to strengthen the present system by making sure that only a man with special knowledge of the particular type of building—whatever it may be—is appointed to an assessorship, and by educating promoters of competitions up to the point of trusting the assessor and abiding by his award.

"Building Heights and Ancient Lights"

Lack of space prevented us from commenting last week upon Mr. Delissa Joseph's letter which appeared in the Correspondence page of that issue. We find that Mr. Joseph was slightly misquoted in the leading article to which he referred. His words were not, as we stated, "forced to build in strict accordance with the rights of their neighbours," but "designing his building in strict accordance with his neighbour's rights." We apologize for this slight inaccuracy. Mr. Joseph disagrees with our view that the meeting of the R.I.B.A. was emphatically opposed to his proposals. He is of course entitled to his objection in the case of a meeting at which no formal vote was taken. But he says, further, that "the actual attitude of the Institute is indicated by the fact that its Building Act Committee is studying the question of higher buildings, while its Ancient Lights Committee is studying the question of ancient lights." May we remind Mr. Joseph that there has recently been an election? Of course the two committees referred to nominally exist until the new committees get to work, but actually their unfinished and unreported deliberations are as "dead as mutton." Mr. Joseph's paper is probably the only medium in which they will ever be published.

The Prices of Building Materials

The Inter-departmental Committee appointed to survey the prices of building materials make no startling revelations in their interim report, which was issued last week. They outline the procedure that they have adopted to ascertain what are the ruling prices in different areas; comment upon the increase of 10 per cent. in the prices of certain light castings (which, oddly enough, are those used in housebuilding, though it is not implied that there is necessarily any connection between this increase and the Government's housing programme); and offer a few observations upon the economic situation with regard to bricks. No reasonably intelligent person expects that the Committee will be able to arrest the natural operation of the law of supply and demand; but if they can expose cases of profiteering, and suggest how such abuses of the communal interest may be stopped, they will deserve the best thanks of the community.

Celtic Britain from the Air

In "The Observer," Mr. O. G. S. Crawford, F.S.A., Archæology Officer, Ordnance Survey, describes how, through the medium of the aerial photograph, the sites of Celtic habitations have been revealed in ploughed fields and other situations. The outlines of earthworks, invisible from the ground, become apparent from the air by the faint shadows cast by the sun at sunrise and sunset. Aerial photography for archæological purposes is in its infancy. What may it not disclose in the future?

Architectural Travel

Edited by F. R. YERBURY, Secretary of the Architectural Association

3.—North Africa: Algeria and Tunisia

By H. M. ROBERTSON, S.A.D.G.

TRAVEL in Northern Africa is of extraordinary interest to the architect, for the reason that the country, the people, and the buildings have a character which is peculiarly their own, and bear little resemblance to anything to be seen in Europe.

Few people realize what a mine of architectural inspiration is to be found in Algeria, Tunisia, and Morocco. Nor is it fully appreciated that Northern Africa contains some of the finest examples of ancient Roman remains in the world.

In arranging a trip to Northern Africa it is quite feasible to plan an itinerary which will include Morocco, Algeria, and Tunisia. The distances, however, are great, as a glance at the map will show, and considerations of time and money may make it advisable to include Morocco in a voyage to Southern Spain, and consider a round trip through Algeria and Tunisia as being the most feasible travel arrangement. Communications between Morocco and Algeria are a little difficult, as the motor-car and sometimes even the aeroplane are utilized for a portion of the journey where railway connections are lacking. Motor travel, of which mention is made later, is however apt to be beyond the financial means of the average student of architecture.

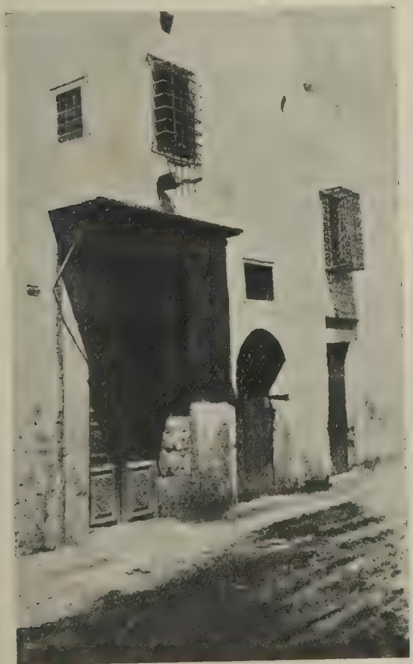
The planning of a trip will vary according to the time and money available. But a great deal of country may be covered in a journey of from three to four weeks, and the itinerary suggested herein is based on a period of that duration. Persons who are not bothered by considerations of time and expense may amplify the journey considerably, and will find at the end of this article a list of places of real interest but of which detailed description has not been given on account of the limitations imposed on the average traveller.

For reasons which may or may not be connected with French colonial policy, the average guide-books and travel prospectus devote much greater space to Algeria than to Tunisia. One gathers the impression that Algeria is the main centre of interest, and that Tunisia takes second place. From the tourist's point of view this may be the case, but to the architect Tunisia offers far greater interest and stimulus from the point of view of the design of buildings, local colour, and unspoiled beauty. Certain cities of Tunisia have remained in their native condition, almost untouched, and they produce, in their wealth of brightness and colour, an unforgettable impression. To avoid an anticlimax of sensations, the architect will be well advised to see Algeria first.

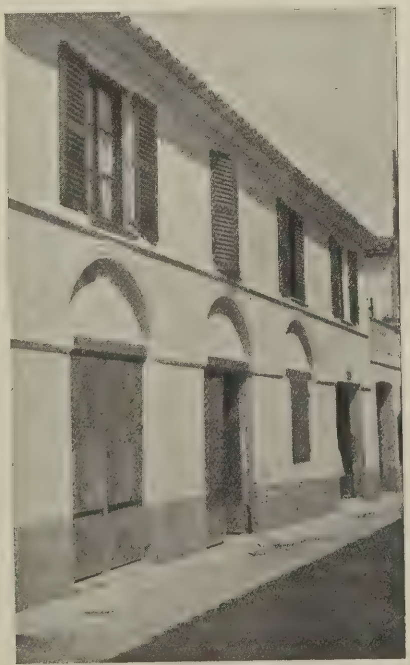
The cost of a three or four weeks' trip may be far less than is at first anticipated after enquiry at travel bureaux, but to travel economically it is advisable to choose a time "out of season" and to avoid purchasing round trip tickets in England which provide luxurious but expensive travel and accommodation.

The winter and spring months from October to May are the most popular for both tourists and residents. By April the tide has begun to turn, and more travellers are leaving Africa than entering it. This month is therefore a favourable one for beginning a trip, as accommodation is less difficult and prices are no longer at their zenith. The only difficulty lies in the return steamer trip, for which reservations should be made if possible ten days in advance, as the boats are crowded with travellers of all categories returning to Europe.

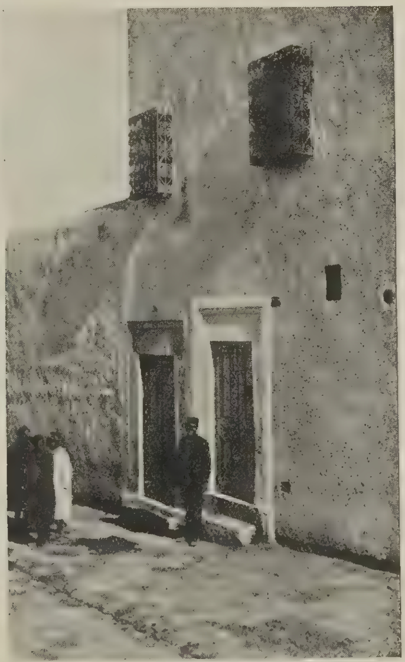
On the outward journey second-class travel is perfectly comfortable from London to Dover—Calais—Marseilles—Algiers. On the return journey first-class accommodation on the boat from Tunis to Marseilles is perhaps advisable, on account of the crowds and because the journey at present entails two nights on board. In Algeria and Tunisia both, unless journeys by night are necessary, by far the cheapest and most interesting travel is by third-class ticket. The third-class carriages are patronized by Arabs and natives generally, and by a few Europeans and French military also. They generally consist of compart-



SIDI BOU SAÏD.



AT CHERCHEL.



SOUSSE.

ments with three-quarter partitions with a corridor on one side, and having wooden seats and wide opening windows, are perfectly clean and airy. As an offset to the absence of the often dirty cushions of the second and first-class carriages, one has music, singing, peanuts, and native sweets, fat and thin natives sitting tailor fashion on the benches, and, indeed, every kind of local colour and interest which breaks the monotony of the often long journeys. The restaurant car is available to third-class passengers, and the third-class fare is about half that of the first class, where the only companionship is that of tourists and Europeans.

The Compagnie Générale Transatlantique has organized a magnificent service of motor-cars which make regular round trip tours to all parts of Northern Africa. Known as the Auto-Circuits Nord-Africans, these huge cars, generally with a trailer in tow, convey parties of tourists in luxury, and at what is really a modest figure considering the absolutely first-class service and accommodation provided in the best hotels. But for the architect such tours are of little value, for even if the expense is bearable, the necessity of keeping to schedule makes it difficult to linger where fancy dictates and omit those sights which are purely touristic.

Hotel accommodation in the larger towns such as Algiers, Tunis, Oran, Constantine, etc., presents no difficulties. Here again, quite a modest outlay will ensure good rooms and meals provided that the "Palace" hotels de luxe are avoided. The classifications of both Baedeker's "Mediterranean" (1911) and the more up-to-date French Guide Bleus (Hachette, 1923) hold good, and hotels of the second category may be selected from either with confidence. In the smaller towns it is advisable to wire ahead for rooms.

If due economy is observed it should be possible to spend three or four weeks in North Africa for £35 to £40, including the return fare to London.

The best route to Algiers is from Marseilles (about thirty hours), and the suggested return route is from Tunis to Marseilles (at present thirty-six hours, but soon to be improved). By arriving at and departing from these two ports the principal points of interest in Algeria and Tunisia may be conveniently covered.

The spectacle on arrival at Algiers is generally interesting, but architecturally rather disappointing. It is quite customary for the native third and fourth-class passengers to celebrate their return to Africa by consigning to the deep their European headgear and often their boots! The water of the port receives a veritable shower of cast-off haberdashery, the sacrifice being consummated with shouts and laughter.

Algiers piles up finely from the waterside, but the nearest buildings are mostly modern, and it is only by the glimpse of a white mosque roof or tower and the mass of the old town packed closely up the hillside that one distinguishes it from a Mediterranean port of Europe. The new boulevards and streets are finely constructed, and the long ramps leading up from the quai and station to the Boulevard de la Republique are well handled.

The new town of Algiers has enveloped and swamped the old; to appreciate its development, and, indeed, to understand the configuration of any town in Northern Africa, it is advisable to read a little of African history which fascinates by its turbulence and transitions from one domination to another.

The most interesting part of the town is the old Algiers of the Turkish period, a labyrinth of tiny streets and passages climbing up the hill, between whitewashed houses with heavily corbelled upper stories and crudely sculptured doorways which are generally very low. Mosques, Moorish cafés, and shops offer a kaleidoscope of sights and smells. One climbs up to the Kasbah (a fortress which is worth visiting) on slippery cobbles, with here and there a chance glimpse of internal courts or "patios" which are closed to the foreigner.

The chief architectural interest lies in the tiled counters of certain of the shops, the corbelled windows, and the door handles, which often consist of fine bronze drops with roses of filigree pattern.

The mosques of Algiers are of less interest than those of Tunisia, but a few are well worth a visit. The Grand Mosque is the oldest and largest, and has an interior of simple whitewashed arcades, with an attractive entrance through a fountain court. The division of the interior of many of the mosques by parallel colonnades is very characteristic. The eye is confused by the multiplicity of columns, and a certain effect of size is gained thereby; but the lack of contrast provided by a big nave and smaller aisles does not seem to be offset by the picturesqueness of the more usual mosque arrangement.

The mosque of Sidi Abderrahmân, built in 1696, has a fine minaret with coloured tiles and a charming internal court with several tombs in it. These have their arrises worked into a rope ornament, which is very effective. The interior forms a close approach to a "junk" shop. A wooden tomb of rather poor colour, a forest of very bad glass chandeliers hanging from the ceiling, so close together as almost to touch, and one or two shocking European "grandfather" clocks. One takes off one's shoes and leaves many small coins in willing palms.

Of the individual buildings in Algiers the best is the "Archivêché," but little modernized. It has a fine court of two stories with horseshoe arches on twisted columns, with good wrought-iron gratings to the windows. The stucco ornamentation, the coloured tile-work, the window shutters, and the ceilings in cedar and oak are all interesting, but do not compare with similar detail in Moorish work in Spain and Morocco.

The "Bibliothèque Nationale" has a fine court like the Archivêché, but the Palais d'Hiver of the governor, one of the latest specimens of Moorish-Turkish architecture in Algeria, fulfils all one's ideas of an Oriental nightmare. Wedding cake is the keynote of the Salle de Réception, and the blue and purple tiles of the court galleries are bad in colour. Moorish tabouret tables complete an unfavourable impression.

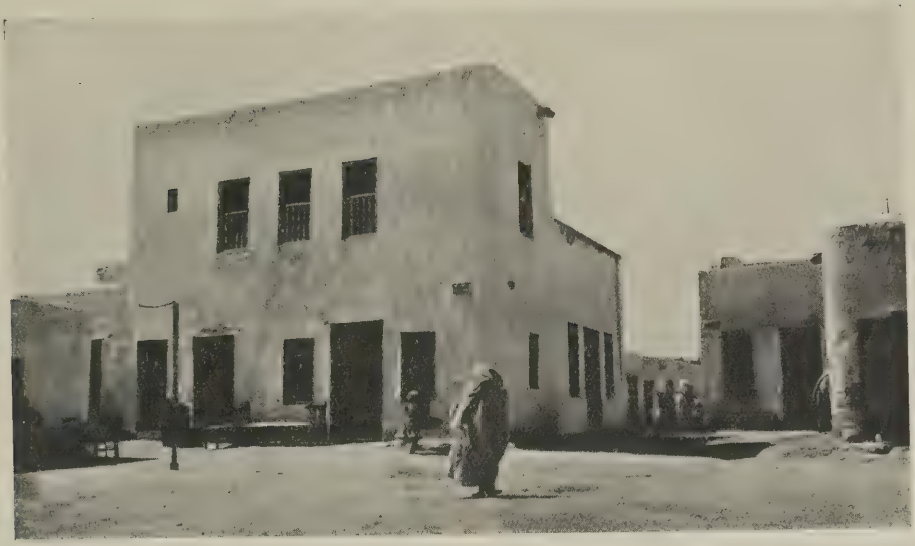
There are picturesque corners in old Algiers in plenty, to be happened on by chance, and plenty of subjects for a sketch. The new and swagger quarter of Mustapha Supérieur must not, however, be forgotten, as it contains a fine little museum set in a delightful garden. Its office annexe is charming, with its white walls and iron grilles, and tile seats, steps and fountains do credit to the taste of their planner. On the way to the museum one passes the modern university, high up on a fine precipitous site, a good French "Ecole" building, and farther on the over-orientalized governor's summer palace, with a laughable collection of busts of former governors flanking the hemicycle of its gate.

The hills of Algiers provide some fine effects reminiscent of Genoa, with some bold flights of steps and piled up buildings; but the chief interest of the town lies in its museum, the Kasbah quarter, the mosques, and one or two streets, such as the rue de la Charte and the rue d'Orléans.

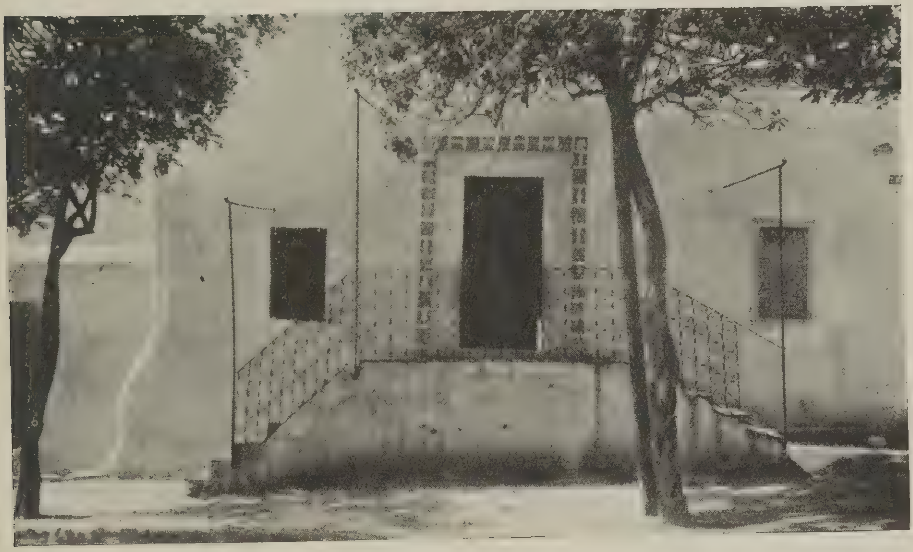
The new post office is worth inspection as a bold effort to produce a monumental modern building in the native manner.

From Algiers it is worth while taking the public motor 'bus to Cherchel, a charming ride along the coast. Here are curious Roman remains, and a museum with fine Roman mosaics, sculpture, and architectural fragments. Roman detail is everywhere, even the curb of the fountain in the main "place" being formed of a Roman entablature placed on edge, the modillions pointing plaintively skywards!

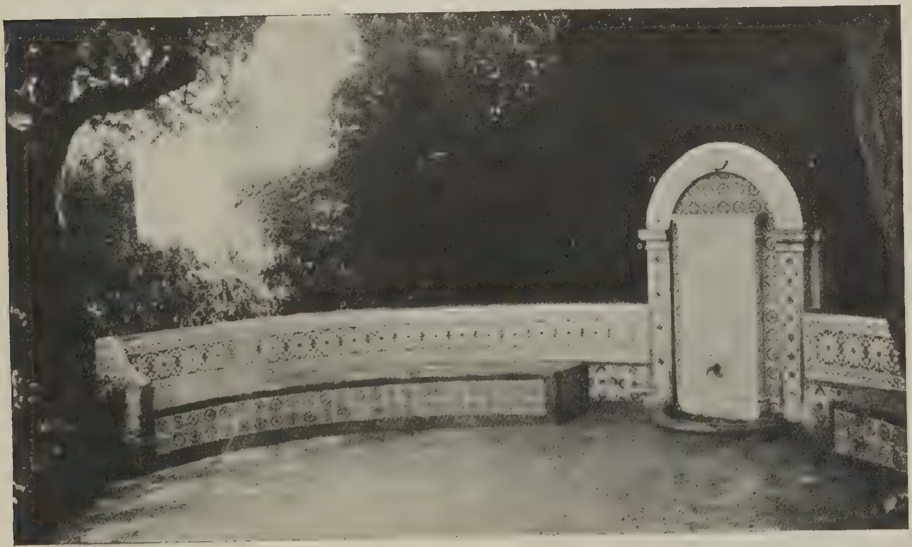
The doorways and cornices of the houses show interesting and amusing treatment of tile and brick, and there is a pleasant little mosque. The Eglise Romaine is quite interesting, particularly in its delightfully flat and simply incised Ionic pilaster caps. On the return journey to Algiers the road passes the magnificent remains of a Roman aqueduct striding across the plain from the hills.



KAIROUAN



IN SIDI BOU SAÏD.



MUSEUM GARDENS, ALGIERS.

Not far from Cherchel is an impressive mausoleum known as the "Tombeau de la Chrétienne." Its history is surrounded with legend, but it is mentioned by a Latin author of the first century of our era. It probably represents a Punic tomb of the eleventh century B.C. It is a splendid ruin of the "tumulus" type with a low pedestal about 70 yd. square from which rises a pyramid about 130 ft. high. The base of the monument is circular, with an order of Ionic pilasters. It is the dramatic placing of this tomb, the most conspicuous sailors' landmark on the coast, which helps to produce an impression which is extraordinarily profound.

From Algiers to Constantine the journey occupies about twelve hours through country which is only relatively interesting. The railway passes through hills which are crowned with snow even in April. Indeed, the high altitudes in the north generally come as a surprise to the traveller, who finds mountains and snow instead of the desert and heat. It can be intensely cold in Algeria, and the extremes of temperature are sudden and often treacherous, making a supply of warm clothing necessary.

There is little of interest in the way of towns along this section until one passes Sétif, a rather desolate village with a large military barracks. From Sétif, however, automobiles run to Djemila, about twenty miles to the north-east, where there are remarkable Roman ruins which will probably soon be as famous as those of Timgad, though at present the work of excavation is by no means complete.

The city of Constantine is placed in the most dramatic situation which it is possible to imagine, being built on a sort of pillar of rock rising some 300 ft. sheer from a ravine at the bottom of which flows a turbulent river. The impression of this fortress-like town, with its houses poised on the edge of a precipice, is something to be remembered. The approach from the station is across a huge bridge which spans the ravine known as the "Rummel," and from which one sees, high up the gorge, a much more extraordinary piece of modern engineering. This is the suspension bridge of Sidi-Mecid, at least 520 ft. long, which looks like a slim and delicate girder thrown across the gorge. Its fragile suspending cables are beautiful in weight and "movement," and the bridge is aptly and simply described by the French "un ouvrage d'art d'une grande hardiesse."

As might be imagined, the views from Constantine in every direction are magnificent, and the modern viaducts and retaining walls along the gorge of the Rummel are finely handled and do great credit to their engineers.

The architectural interest of the town lies chiefly in its old quarter, where the principal beauty of the simple houses is to be found in the nail-studded doors, the latticed windows, and the carved wood lintels, many of which are plastered over.

There are one or two charming little courtyards, and the massing and colour of the old tile roofs, a favourite resting-place for storks, is picturesque in the extreme. The mosques are of secondary interest, but the Palais of Hadj Ahmed in the Place du Palais is well worth seeing, with three good patios with marble columns, carved doors, and crude frescoes on the walls. The bazaars of Constantine are not without attraction. No one who goes to Constantine can afford to miss the visit to the Gorges of the Rummel, by a path unfortunately known as the Chemin des Touristes. The scenery is superb and extremely dramatic, in keeping with the whole situation of the town.

From Constantine the usual practice is to go south to Biskra, stopping en route at Batna, the station for Timgad.

Although Timgad is nothing more than a ruined city, it is one of the most striking sights in Africa, and the architect may well spend a night at the little Timgad hotel in order to absorb the full sensations of this extraordinary place.

From Batna to Timgad is about an hour's ride in a car. The road is very bleak and windswept, with little but scenery to admire, the whole horizon being bounded by snow-capped mountains. At a turning of the road one comes on the ruin of a triumphal arch and a curious rectangular building known as the Prætorium. These are the remains of Lambèse, the outpost camp of the famou Roman Third Legion. The road then becomes a winding ribbon between arid wastes, when in the distance appea the white lines of the streets of Timgad, streaked with the shadows of the African sun from wall and column. Imagine the completely waste and barren surroundings, the gently sloping plain with the distant snow-crowned mountains and then suddenly the delicate shafts of innumerable columns and low walls, the curve of an amphitheatre, the lofty shafts of a capitol, the stately ruins of a polished and cultured architecture.

Without doubt it is the contrast of this complete and finished little town with its wild surroundings which helps to create emotions far stronger than those aroused by Roman remains in the cities of Italy. It is the thought that this little gem of a city was a thriving outpost of civilization created in a country of Barbarians for the welfare of an Imperial Legion which strikes the imagination, already moved by the tranquil desolation of the place as it stands to-day.

There is no better guide to the ruins than the little illustrated book by M. Albert Ballu, Director of the Excavations. It can be purchased in the excellent museum, which contains many beautiful and a few unpublishable fragments. The architect will be sure to notice the comparatively small dimensions of the Roman columns and buildings generally, without any loss whatever to dignity and scale.

Indeed, the ruins of Timgad are very curious in every respect, and one gathers a first-hand impression of a Roman city with all its typical planning, buildings, and construction, including even an excellent and complete drainage system which functions at the present day.

To the average Englishman there is probably no town of Africa more familiar by name than Biskra. It constitutes to-day for the architect a source both of great pleasure and of even greater disappointment. Hichens and the "Garden of Allah" have done their work, and the place is being rapidly and completely ruined.

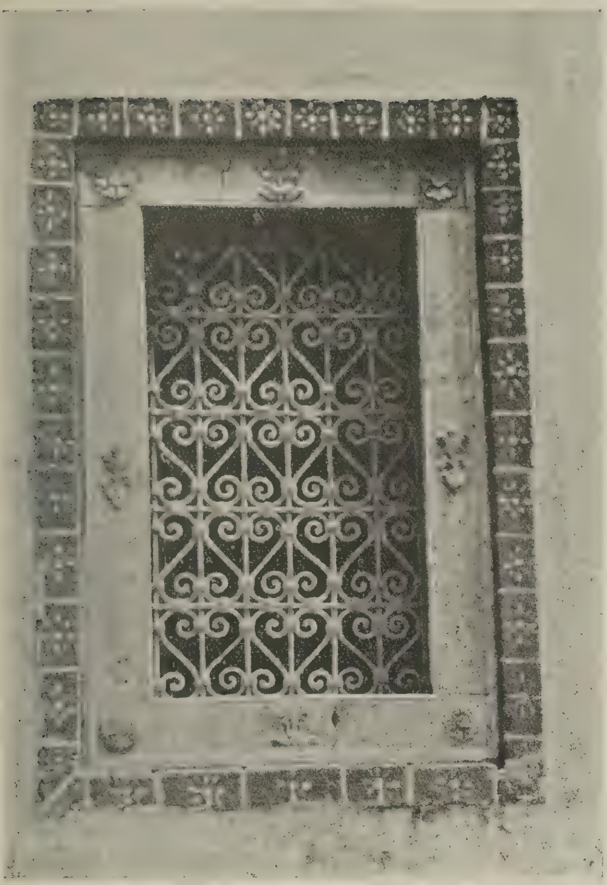
The site is charming. One descends from cold and wild mountain scenery through the splendid gorge of El Kantara right down into a sun-kissed oasis on the desert edge with all the palm trees, camels and mud houses which the most exacting Drury Lane management could desire. The hotels, however, are large and numerous, some of them palatial; in fact, one of the most interesting bits of new architecture in North Africa is the new Transatlantique Hotel in Biskra. As a consequence of this fact the town and surroundings swarm with beggars, touts, and guides. The whine of brown begging children is like the hum of insects on a hot summer day.

The architect will hasten away from the camel rides, the "Danse du ventre," and the casino with its "spectacles pour touriste," to the comparative calm of the outside oasis and the mud villages constituting old Biskra, with a parting glance at the interesting wooden balconies in the streets of the Ouled Naïl quarter. The oasis with its wonderful palms must be seen, and the determined traveller may even push on to the railway's end at Touggourt, with its curious mosque and architecture of sun-dried bricks, the real edge of the desert. But one leaves that hotbed of foreigners and guides, which is new Biskra, with a sensation of relief.

From Biskra back to the junction for Tunis at Kroubs is a half-day's journey, and from there on to Tunis requires another fifteen hours, a tiresome trip through fine mountain scenery which, however, becomes monotonous through repetition.

The well-worn comparison of "water into wine" holds true for Algiers and Tunis. All that one misses in the former is found in the latter, and to the English architect Tunis must be one of the most delightful sights imaginable.

As in all big African towns where French influence is extensive, there has grown up a new European quarter which generally resembles the various sections of any southern French city. But in Tunis the native town has



A TYPICAL TUNIS WINDOW

remained almost completely untouched, and the government has respected it so well that its quarters present a perfect and entirely natural picture.

Interest for the architect is divided between the vivid and colourful life of the native streets, the beauty of the mosques and minarets, and the delightful grouping and detail of the Arab houses and shops.

In detail one notices the almost complete prevalence of flat roofs, the contrast to the tiles of Algeria, the fine nail-studded doors, the delightful pattern of the wrought-iron fanlights to the shops, and the even more charming volute-like window grilles, backed by delicate wooden lattice work. Entrance to the mosques is forbidden in Tunis, but the exteriors are all worth seeing, the octagonal towers of some of the minarets being of very fine design.

The interior of the Dar El Bey (Maison du Bey) and that of the celebrated Bardo with its adjoining museum are well worth visiting, and one could easily spend a day or more in the latter. But walks through the old streets, a visit during the Ramdane (Arab "Lent") to the quarter "Halfouine" after sundown, when the streets are agog with the joyous reaction from fasting, and last, but not least, the endless haggling in the "Souks" or covered bazaars will provide the greatest interest and amusement. There are a few good things to be bought in Tunis, but in the end the Tunisian merchant unloads a portion of his interesting trash on even the discriminating buyer. They are an importunate and, withal, an appealing lot of rascals.

From Tunis a short train ride takes one to Carthage with a good museum. Punic remains in Carthage are few, but the Roman cisterns are very fine and should be seen. Within half an hour's walk lies the perfect little town of Sidi Bou Saïd, an untouched native village beautifully massed on a sloping site on the edge of the water. Nearly every street and house in this town is worth a sketch or a photograph, including the magnificent Arab Palace of Baron Erlanger, which is not open to the public, but can be seen from the far end of the town. The interior of this house is probably the best thing of its kind in Africa, and is exactly reconstructed in the finest Moorish period without a single false note.

The street scenes of the native quarters of Tunisian towns are of endless interest. An Arab funeral, with its strange and poignant chanting, approaching along the arch-spanned streets of Tunis reminds one of a moving biblical scene. Still more extraordinary is the Arab wedding, with its evening procession lit with huge oil-lamps, the rhythmic beating of drums and the steady whine of goatskin bagpipes.

There is a dignity of movement, carriage, and gesture peculiar to the Arabs which in literary descriptions has been by no means exaggerated. To the architect, with his sensitive appreciation of form and colour, these things are a memorable and lasting delight.

From Tunis one should visit Kairouan, and it is easy to take in en route the town of Sousse and its near neighbour Monastir. Of the two places Monastir is by far the most interesting. It is reached by car or public motor-bus from Sousse, and as very few Europeans go there it is completely unspoiled.

Each old Arab town seems to possess its own unique architectural feature. In Cherchel the brick and tile cornices, in Biskra the wooden balconies, in Constantine the wooden door lintols, in Tunis the ironwork of door and window, and in Monastir again the fine-treated stone doorways with delicately carved stone lintols in patterned intaglio.

One may not enter a Arab house, but occasionally an affable Jew will show his patio, and a glimpse of one of these, with its brilliant tiled dados and marble columns, makes one long to see them all. The detail is nearly always charming.

Sousse has some interesting mosque towers, a Moorish bath, which is not mentioned in the guide-books but which inquiry will reveal, a museum worth a visit, and some

TIMGAD.

picturesque streets. But, like Monastir, one of its chief features is the fine old battlemented wall which surrounds it. There are many of the military in Sousse, and from the sounds of raucous music issuing from the windows of certain houses one gathers that much gaiety is going on within.

The last point of this suggested itinerary is, as is fitting, the most interesting of all. This is Kairouan, the Holy City, about three and a half hours' journey from Sousse.

To architect and painter alike Kairouan is a revelation. It is in every way a gem of purest ray, and one could fill a sketch book with drawings of its architecture.

Here, as in Monastir, we have an old Arab town surrounded by a gated wall, the small modern town lying extra muros. The city is filled with mosques and holy places, some fifty in all, and to three of the largest entrance is allowed to Europeans. To the Mohammedan Kairouan holds an especial religious significance, and seven pilgrimages to Kairouan are said to equal a pilgrimage to the Tomb of the Prophet.

The buildings of Kairouan are remarkable for their flat or barrel-vaulted roofs, and roof tiles are rare. They are even more characteristic in their fine grouping, the simple and effective mass handling of cubes, spheres, and delicate plastic effects as, for example, in the rounding off of corners and wall copings.

For the architect there is much to study and learn in the handling of form; in details, such as doorways, windows, projecting bays, with simple but fine wood and stone corbels, there is a wealth of suggestion. But here again it is the unforgettable impression of dazzling white walls, the colour of hangings and costumes, the brilliant sunshine, and, lastly, the weird and plaintive singing and music which remains when details are forgotten.

One of the mosques, the Grande Mosquée, is really magnificent in scale. The so-called "Mosque of the Barber," outside the walls, is full of interesting detail with its fine courts, tile work, and decorated ceiling. And the Mosque of the Swords has a Byzantine beauty, with its clustered cupolas and main internal dome so refreshing in the simple treatment of its transition from square to circle.

From Kairouan one may visit El Djem, where stand in splendid isolation the colossal ruins of the finest Roman monument in Africa,. the huge elliptical amphitheatre, second in size to the Colosseum of Rome. As is the case with Timgad, the impression of this remarkable building is enhanced by its surroundings.

It is impossible, on account of the great distances, to do complete justice to Northern Africa in a short visit, even if motor travel is indulged in on a lavish scale. In addition to the places already mentioned, there are a few others which should be seen by the architect if time permits, and many others which have picturesque and scenic interest; these latter, being fully covered in the guide-books, do not require special mention.

ALGERIA.

Tlemcen.—Some of the most interesting Moorish buildings of Barbary, equal to those of Fez and Kairouan.

Tebessa.—Romain remains, Arch of Caracalla, temple, etc. Christian Basilica.

Medracen.—Tomb of the Medracen, near Timgad.

TUNISIA.

Dougga.—Fine Roman and Punic ruins.

Sfax.—Native town-mosques.

In planning for a tour it is advisable not to encumber oneself with heavy trunks, but take only portable hand luggage. Postcards and photographs can be purchased in nearly every town, and Kodak films in most places mentioned except Kairouan. It is advisable, however, to take with one a reserve supply of films.

[*The previous articles in this series appeared in our issues for March* 21 *and June* 13.]

Colour in Street Architecture

PROFESSOR C. H. REILLY, writing in "The Manchester Guardian" says: The question is always being asked why cannot we have more colour in our town buildings, and the makers of glazed tiles and terra-cotta are always replying that we can if only we would. The people, however, who seem most ready to accept definitely the invitation are the owners of kinemas and public-houses. Here, then, is a mystery; on the one hand a sincere desire for a brighter and richer architecture, and on the other the chief response from those whose business it is to satisfy only the very simplest desires and emotions.

The first question to answer is, What do we mean and hope for by the word "colour"? Do we mean by it masses of elementary reds, greens, blues, and yellows, or do we mean the rich and varied tones of broken colour? If we mean the latter, and some would find in it more "colour" than in the former, the broken surface of old brickwork, the pearly greys, the rich browns and yellows of stone provide it in abundance. But if by colour we mean large solid surfaces of strong primary colours we ought at once to pay tribute to the efforts of the publicans who, wittingly or otherwise, have in this matter been pioneers, unsung if not entirely unrewarded.

Before we proceed, however, to spread, as with a palette knife, stretches of primary colours on our street fronts, let us look at the whole canvas before us. A good third of the surface in any street scene, and more at the intersections of streets, must be given up to sky. What is its tone? Three days out of four a dull grey, and on the fourth at most a pale blue. Our masses of solid colour have, then, to be seen against a low-toned background. That is the really important factor. It is in this that our street scene differs from one in Monte Carlo, ancient Athens, or Thebes. In the brightness of the Mediterranean sun a white building, even a stone or marble one, dazzles the eye so that its form cannot be read. Colour is, therefore, necessary and agreeable, and, as everyone knows, it was used in classical times in all its primary strength. The famous frieze of low-relief carving of the Parthenon was not only coloured but placed under the shadow of the deep peristyle behind a row of columns so that it might be read by light reflected from the ground. This was the only way in which its full value could be appreciated. Hence, too, the enrichment of the underside of cornices rather than of their face. When a Liverpool or Manchester sky throws down so little direct light, how much rises from a Liverpool or Manchester street? The problem, therefore, in our northern greyer latitude, of what is the happy tone of colour for our buildings (apart altogether from the aggravation of dirt and smoke, as the country town witnesses) is altogether different. Masses of solid colour, which under a bright sky look gay and happy, with us become heavy and crude. One has only to recall the dismal entrances to the Tube railway stations in London to see that solid colours, far from having a refreshing effect, have with us just the reverse. It may be argued that the crudity would go, or at any rate be less, if the whole street were in bright primary hues. At present, among ordinary stone and brick buildings, the brightly glazed coloured building is like an enamelled iron sign on an old wall. If the whole wall were enamelled, however, there would still be the contrast with the surface of the street, unless that were enamelled too, and with the sky, which no form of sky-writing has yet been able to turn into Prussian blue and vermilion.

The quality of the colour which the ancients used on their buildings when it was applied colour and not that of the natural material, marble, brick, or stone, was not the quality we are invited to use to-day. As far as can be judged from fragments, the quality of the colour on a Greek building was more like that of thin water-colour than thick oil-colour, whereas the glazed materials of to-day are far more treacly than oil paint. Look at the glazed portions of the Midland Hotel. They have a solid glueyness, a thick, uniform viscosity which is the very negation of life and colour. Natural materials, though they may very quickly become darker and duller in Manchester air, never become so dead as these artificial ones. The latter may indeed be washed—unwashed they hold the dirt in streaks and patches in a much less pleasant way than natural ones—but they cannot be brought back to life, for they have never really lived. They were cast in moulds from the start, and were repeated endlessly. In the baking, too, they twisted not a little, so that there is always an uneven puffiness of surface and line. They have not the clean-cut look of stone from the chisel, or even of brickwork truly laid. It is a case of cast material in place of wrought, and of a cast material which does not cast well. This, of course, only applies to glazed and unglazed terra-cotta when used structurally to take the place of brick or stone. It is quite another thing when it is used decoratively, as the Della Robbias used it, inset in brick, stone, or plaster. Its very irregularities then increase its decorative value. These objections, too, would not, in my mind, apply with quite the same force to a purely surface material like tiles or mosaic. The difficulty of the bright colouring against the dull sky would, of course, be there, but from the multiplicity of joints and surfaces the colour would be less solid, more broken, in fact. In Portugal there are houses faced with coloured tiles which give a pleasant effect, but there again the latitude and atmosphere are different. We have yet to see a satisfactory external use of glazed materials in this country.

When it does come, about which I am very doubtful, it must for good neighbourly reasons be applied to a whole street or district at once. Isolated patches like public-house fronts and Tube railway stations do the same sort of violence to adjacent buildings in natural materials that an enamelled iron sign does to a country lane when set up in a field alongside.

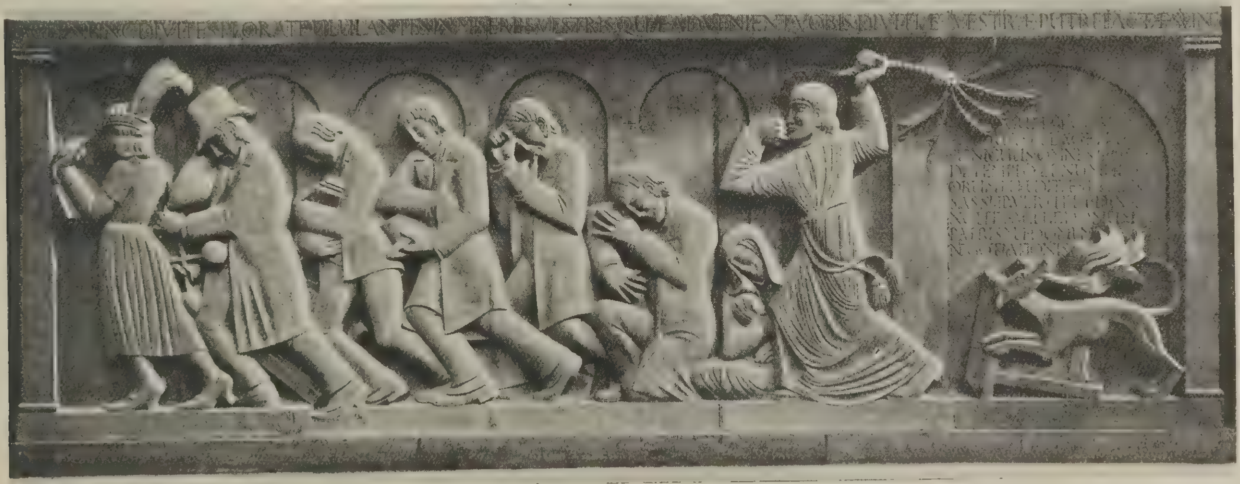
The Leeds University War Memorial

THE war memorial which we reproduce below has been set on an outer wall of the University at Leeds. The sculptured group, which has been executed by Mr. Eric Gill, shows Christ with a seven-thonged whip driving the money-changers out of the temple. The money-changers are represented by the men in tall hats and frock coats, one of them carrying the emblem of a pawnbroker and another books which are marked "£.s.d.," and with them is a woman who has a vanity bag. A cowering woman and child complete the group.

The Latin inscription is a sentence from the Epistle of St. James: "Go to now, ye rich men, weep and howl for your miseries that shall come upon you. Your riches are corrupted." Mr. Gill has explained that this design represents the perpetual war between justice and cupidity, begun by Christ, and implicit in the last European struggle.

Sir Michael Sadler, the retiring Vice-Chancellor of the University, has explained that he was responsible for the choice of the artist who had carved the monument which, through the generosity of a friend, he was able to offer for acceptance by the Council of the University. "As it fell to me to approve, in the first instance, his choice of subject and his sketch design," Sir Michael said, "I feel it right to accede to the request that I should say what the design has meant to me since I saw the first form of it in 1916, and why I think it fitting to be one of the memorials which, through the decision of the Council to accept this gift, the University will possess of those of its members who fell for their country in the war.

"The carving suggests a Christian view of war. The subject is taken from the Gospels which record the act (or possibly two distinct acts) of Jesus in casting out those who sold and bought in the temple. In His rebuke of them, our Lord recalled the words of two of the Hebrew prophets who bade men do righteousness and thoroughly execute judgment between a man and his neighbour. By our Lord's act the Christian is assured that force under due authority may be used in a righteous cause. The words which He quoted bid the Christian remember that to execute judgment is a righteous and sacred duty. Our Lord's driving the money-changers and the sellers of doves out of the temple does not condemn honest traffic, but teaches us that sacred things must be kept free from thoughts of money gain. This lesson is fitting for a monument which is set up in grateful memory of those who served in the war. Britain, after striving to keep the peace of Europe, took up arms because, in breach of treaty, a nation had been wrongfully attacked. Those who fell in the defence of the rights thus challenged gave their lives in a sacred cause."



LEEDS UNIVERSITY WAR MEMORIAL: CHRIST DRIVING THE MONEY-CHANGERS OUT OF THE TEMPLE.
ERIC GILL, SCULPTOR

New Bank at Southport

FRANCIS JONES and H. A. DALRYMPLE, F. and A.R.I.B.A., Architects

THE new premises of the Manchester and Liverpool District Banking Co., Ltd., in Lord Street, Southport, consist mainly of a one-storied building, excepting the back portion, which is carried up for several stories for sundry offices, clerks' rooms, and so on. The elevation to Lord Street is in the form of a very large portico with two Ionic columns in antis, with a large pediment.

The doorway leads into a small vestibule, with a stone-vaulted dome, and thence into the main banking hall. The doors, both outer and inner, are faced with bronze and detailed in keeping with the character of the building.

In the large banking hall, which is about 80 ft. long by 30 ft. wide, and about 21 ft. high, the fittings are all in dark mahogany.

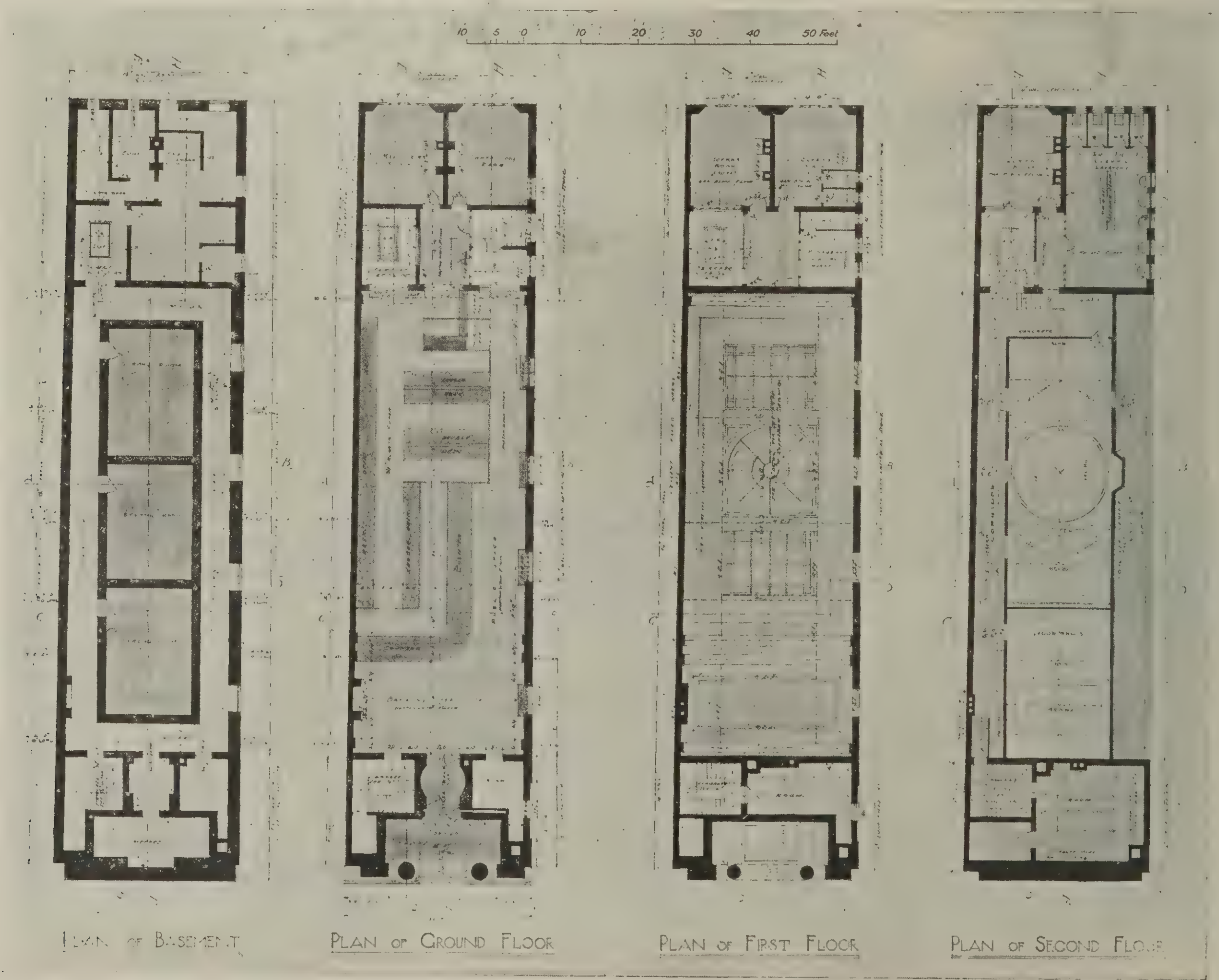
The dome ceilings in the banking hall were executed by Messrs. G. Jackson and Sons, Ltd., in pre-cast reinforced or fibrous plaster with distempered finish, the walls, cornices, door and window surrounds, pilasters and caps, both plain and decorated parts, being executed in the firm's special stuc, jointed and lined out as stone.

Beyond the banking hall is a side entrance and the managerial department.

In the basement is a series of strong-rooms. They are surrounded by a wide passage for inspection all round, the strong-rooms forming an island in the centre of the basement. These strong-rooms are fitted up with cupboards, shelving, and safes, suitable for the various requirements of the bank.

The work was carried out by the following contractors: B. R. Hunt and Sons, Southport (brickwork); T. A. Halliwell, Southport (stonework); Heyes Bros., Southport (plumbing and decorating); Thos. Southworth, Southport (plastering); Duxfield Bros., Southport (internal joinery); W. Macdonald & Co., Ltd., Manchester (steelwork, fireproof flooring, etc.); G. N. Haden and Sons, Manchester (warming installation); Humphries, Jackson and Ambler, Manchester (steel windows); Luxfer Prism, Ltd., London (bronze windows and ceiling lights); Lightfoot Bros., Manchester (electric lighting); Pearson Bros. and Campbell, Liverpool (litholite stone); Chatwood Safe Co., Bolton (strong-room doors); Chubb and Sons, Manchester (safes and fittings to strong-rooms); Wadsworth and Sons, Bolton (electric passenger-lift); J. and H. Patteson, Manchester (marble work); Conway & Co., Manchester (wall tiling); H. Shepherdson, Stockport (bank fittings); Well Fire Co., Ltd., Manchester (grates, etc.); Hooley Hill Rubber Co., Manchester (rubber flooring); Musgraves, Ltd., Liverpool (sanitary fittings); George Wragge, Ltd., Manchester (staircase balustrade and lift enclosure).

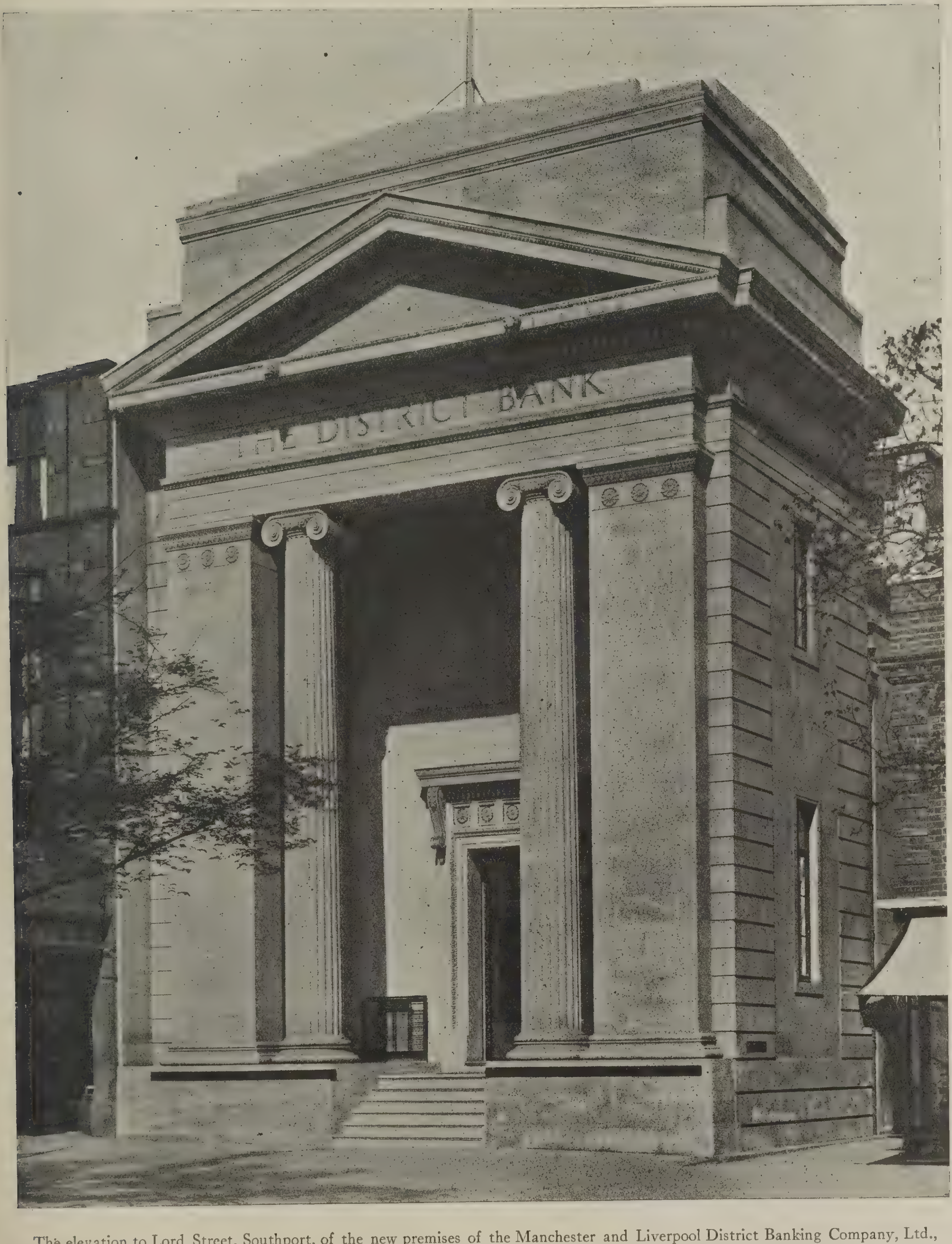
The following work was carried out by the Bromsgrove Guild, Ltd., of Bromsgrove, Worcestershire: the main entrance doors and bronze sliding doors, the portable bronze gates, name tablets, electric light fittings (wall brackets), special furniture for manager's office, and all the door furniture throughout the building.



PLANS OF BASEMENT AND PRINCIPAL FLOORS.

Current Architecture. 182.—New Bank at Southport: Elevation to Lord Street

Francis Jones and H. A. Dalrymple, F. and A.R.I.B.A., Architects

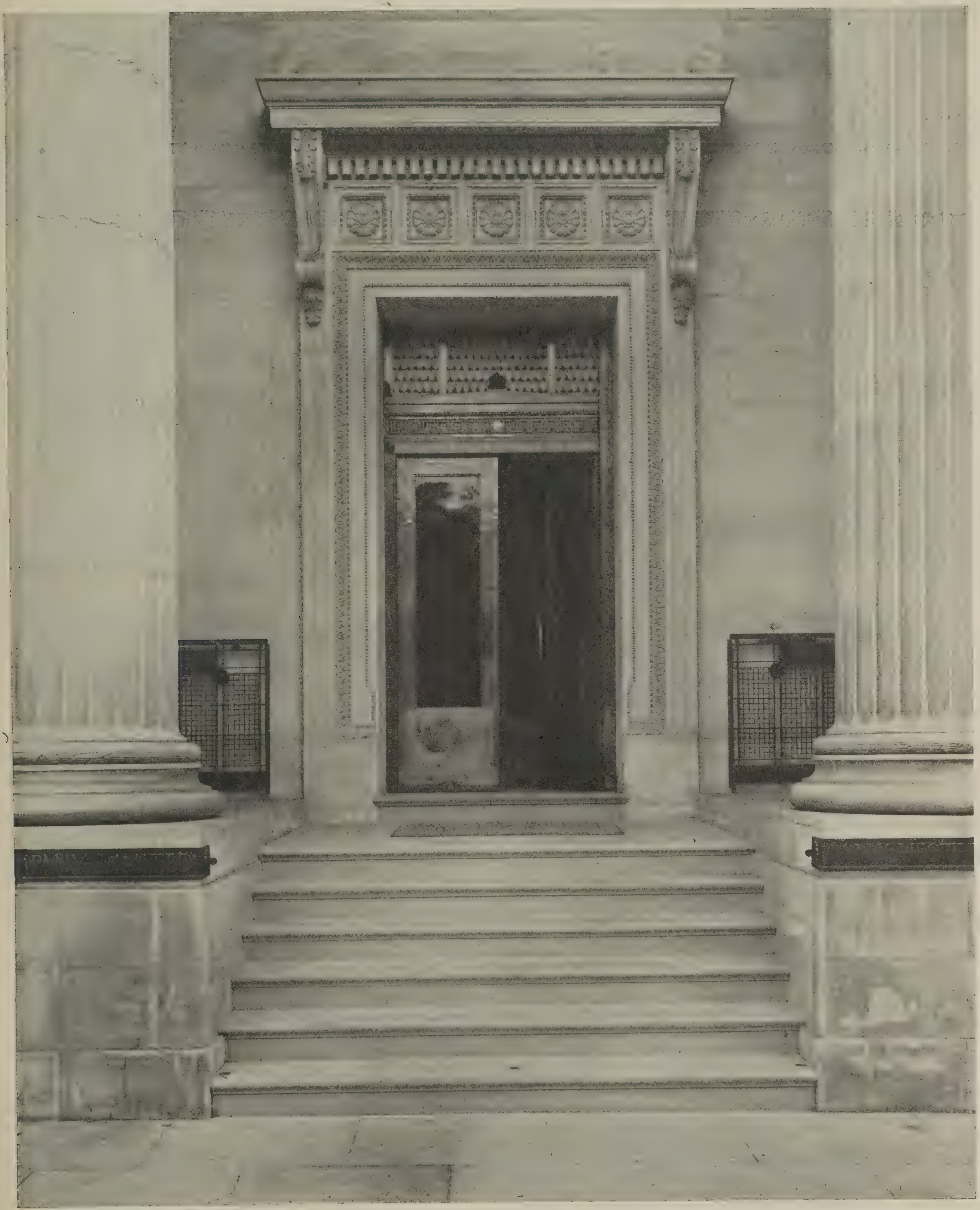


The elevation to Lord Street, Southport, of the new premises of the Manchester and Liverpool District Banking Company, Ltd., consists of a large portico with two Ionic columns in antis, with a large pediment. In scale and feeling, the best American influences can be traced.

THE LIBRARY
OF THE
UNIVERSITY OF ILLINOIS

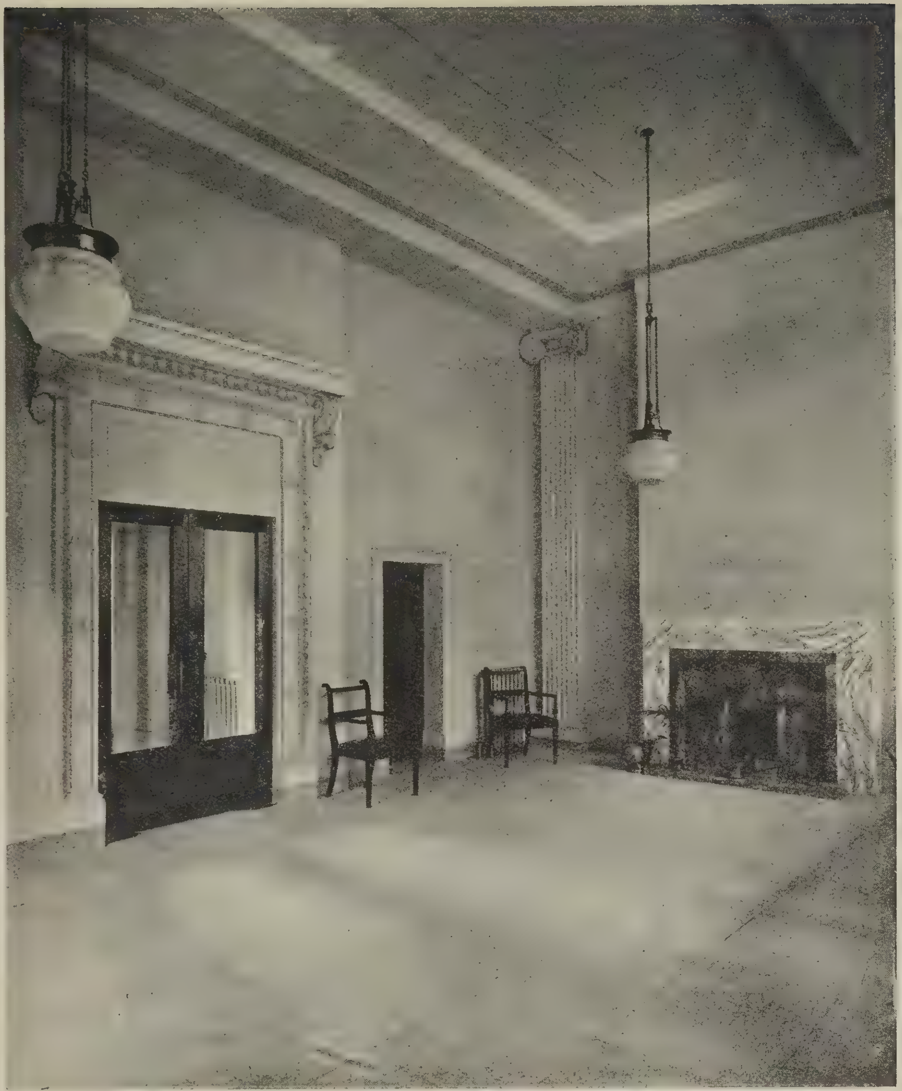
Current Architecture. 183.—New Bank at Southport: Detail of Entrance

Francis Jones and H. A. Dalrymple, F. and A.R.I.B.A., Architects

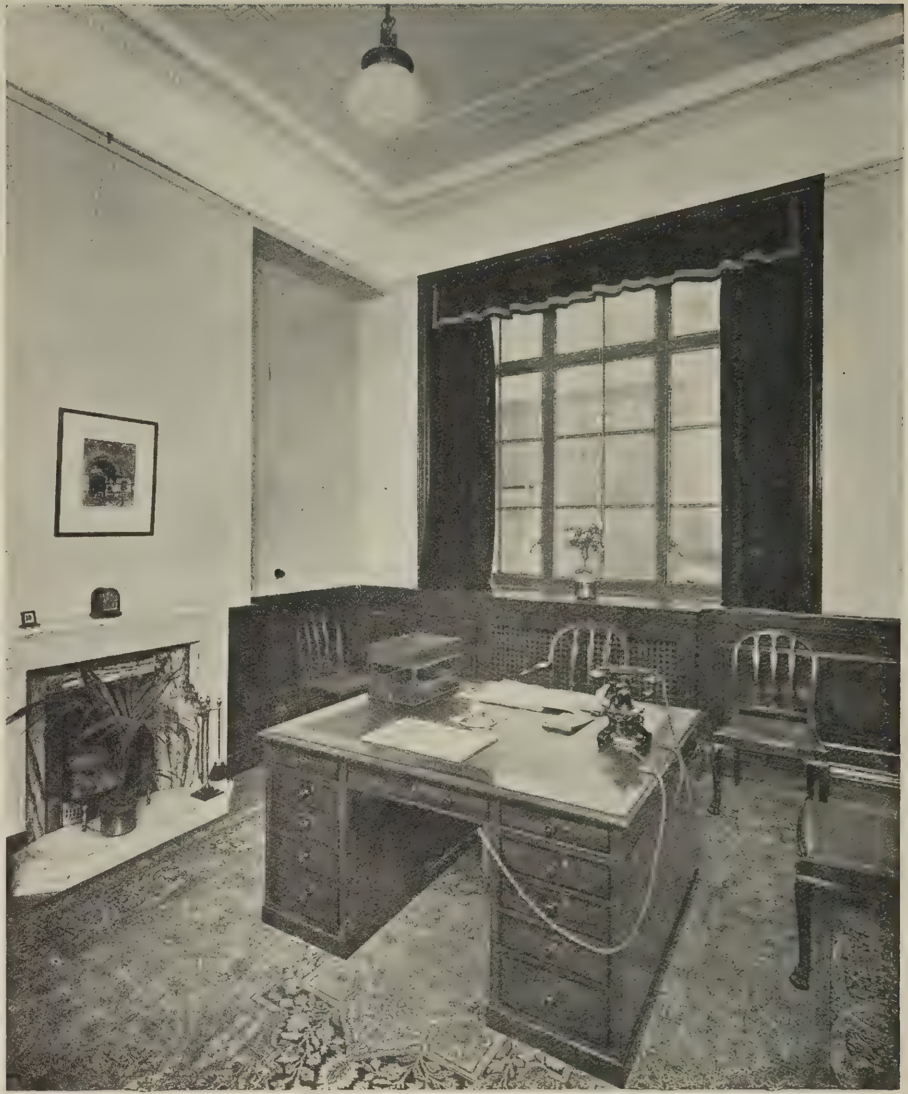


The architects have imparted a great deal of dignity into this building, both in fineness of proportion and of detail.

THE LIBRARY
OF THE
UNIVERSITY OF ILLINOIS



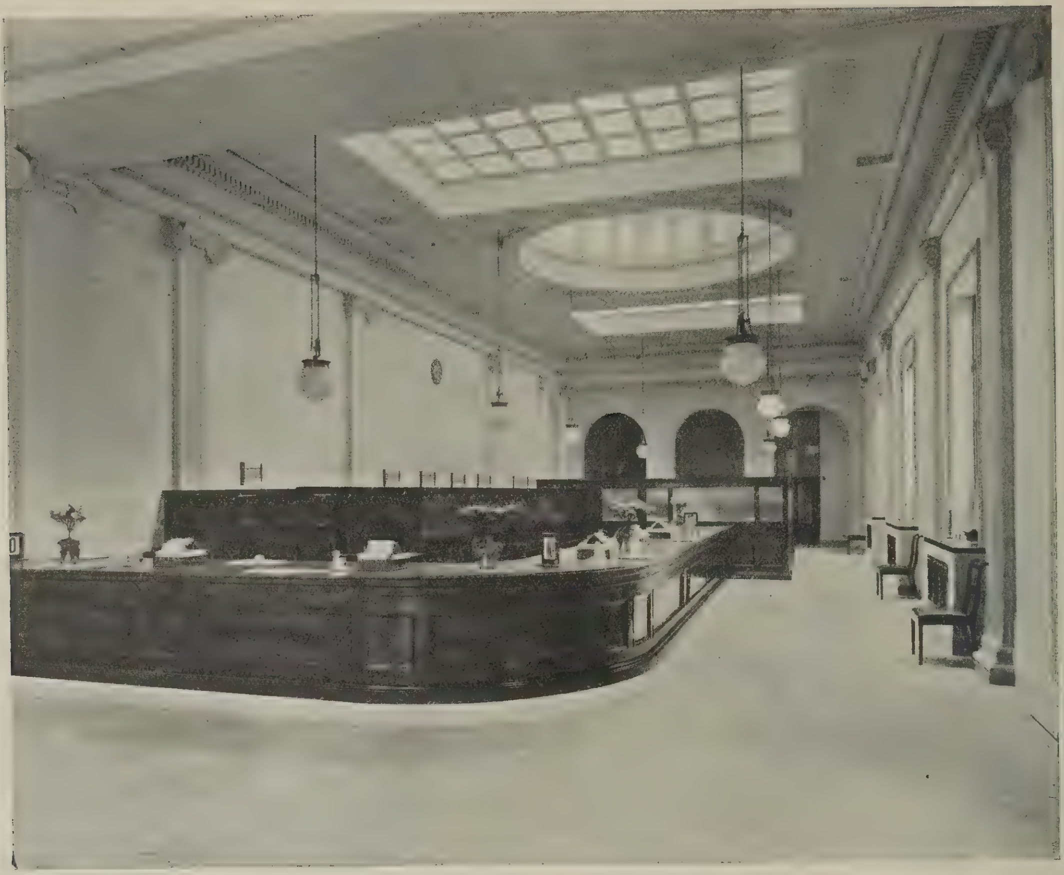
THE PUBLIC SPACE.



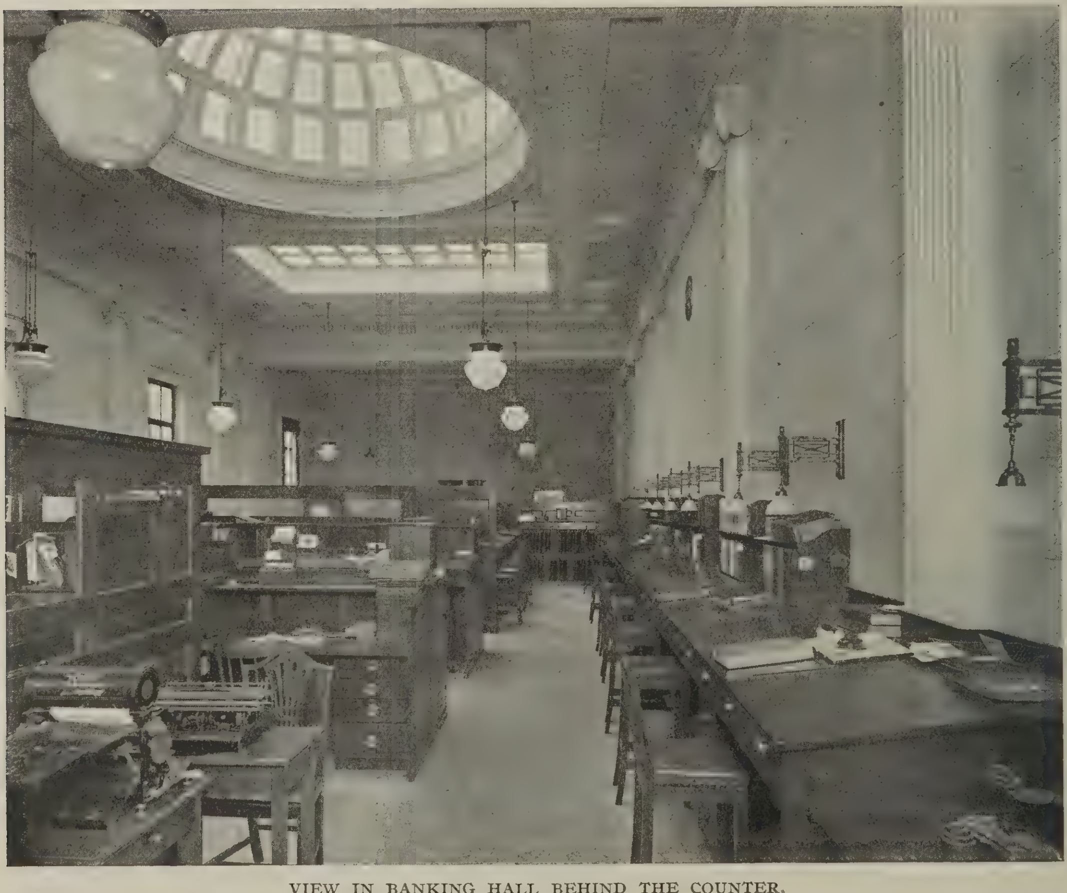
MANAGER'S ROOM.

NEW BANK AT SOUTHPORT.

FRANCIS JONES AND H. A. DALRYMPLE, F. AND A.R.I.B.A., ARCHITECTS.



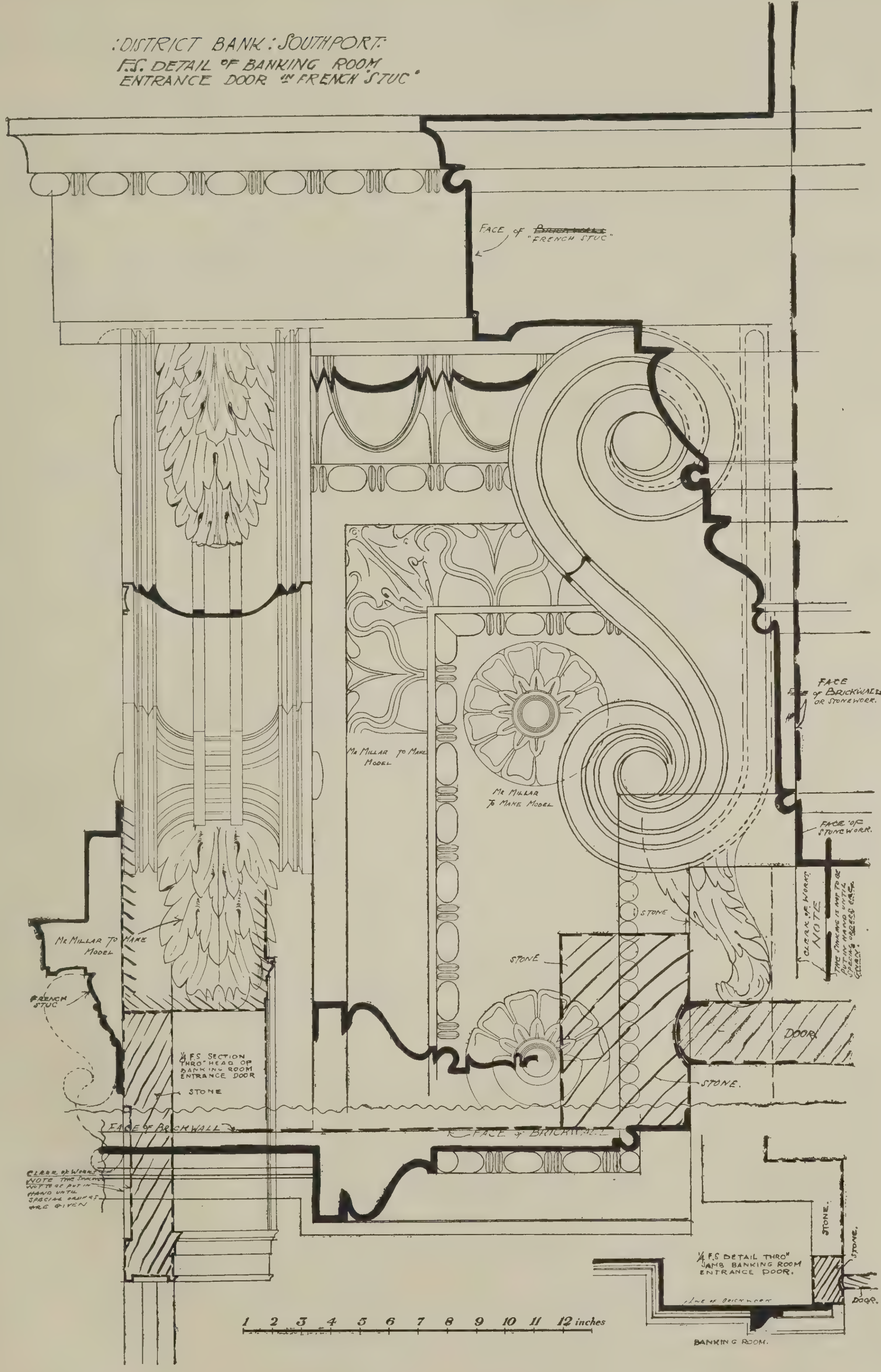
GENERAL VIEW OF BANKING HALL.



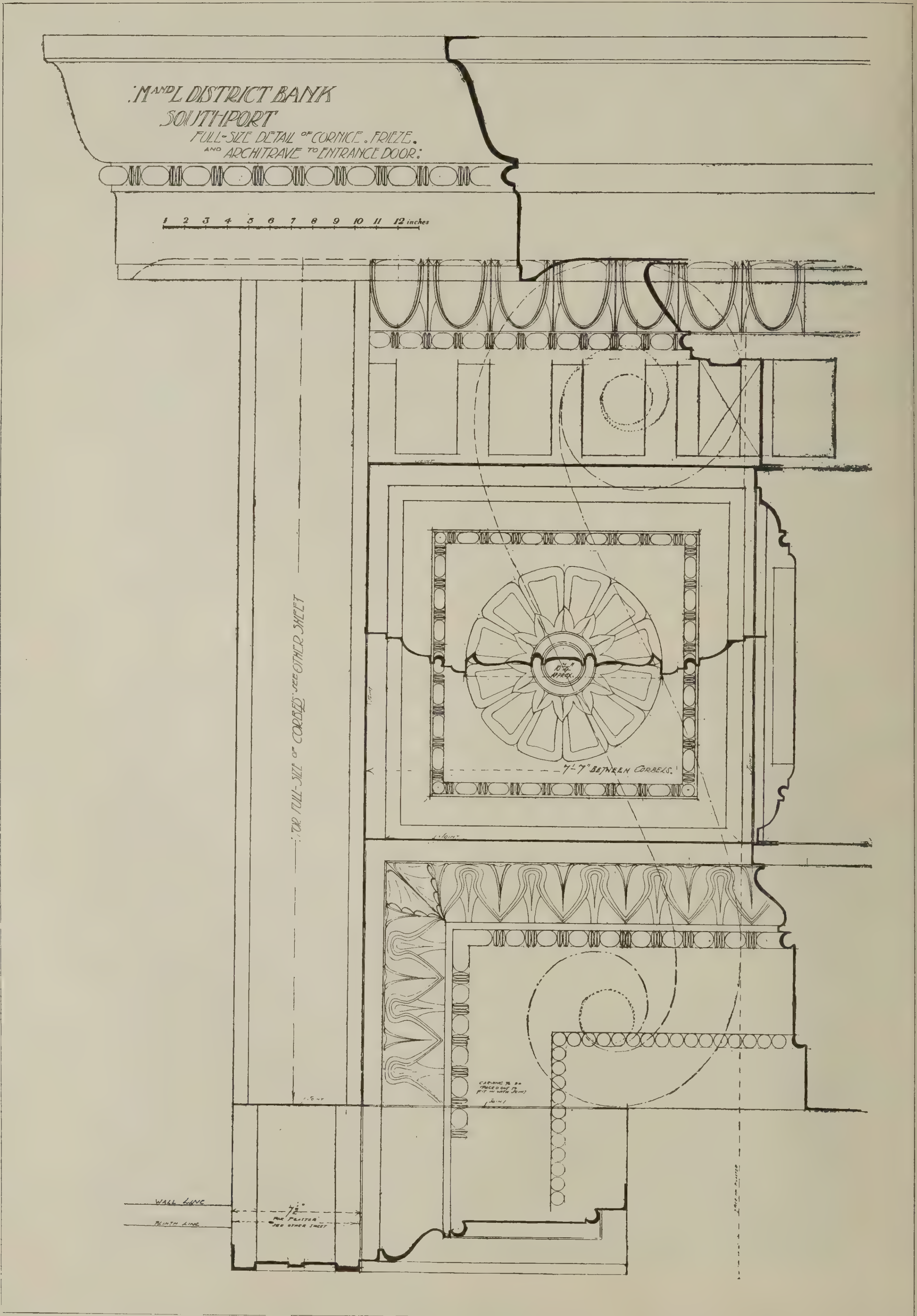
VIEW IN BANKING HALL BEHIND THE COUNTER.

NEW BANK AT SOUTHPORT.

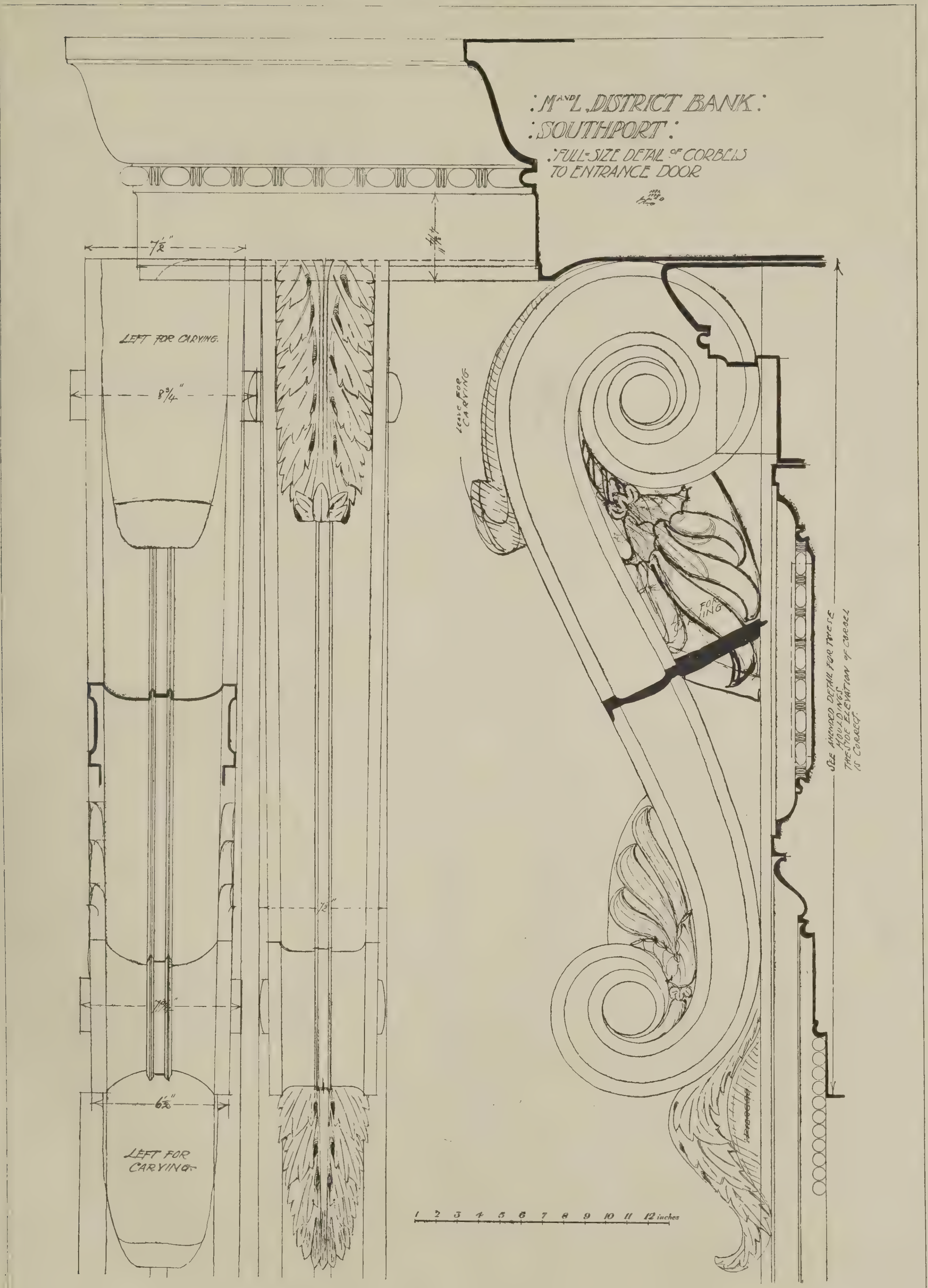
FRANCIS JONES AND H. A. DALRYMPLE, F. AND A.R.I.B.A., ARCHITECTS.


:DISTRICT BANK : SOUTHPORT:
F.S. DETAIL OF BANKING ROOM ENTRANCE DOOR IN FRENCH "STUC"
FACE of ~~BRICKWALL~~ "FRENCH STUC"
FACE of BRICKWALL or STONEWORK.
FACE OF STONEWORK.
CLERK OF WORKS NOTE
THE SINKING IS NOT TO BE PUT IN HAND UNTIL SPECIAL ORDERS ARE GIVEN.
Mr MILLAR TO MAKE MODEL
Mr MILLAR to MAKE MODEL
Mr MILLAR TO MAKE MODEL
FRENCH STUC
STONE
STONE
STONE
STONE.
DOOR
¼ F.S SECTION THRO" HEAD OF BANKING ROOM ENTRANCE DOOR
STONE
FACE OF BRICKWALL
FACE of BRICKWALL
CLERK OF WORKS NOTE THE SINKING NOT TO BE PUT IN HAND UNTIL SPECIAL ORDERS ARE GIVEN
¼ F.S DETAIL THRO" JAMB BANKING ROOM ENTRANCE DOOR.
STONE.
STONE.
LINE OF BRICKWORK
DOOR.
BANKING ROOM.
1 2 3 4 5 6 7 8 9 10 11 12 inches

NEW BANK AT SOUTHPORT: DETAIL OF BANKING ROOM ENTRANCE DOOR IN FRENCH STUC.
FRANCIS JONES AND H. A. DALRYMPLE, F. AND A.R.I.B.A., ARCHITECTS.


:M and L DISTRICT BANK
SOUTHPORT
FULL-SIZE DETAIL of CORNICE. FRIEZE.
and ARCHITRAVE to ENTRANCE DOOR:
1 2 3 4 5 6 7 8 9 10 11 12 inches
:FOR FULL-SIZE of CORBELS see OTHER SHEET
10¾" APPROX.
7'-7" BETWEEN CORBELS.
CARVING TO BE SPACED OUT TO FIT IN WITH JOINT
JOINT
WALL LINE
PLINTH LINE
7½"
FOR PLASTER SEE OTHER SHEET

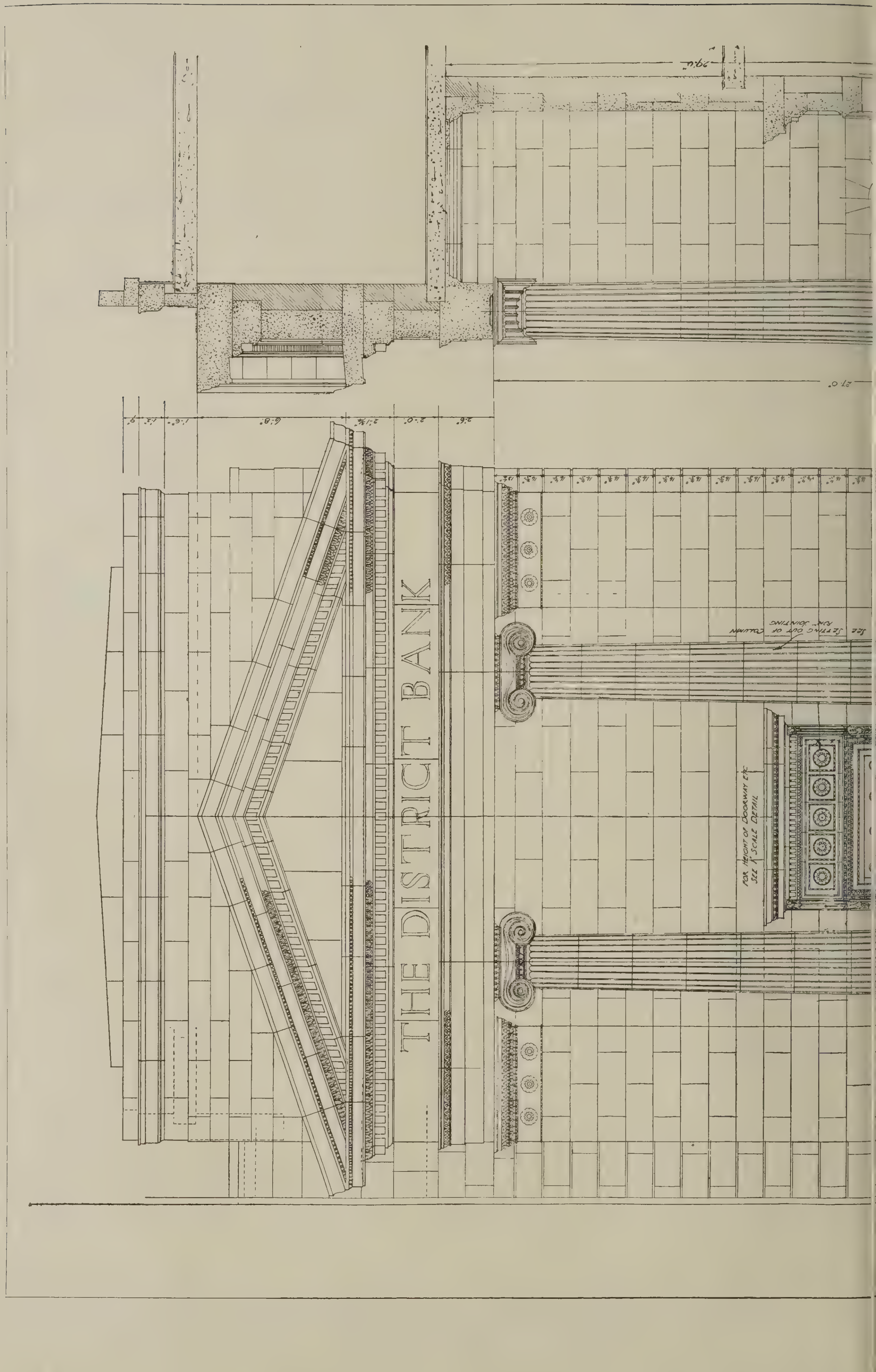
NEW BANK AT SOUTHPORT: DETAIL OF CORNICE, FRIEZE, AND ARCHITRAVE TO ENTRANCE DOOR.
FRANCIS JONES AND H. A. DALRYMPLE, F. AND A.R.I.B.A., ARCHITECTS.

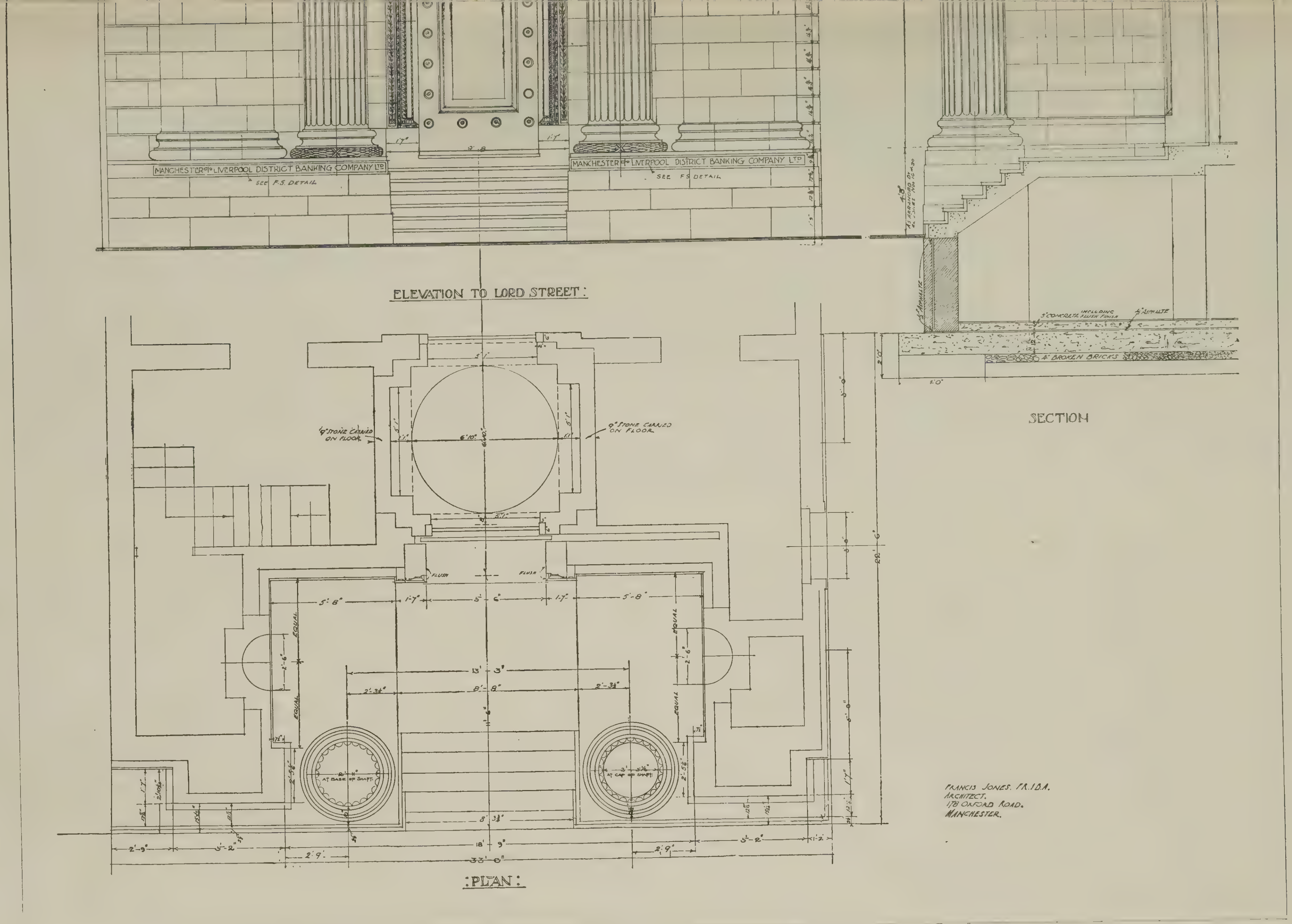

:Mand L. DISTRICT BANK:
:SOUTHPORT:
:FULL-SIZE DETAIL of CORBELS TO ENTRANCE DOOR
7½"
11¾"
LEFT FOR CARVING.
8¾"
LEAVE FOR CARVING
SEE AMENDED DETAIL FOR THESE MOULDINGS.
THE SIDE ELEVATION of CORBEL IS CORRECT.
7½"
7½"
6½"
LEFT FOR CARVING
1 2 3 4 5 6 7 8 9 10 11 12 inches

NEW BANK AT SOUTHPORT: DETAIL OF CORBELS TO ENTRANCE DOOR.
FRANCIS JONES AND H. A. DALRYMPLE, F. AND A.R.I.B.A., ARCHITECTS.

Architects' Working Drawings. 63.—New Bank at Southport

Francis Jones and H. A. Dalrymple, F. and A.R.I.B.A., Architects

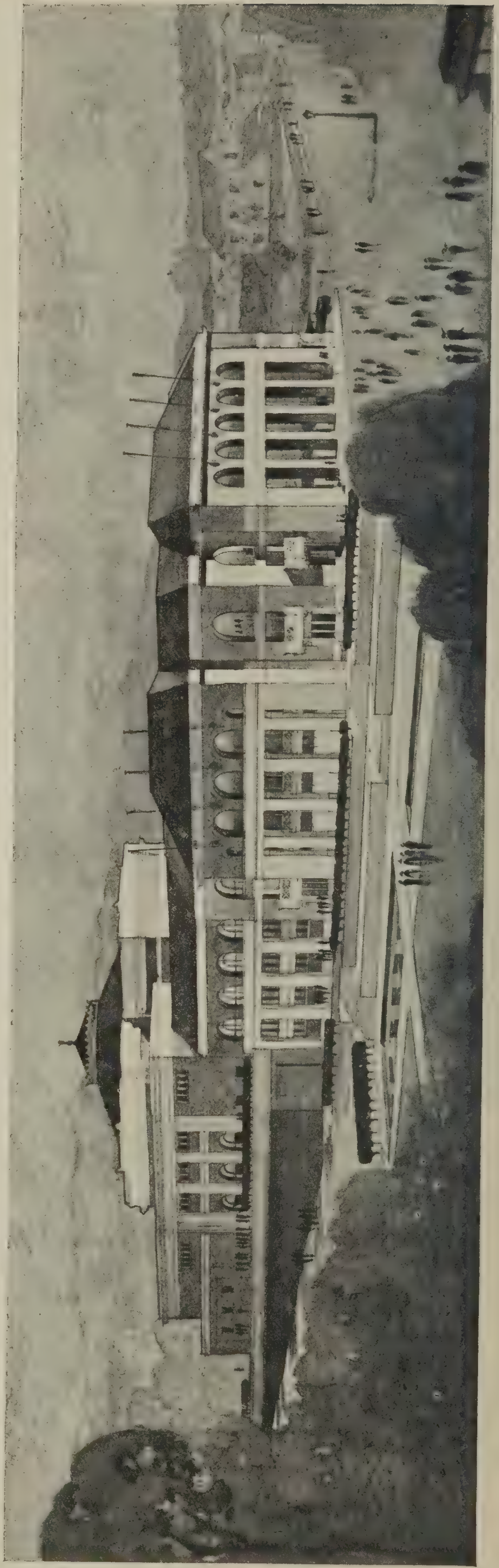

THE DISTRICT BANK
SEE SETTING OUT OF COLUMN FOR JOINTING
FOR HEIGHT OF DOORWAY ETC SEE ¼ SCALE DETAIL


ELEVATION TO LORD STREET:
SECTION
:PLAN:
MANCHESTER & LIVERPOOL DISTRICT BANKING COMPANY LTD
SEE F.S. DETAIL
9" STONE CARRIED ON FLOOR
5" CONCRETE INCLUDING FLUSH FINISH
½" ASPHALTE
4" BROKEN BRICKS
FLUSH
EQUAL
AT BASE OF SHAFT
AT CAP OF SHAFT
FRANCIS JONES. F.R.I.B.A.
ARCHITECT.
17B OXFORD ROAD.
MANCHESTER.

This new branch bank has been erected for the Manchester and Liverpool District Banking Company, Ltd. The working drawing reproduced above is of the principal façade, a photographic illustration of which appears on page 53.

Bournemouth Pavilion Competition

The First, Second, and Third Designs



As announced in our last issue, Sir Edwin Cooper, F.R.I.B.A., the assessor, has made the following awards in the competition, promoted by the Bournemouth Corporation, for designs for the new pavilion to be erected on the Belle Vue site, near Bournemouth pier:

First.—Mr. G. Wyville Home, A.R.I.B.A., and Mr. Shirley Knight, A.R.I.B.A., of Lincoln Chambers, Portsmouth Street, Lincoln's Inn Fields, London.

Second.—Mr. H. V. Ashley, F.R.I.B.A., and Mr. Winton Newman, F.R.I.B.A., of 14 Gray's Inn Square, London.

Third.—Messrs. Collcutt & Hamp, and Mr. J. F. Watkins, associated architects, of 20 Red Lion Square, London.

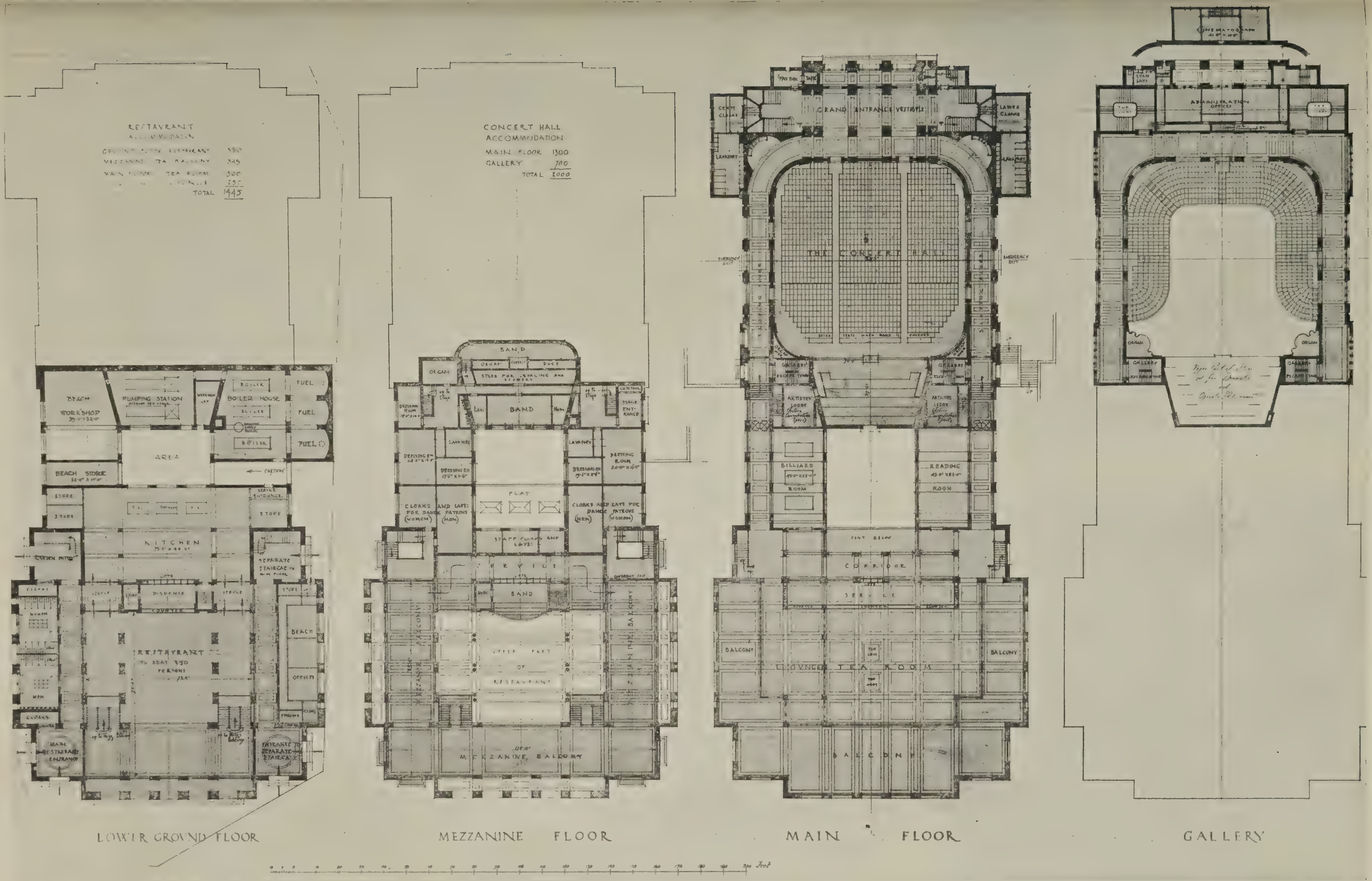
Nearly one hundred designs were submitted.

The Winning Design

The winning design was planned after the conditions had been carefully considered and an inspection had been made of the site and its surroundings. In their report the authors state: while providing the various entrances laid down in the requirements, it has been considered desirable to make the buildings accessible from the gardens as well as from the northern and southern approaches. In view of the large number of persons provided for in the concert hall, restaurants and in the other parts of the building, these extra entrances would prevent congestion, and would facilitate the rapid ingress and egress of the public.

The concert hall has been planned in such a manner that it can be used successfully for either concerts, operatic or dramatic performances and cinematograph displays, but preferential treatment, in accordance with the "answers to questions," has been given to the requirements of a concert and its orchestra. Every seat has a clear view of the platform, while the staircases, entrances, and exits have been planned with due regard to comfort in access and rapid emptying of the hall. Alternative means of escape in case of fire have been provided from all parts of the auditorium. Accommodation has been included for an organ of forty stops. A suggested design for this is indicated. The pipes are distributed on each side of the proscenium opening, and the console is placed immediately in front of the band conductor (operatic and dramatic) and behind and under the orchestral conductor. By placing the console in this position the organ can be played during any of the performances. The consoles are placed centrally between the groups of pipes, so that the organist does not suffer from irregularity of sound waves. The organ would be electrically driven, and a duct for the pipes, etc., is shown under the stage. The turnstiles are provided in accordance with the conditions, and cut off completely the concert hall from the rest of the building. As far as possible the stage accommodation has been planned to meet the varying requirements according to the uses to which the hall will be put. The whole of this portion of the building is self-contained. It is shut off from the auditorium, and has its own means of escape. Access to the main floor tea-rooms, etc., from the Westover Road and from the concert hall is by means of the corridor running along the hall on its eastern side.

The main entrance to the lower ground-floor restaurant is (in accordance with the conditions) from the pier approach, and a subsidiary one has been provided from the gardens. Extensive lavatories have been placed so that they are equally accessible from either entrance. The mezzanine gallery has been planned around the three sides of the restaurant, and it is accessible externally from the



BOURNEMOUTH PAVILION COMPETITION: FIRST PREMIATED DESIGN. G. WYVILLE HOME AND SHIRLEY KNIGHT, AA.R.I.B.A., ARCHITECTS.

MR. G. WYVILLE HOME, A.R.I.B.A.

MR. SHIRLEY KNIGHT, A.R.I.B.A.

THE AUTHORS OF THE WINNING DESIGN.

gardens entrance and internally from the lower restaurant. Further lavatories to augment those on the lower ground floor are shown at mezzanine level. A large proportion of the area laid down for the main floor lounge and tea-rooms, etc., has been given up to balcony treatment. These balconies, which run around all three sides of the building, give extensive views of the sea and the gardens, and also over the Tatchbrook site which, as suggested on the lay-out plan, will be developed.

The extensive well-lit kitchen, indicated on the lower ground floor, has electrically-driven lifts communicating with the service rooms on all floors. Staff lavatories are provided on the mezzanine floor.

The separate staircase from the pier approach leads direct to the main floor, and to the corridor running along the eastern side of the concert hall. Off this staircase at mezzanine level cloak-rooms and lavatories are provided for the convenience of persons attending dances in the tea-room. Otherwise this staircase approach is entirely separate.

The remainder of the accommodation is explained by the plans themselves.

The structure is fireproof as far as possible, the construction being of a direct nature to avoid the elaborate use of steel. The walls are of brickwork and have a facing partly of Portland stone and partly of a purple facing brick. The floors are of reinforced concrete, the roofs of steel covered with pantiles, the windows of wrought steel, and the railings to the balconies of wrought and cast iron.

In the interior the finishings are of the simplest nature, and the main architectural effect would be gained by a carefully prepared scheme of colour decoration. The walls generally are to be floated with plaster with fibrous plaster mouldings, and enrichments to receive colour. The ceiling to the concert hall is of fibrous plaster suspended by hangers to the trusses and coloured. Floors generally are of wood block in mastic; and the corridors and promenoir around the concert hall, the gangways between the seating, and other parts of the building where silence is essential are to be covered with a heavy thickness of cork carpet. The floors to the sanitary blocks are covered with a composition jointless flooring. The internal stairs of concrete are faced with a thin layer of hard York stone, and the internal railings and staircase balustrading are of wrought and cast iron. The doors are hardwood throughout, and those giving access to the concert hall would be rendered sound-proof.

The heating generally is by the atmospheric steam heating system, carried out in such a manner as to enable the pipes and radiators to give out a heat up to 212° Fah. The concert hall is to be heated by warmed air forced by electric fans through openings in the ceiling and in the upper parts of the walls. Foul air will be extracted from the hall at the back of the gallery and over the ground floor corridor, taken down to the lower ground floor level and expelled from there. The plant for pumping in the hot air will be in the concert-hall roof. The boilers for heating will be of the Lancashire type, and a smaller boiler for hot water is also indicated. The smoke stack is placed with due regard to the prevailing winds.

Cooking will be by gas-cookers; and electric lighting, both direct and indirect, will be employed in the more important rooms. The drainage is in accordance with modern requirements, and will be well ventilated.

The estimated cost was made up as follows: lower floor, £48,929; concert hall, £52,466; rest of building, £24,776. Total, £126,171. The portions darkened on plan are estimated to cost £101,395.

The Second Design

In the second design the concert hall provides for 1,500 seats on the main floor, which is sloped, and a further 500 in the gallery, the latter being schemed entirely as an end gallery. Corridors with turnstiles give convenient access to the tea and refreshment rooms on the main floor level and at the pier end of the site. The staircases to the gallery, with additional cloakroom and offices on the mezzanine floor, have been so planned as to be accessible either from the grand vestibule, or, if desired, only from the external entrances flanking the main entrance loggia. There are additional exit staircases from either side of the gallery, and accommodation is provided for a refreshment counter in the gallery crush hall. Full accommodation has been provided for all conveniences for orchestra, artists, and audience. Provision is also made for a sunk orchestra when required, together with a scenery lift and store.

The tea, refreshment rooms, and lounge have been planned on the main floor level, and are easy of access either by means of the corridors from the grand vestibule or the separate staircase from the pier approach. The lounge and balcony are at the pier end of the site, and the tea and refreshment room is adaptable for use as one large room or a portion may be cut off without any derangement of service. Service rooms with staircases and lifts to the kitchen floor are provided, and so arranged to serve all parts without interference of cross traffic. Galleries for small orchestras have been arranged for over the service rooms at the end of the tea and refreshment rooms. The balconies may on occasion be thrown open.

The large luncheon and refreshment room is arranged beneath the lounge, with central and side entrances on the pier approach level, and with a tea balcony at the mezzanine floor running the full width of the building.

The total estimated cost of the entire building is £150,000.

The Third Design.

In the third design the ground and mezzanine floor restaurants have been so planned as to be entirely self-contained so as to simplify sub-letting, if desired. The same effort has been made in regard to the concert hall and main tea and dancing-room, only two points of connection existing between these, both being controlled by turnstiles on the principal floor.

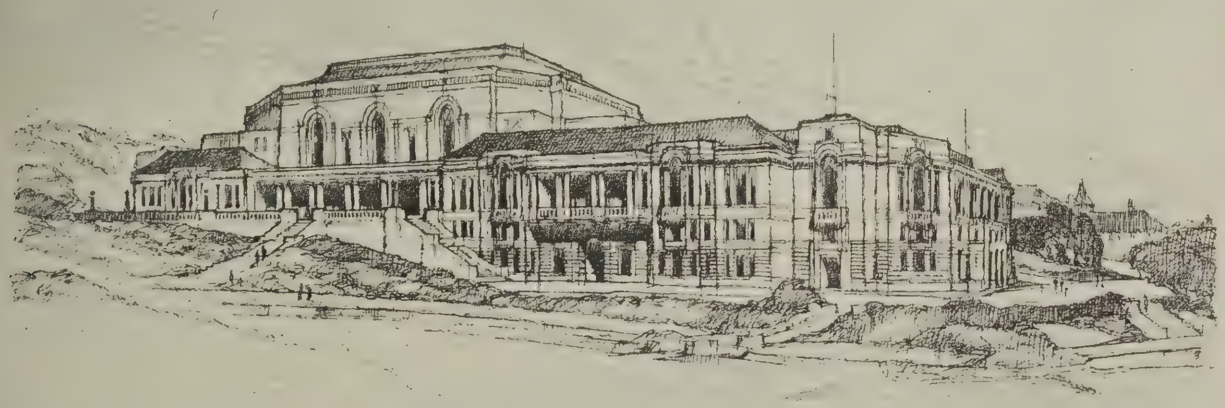
In view of the fact that the entertainment in the concert hall will be chiefly orchestral, the full width of the stage has been left available for use. When the stage is required for dramatic purposes it is suggested that movable side-jambs should be used for the proscenium. Space for the organ is provided to the right and left of the proscenium opening, and it is proposed to place the console in the orchestra pit. In view of the popularity of the evening concerts, provision has been made for promenading round the concert hall.

The estimated total cost of the building is £118,156.

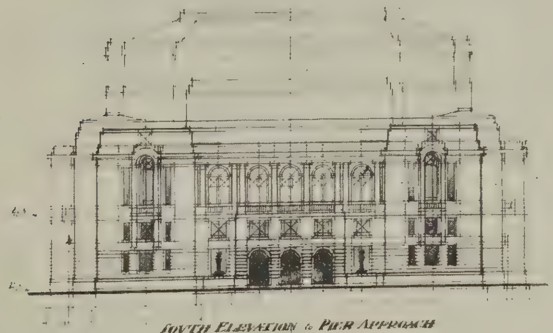
The Winners.

Mr. G. Wyville Home, A.R.I.B.A., who is thirty-six years of age, studied at the Royal College of Art and the Architectural Association, where in 1911 he took the Silver Medal in design and qualified as an Associate R.I.B.A. He was articled to Mr. Walter Cave (at that time President, A.A.), and his subsequent experience, which was broken into by four years of army service, was gained in various London offices, including the architect's department, London County Council, Messrs. Ashley and Newman, Messrs. Lanchester, Rickards and Lucas, and Messrs. Simpson and Ayrton.

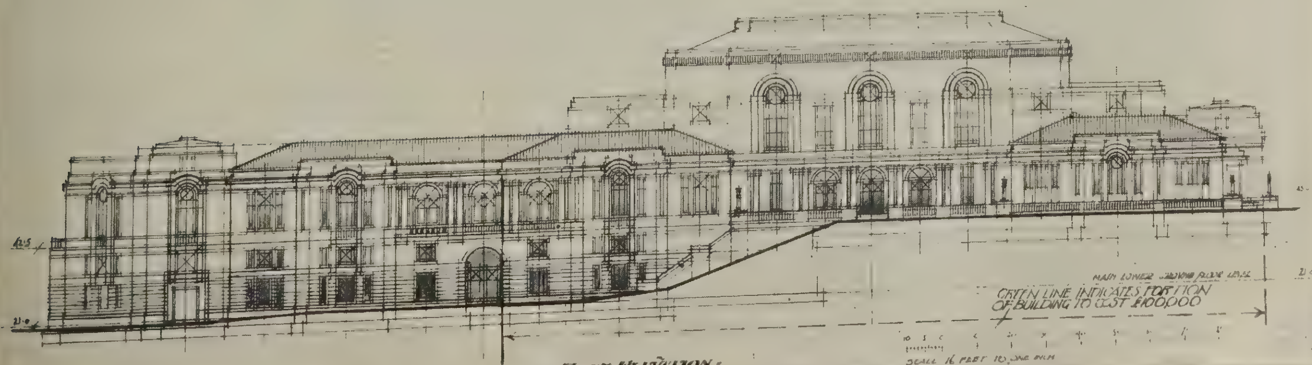
Mr. Shirley Knight, A.R.I.B.A., who is thirty-three years of age, was born in Northampton, and began his training in the Provinces. He was articled to Mr. T. H. Baker, of Colchester, and was with him for three years, after which he came to London. The war interrupted his studies for the final examination of the R.I.B.A., and he qualified eventually in 1918, after he was discharged from the army as a result of wounds. London offices in which he has worked include the London County Council, the Office of Works, Messrs. Lovegrove and Papworth, and Messrs. Simpson and Ayrton.



PERSPECTIVE VIEW

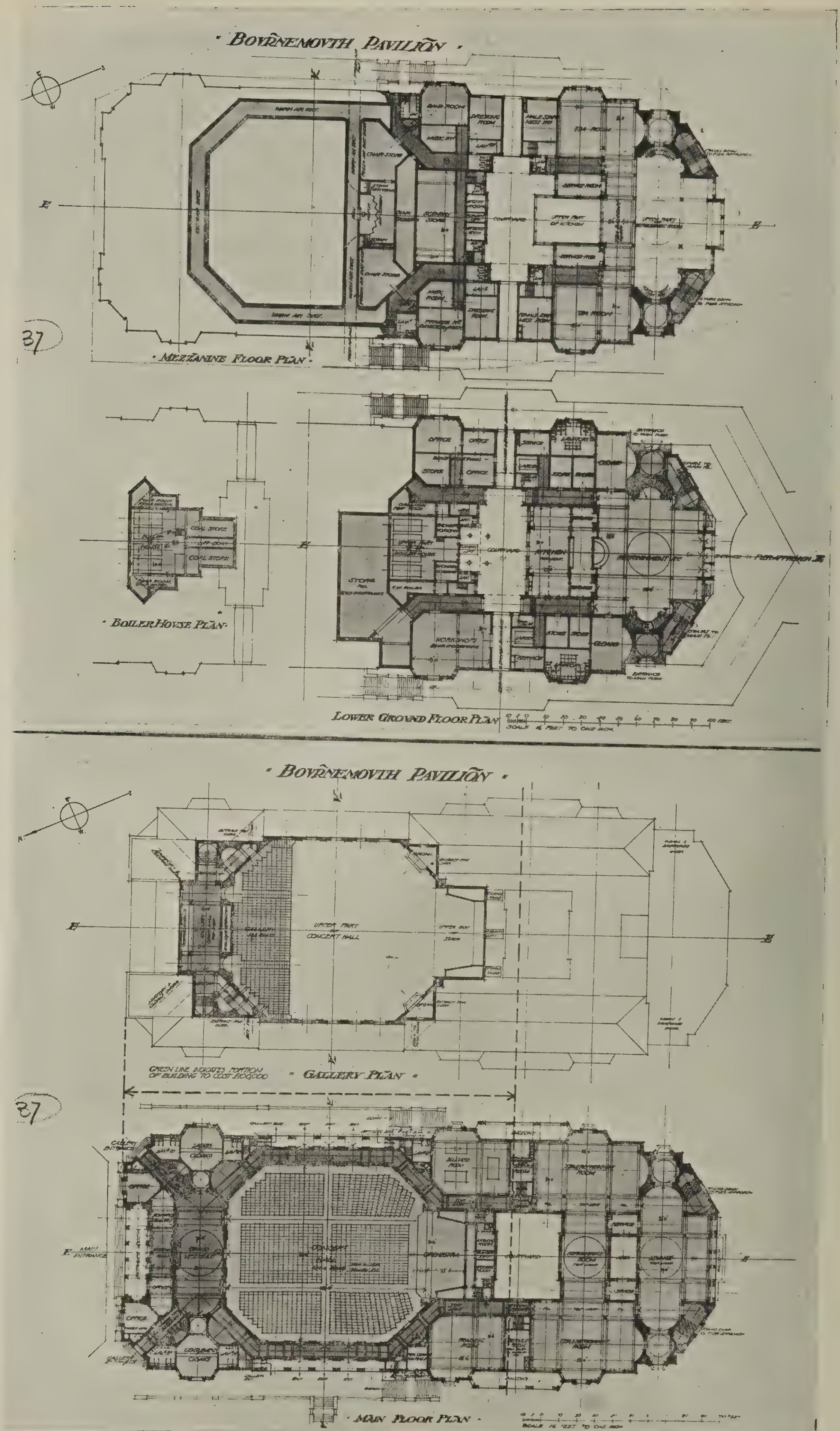


SOUTH ELEVATION to PIER APPROACH

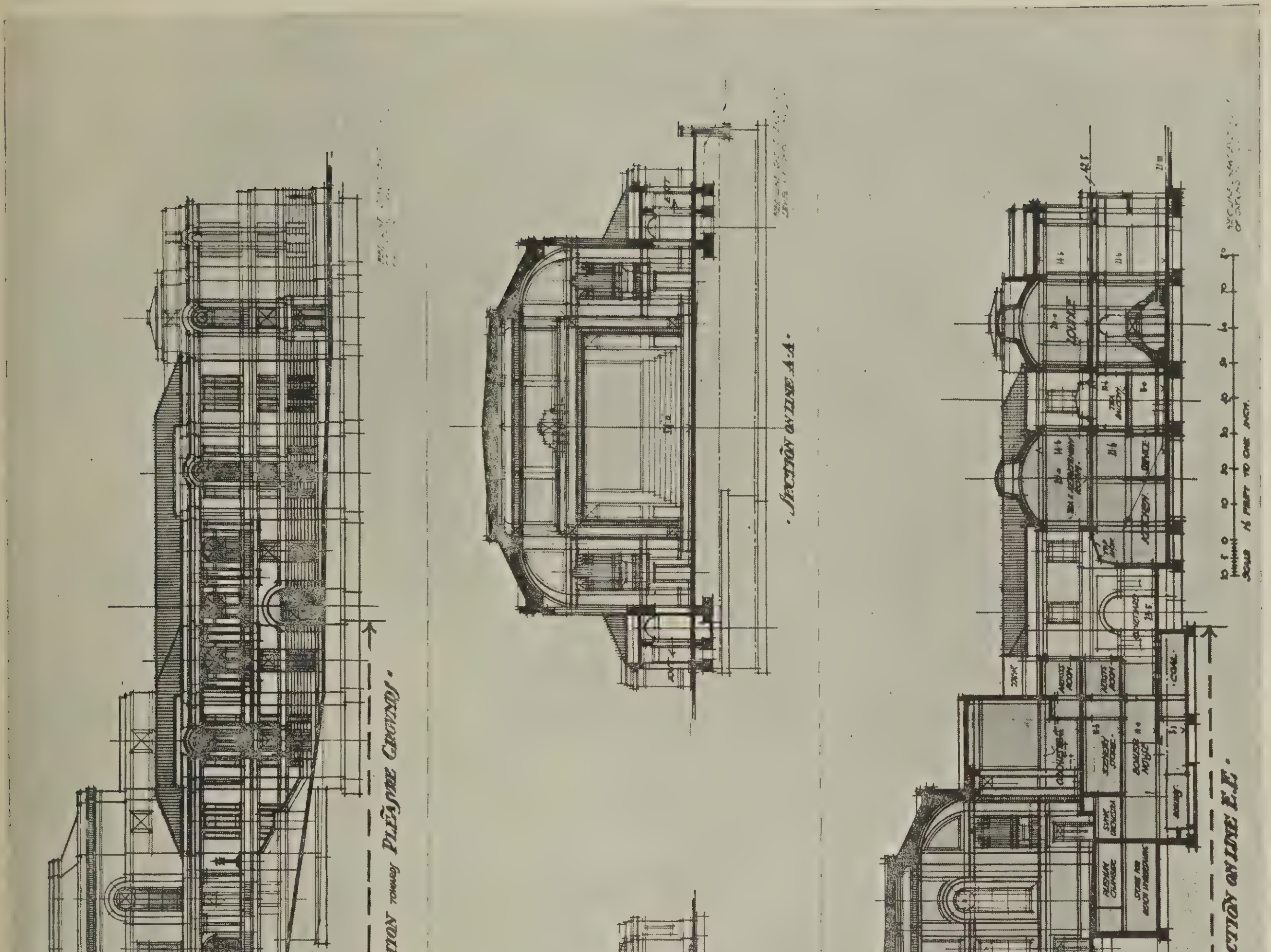

MAIN LOWER [illegible] FLOOR LEVEL
GREEN LINE INDICATES PORTION OF BUILDING TO COST £100,000
SCALE 16 FEET TO ONE INCH

EAST ELEVATION

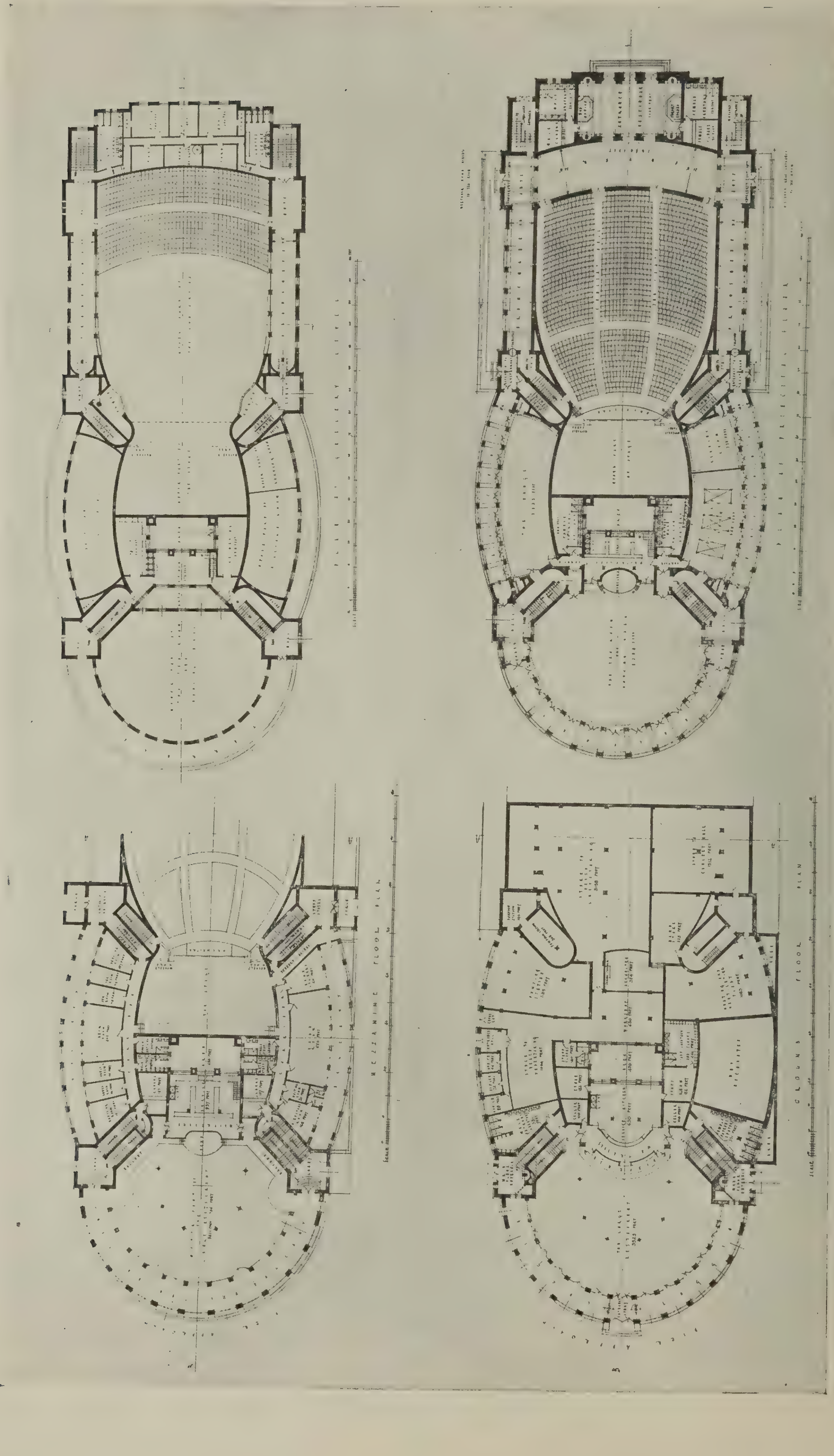
BOURNEMOUTH PAVILION COMPETITION: SECOND PREMIATED DESIGN.
H. V. ASHLEY AND WINTON NEWMAN, FF.R.I.B.A., ARCHITECTS.



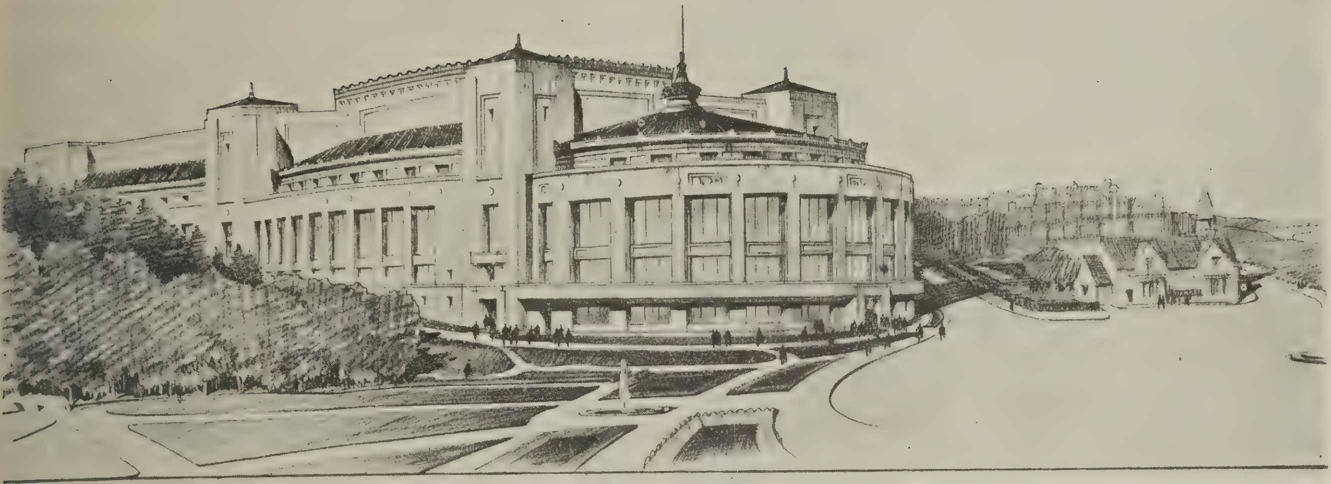
BOURNEMOUTH PAVILION COMPETITION: SECOND PREMIATED DESIGN.
H. V. ASHLEY AND WINTON NEWMAN, FF.R.I.B.A., ARCHITECTS.

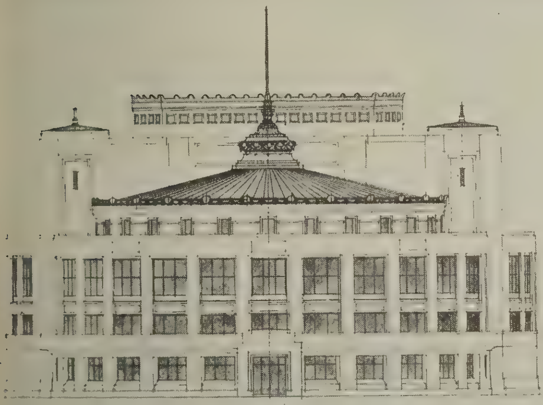

· WEST ELEVATION towards PLEASURE GROUNDS ·
GREEN LINE INDICATES PORTION OF BUILDING TO COST £100,000
MAIN LOWER GROUND FLOOR LEVEL
· SECTION ON LINE A-A ·
NORTH ELEVATION towards WESTOVER ROAD ·
· SECTION ON LINE E.E ·
GREEN LINE INDICATES PORTION OF BUILDING TO COST £100,000
MAIN LOWER GROUND FLOOR LEVEL
LOUNGE
KITCHEN
COAL
SCALE 16 FEET TO ONE INCH

BOURNEMOUTH PAVILION COMPETITION: SECOND PREMIATED DESIGN. H. V. ASHLEY AND WINTON NEWMAN, FF.R.I.B.A., ARCHITECTS.

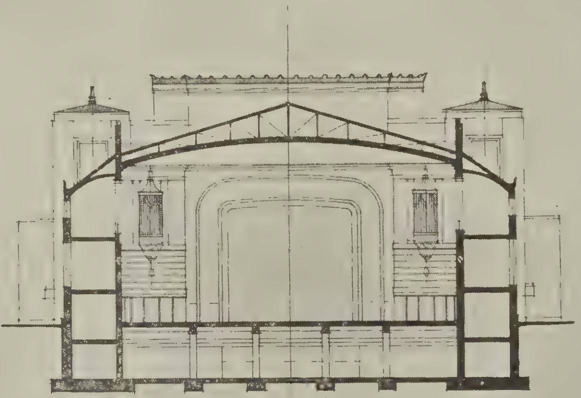


BOURNEMOUTH PAVILION COMPETITION: THIRD PREMIATED DESIGN. COLLCUTT & HAMP AND J. F. WATKINS, ASSOCIATED ARCHITECTS.

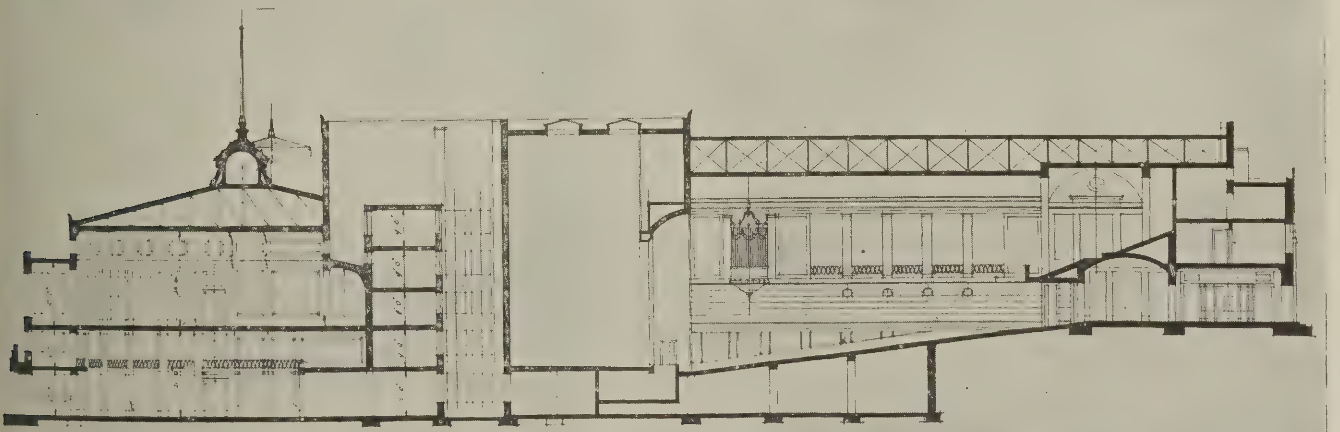




PIER APPROACH ELEVATION



SECTION A·A



SECTION B B

BOURNEMOUTH PAVILION COMPETITION: THIRD PREMIATED DESIGN.
COLLCUTT & HAMP AND J. F. WATKINS, ASSOCIATED ARCHITECTS.

Law Reports

Conversion of Premises—Structural Alterations

Herbert v. *Savage and another.*

June 21. King's Bench Division. Before Justices Sankey and Salter.

This was an appeal by the defendants Savage and another from a decision of the Lambeth County Court Judge.

The short facts were as follows: The plaintiff was the lessee of 337 Norwood Road, and the assignee of 337a Norwood Road, which he occupied for some time while 337 was unoccupied. In 1919 he decided to enlarge the premises he occupied and he converted the two buildings into what he claimed to be one building after making certain alterations. He next found that his business was not going as well as he wished and he obtained two ladies as tenants of what had been 337 Norwood Road. He had spent a considerable sum of money on repairs and decorations, and the ladies paid him £200 premium on the granting of a lease. Mr. Herbert afterwards claimed possession and rent due, and the tenants brought a counterclaim for the return of the premium on the ground that their tenancy was within the Rent Restrictions Act, which made the payment of a premium illegal. The County Court Judge then found that the alterations made did not constitute structural alterations within the meaning of the Act. He gave judgment for the plaintiff on the issue of rent and judgment for the tenants on the counterclaim. The matter then went to a King's Bench Divisional Court, which sent the case back for a new trial of the counterclaim. The judge affirmed his decision, and it was against that judgment that the present appeal was brought.

On behalf of the landlord it was submitted that he had first made the two premises one and then by further alterations that one building was converted into "two or more separate and self-contained flats or tenements." The building had been rated as one and then two separate ratings were made after the tenancy was created. According to the definition in the London County Council General Powers Act the original alterations united the two houses.

The Court dismissed the appeal with costs.

Mr. Justice Sankey, said he had come to the conclusion that so far as the facts were concerned the judge had come to the correct determination. There was evidence upon which he could conclude, as he did, that the two houses had not, so to speak, been merged into one, but remained two houses. With regard to the point of law respecting the London County Council General Powers Act he could not help thinking that it was always dangerous to transfer without any consideration the definition in one Act to explain the words in another. It was his view that the definition in question did not apply in a general way to the Rent Restrictions Act.

Mr. Justice Salter concurred.

Question of an Improvement

Smith and others v. *Burrows and others.*

June 21. King's Bench Division. Before Mr. Justice McCardie.

In this case the plaintiffs sued the defendants as executors of the late Walter Burrows, deceased, for possession of certain land, factory, and workshops known as 45 Church Street, Deptford, let under lease in 1902 to Walter Burrows, and for damages for alleged breach of a covenant. Defendants set up a counterclaim for relief.

Mr. W. Williams appeared for plaintiffs, and Mr. R. Peel for defendants.

The breach alleged against defendants was that they had pulled down an old brick building and erected another building in its place. Defendants said that the substituted building was a much more valuable one than the old building which it replaced.

Mr. Willoughby Williams said his clients objected to having their premises improved without their consent.

His Lordship: You would not object if it were not that you may get the premises out of defendants' hands and l them at a higher figure to someone else.

Mr. Williams said his clients did not find out till aft Mr. Burrows died that a part of the premises had bee pulled down and another building erected there. The property fronted on two streets, and the part which had bee taken down fronted on Reginald Place. The estimate expense of replacing the old building was about £1,000.

His Lordship: I understand a better building has bee put in its place.

Mr. Williams: My instructions are that an iron roof ha been put there which covers the machinery. That is wha defendants call an improvement. Even if it were a improvement I say my clients are entitled to have wha was let by the lease.

Mr. Peel said he could call evidence that the new buildin was three times the value of the old. For rating purpose the old building was valued at £195 and the new at £592.

His Lordship (addressing Mr. Williams) said: You hav an indirect object in this action. The real position i whether you can get defendants in such a position as t compel them to pay a higher rent. I suggest that yo should have a talk with your opponent.

The parties being unable to agree Mr. Williams contende that relief ought not to be granted except on terms tha they should reinstate the property in its original state.

Mr. Geo. James Smith, one of the plaintiffs, said th brick building which had been pulled down was used as linoleum factory and it had been replaced by a mere iro roof with open sides covering sawmill machinery.

His Lordship again suggested a settlement on the basi that plaintiffs should be compensated for any diminutio in capital value that might be found to have occurred whe the remaining thirty-two years of the lease had expired the new building to be regarded as a substitution for th old one, and eventually the parties agreed that plaintiff should be paid £100 and costs in satisfaction of thei claim.

Parliamentary Notes

BY OUR SPECIAL REPRESENTATIVE.

Building by Private Enterprise.

Mr. N. Chamberlain, Minister of Health, informed Mr. A Bennett that 14,763 houses had been completed by privat builders since September 30, 1922, and 17,693 were in cours of erection on March 1, 1923.

The Cost of Building.

Replying to Lt.-Commander Astbury, Mr. N. Chamberlai said he understood that the prices of certain building materials had recently been increased. He was not able t state the precise extent by which those increases had reduced the value of the proposed subsidies, but he was advised that it was negligible. The committee which had been appointed was inquiring into the whole matter, and would also deal with the question as to whether those advances in prices were due to the concerted action of any persons or firms desirous of taking undue advantage of the present circumstances.

State-aided Housing.

Answering Mr. Gilbert, Mr. N. Chamberlain said that during 1920, 1921, and 1922, the number of houses completed in England and Wales under State-aided housing schemes was 15,700, 86,669, and 88,976 respectively. On June 1, 8,019 houses were in course of construction under the State-assisted scheme.

The Housing Bill.

During the debate on the second reading of the Housing Bill in the House of Lords, Lord Dawson of Penn urged the Government to give a generous trial to the garden suburb proposals contained in the second part of the Bill.

Nothing could be more productive of permanent good than the extension of town planning and of garden suburbs.

Lord Salisbury, who spoke on behalf of the Government, threw out the hint that next year there might be introduced a Bill to consolidate the various Housing Acts.

The second reading was agreed to.

The Price of Building Materials.

At question time Lord Wolmer, Parliamentary Secretary to the Board of Trade, informed Captain W. Benn that he understood an interim report would be issued almost immediately by the committee which was investigating the price of building materials.

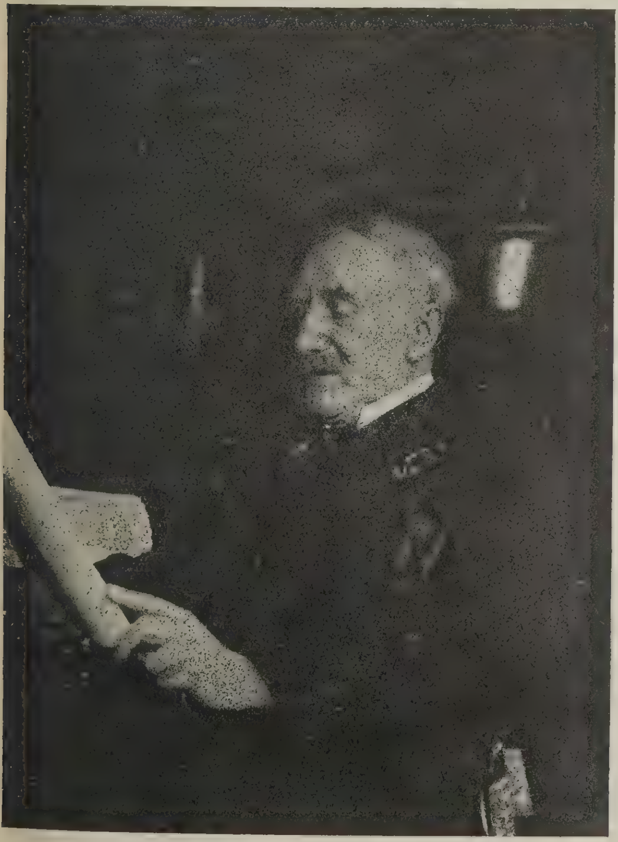
Housing Progress.

Lord E. Percy stated that the number of houses approved to date which would rank for assistance under the new Housing Bill was 13,401.

The late Mr. J. H. Morton, F.R.I.B.A.

As briefly announced in our last issue the death occurred on June 28 of Mr. Joseph Hall Morton, F.R.I.B.A., of Dinsdale House, Westoe Village, South Shields, at the age of seventy-three. He had offices in South Shields and in Westgate Road, Newcastle, and since 1900 his son, Mr. R. H. Morton, had been in partnership with him. He obtained his earlier training with the late Matthew Thompson, F.R.I.B.A., of Newcastle. He had occupied the presidential chair of the Northern Architectural Association, and in the course of his career had designed poor law institutions and infirmaries in various parts of the country, including South Shields, Gateshead, Leeds, Bradford, York, Doncaster, Hartlepool, Hexham, Burton-upon-Trent, and Stamford. The South Shields building was the first built upon the "Pavilion system" in the country and the remainder followed upon these lines.

The beautiful outline of many local parish churches is due to his skill, particularly those of St. Aidan's, South Shields, St. Jude's, South Shields, St. Aidan's, West Hartlepool, and St. Aidan's, Herrington, Sunderland; and in addition he planned a colony for the feeble-minded at Prudhoe to house about 2,000 patients.


THE LATE MR. J. H. MORTON, F.R.I.B.A.

In various parts of the country, hotels, theatres, public offices, scholastic establishments, banks, infectious hospitals, baths and washhouses bear the mark of his craftsmanship, and throughout Northumberland and Durham he took quite a prominent part in the preparation of housing schemes for the various councils.

Mr. Morton was a Freemason and was the designer of many notable buildings of the craft in the neighbourhood. He was a member of the St. Hilda Lodge, South Shields, and was a Past Provincial Grand Superintendent of Works (Durham).

Mr. Morton had the honour of sending designs for workhouses and infirmaries to the Russian Government in the time of the late Tzarina, who was interested in this class of building. He was also asked by the Government to send similar designs to the Government of Venezuela. His design for the Stamford Infirmary formed part of the exhibit of the Local Government Board at the last Paris Exhibition and was awarded "Hors concours."

He leaves an upgrown family of two sons and three daughters, his wife having pre-deceased him thirteen years ago.

The British Confederation of Arts

Mr. Malcolm Thomson, in delivering an address at the Conference of Arts, held by the British Confederation of Arts at University College, London, said that there were so many attempts to-day to found new societies, some of them ephemeral, some abortive, that one might feel excusable suspicion of the proposal to form a British Confederation of Arts. One had at least the right to demand that its advocates demonstrate: (*a*) That there was a real widespread desire for some such body; (*b*) that there were definite services it could render; and (*c*) that the character of organization proposed was well adapted to meet the felt need and discharge the desired functions.

He said that the movement to associate the intellectual and cultural workers in this and other countries rested on a genuine urge, felt half-consciously throughout the civilized world. This was partly a natural growth of civilization in its higher levels, and partly an outcome of the proved weakness and bankruptcy of the old order expressed in the war. Modern developments had rapidly and vastly increased the size of human communities that could live in close interdependence, but the main motive of human activity—that of GET MUCH, the purely economic incentive, which had come down from the cave-man and primitive life—proved inadequate to order these immense communities, and led to annihilating war and intense economic and class conflict.

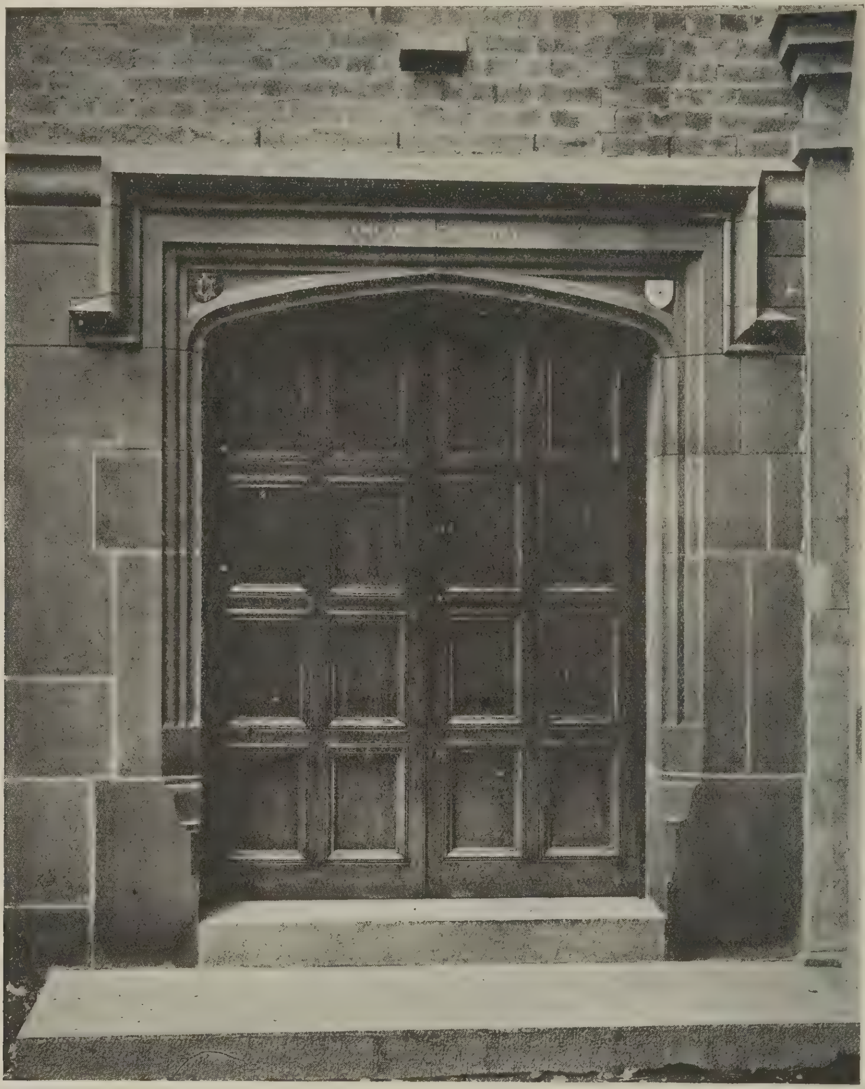
The way out, if there was one, must lie in the hands of the most highly trained sections of society—the men of brains and imagination, the artists and intellectual workers. These already had in their work another incentive, that of DO WELL—the sense of craftsmanship and of service. That it was which prompted painter and poet, teacher and doctor. With them quality of work was a motive that modified the desire for quantity of gain. The students at the universities throughout Europe had already felt this urge to organize themselves for playing their part in the reconstruction of society.

The functions of the proposed Confederation would be fourfold: (*a*) Economic defence of artists and brain-workers; (*b*) raising the standard of craftsmanship; (*c*) enabling the thought and imagination of cultural workers to exert its rightful influence in national affairs; and (*d*) international fellowship and co-operation with the intellectual and artistic workers throughout the world. The world was tired of muddle. Ought not its men of thought and imagination to unite and guide it to a New Age?

New Buildings for Sydney University

LESLIE WILKINSON, F.R.I.B.A., Architect

SOON after the establishment of the Chair of Organic Chemistry at Sydney University a building was erected in 1915–16 to form part of a large new science group to accommodate the Departments of Chemistry and Physics. This, the northern block shown on the plan, is a two-storied building, 63 ft. long by 42 ft. wide. It contains a research laboratory, private rooms, stores, etc., on the ground floor, and a large advanced laboratory above.



THE DEPARTMENT OF ORGANIC CHEMISTRY, UNIVERSITY OF SYDNEY: WEST ENTRANCE. (NO. I ON PLAN.)

On the adoption by the Senate, in 1920, of a general plan of development for the University buildings and grounds, it was decided to erect the future new buildings for the various Departments of Chemistry and the Department of Physics on sites to the south of the Central Medical School. As, however, additional accommodation for organic chemistry was needed at once, the rooms here illustrated have been built and equipped for use until the larger buildings of the Chemical Institute are ready. These temporary quarters will then be used by other faculties in whose area they are situated.

The new accommodation, as shown on the plans, consists of an addition to the west end of the older block, and the provision of a detached block to the south. This south block is 100 ft. long by 50 ft. wide, and is approached across a small court. Owing to the high level of the ground floor of the older building it was found possible to form a cool basement to contain the storage rooms and accommodation for attendants. Above this there are three stories devoted to rooms for research and a small lecture room, etc. The detached block contains the large lecture theatre, to seat 300, preparation room, private rooms, and technical laboratory, and above the latter are a large elementary laboratory, with sixty places, and a service room.

The buildings have been designed to conform with the existing work. The south front of the isolated block i
stone, and will eventually form
flanking wall of the great stair lea
down from the main quadrangle.
remainder of the walls are of ba
brickwork; the windows are stone
lioned, with steel casements and le
lights; the floors are of fire-resis
material, and the roof is of timber.

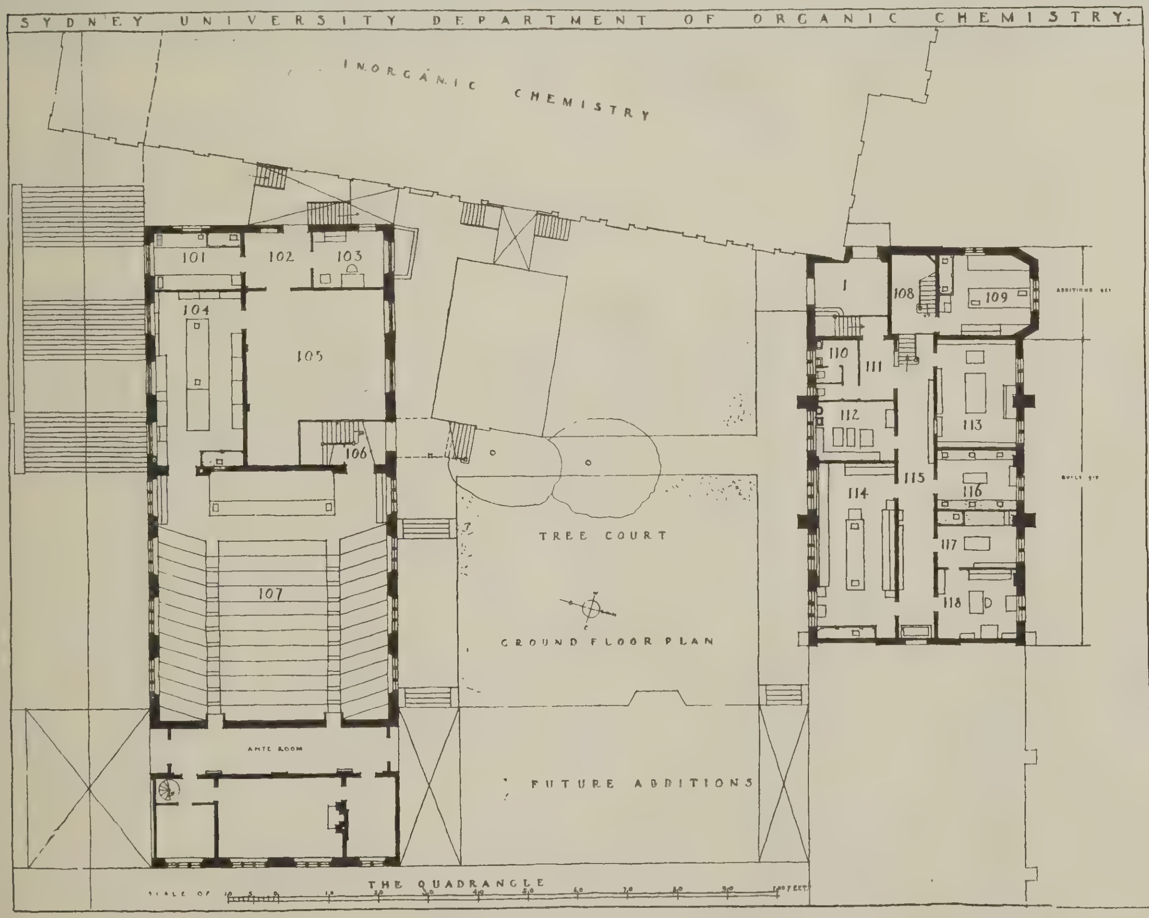
In planning the lecture theatre ad
tage was taken of the natural fall in
ground of nearly 20 ft., with the re
that an exceptionally airy room con
niently approached from the upper
the lower levels has been obtained.
system of natural ventilation is employ
heating is unnecessary in this clim
The room can be readily darkened
lantern work. The ceiling, of redwood
fibre-board, is painted a rich cl
colour, and the brick walls are washe
stone colour. The seating is of cl
Jarrah on special castings, adjustable
the varying heights of the risers of

SOUTH EXTERIOR OF NEW BLOCK. (No. 202 ON PLAN.)

stepped floor, and the seats tip up to facilitate cleaning. Acoustically the theatre is quite successful.

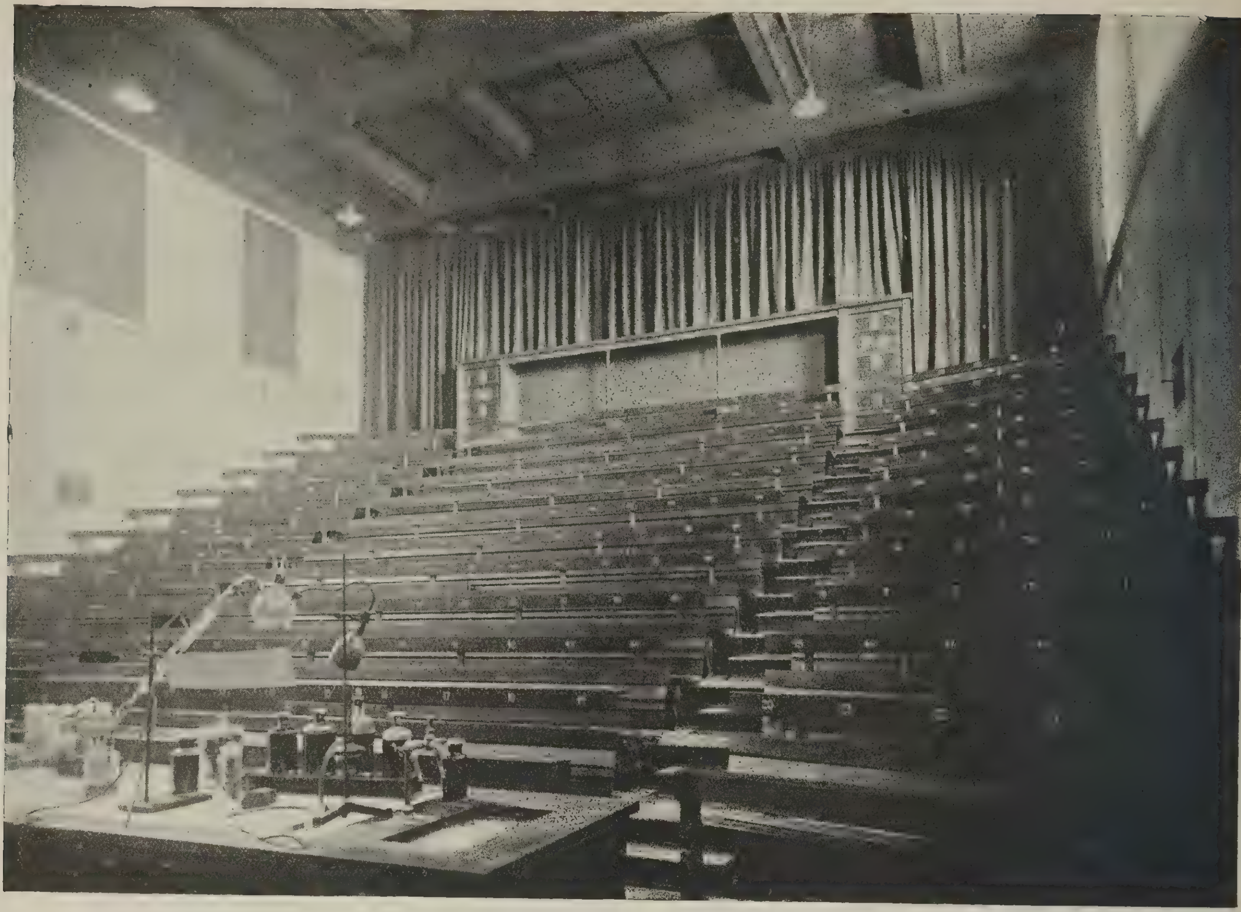
The laboratory fittings are generally of Queensland maple, wax finished. The standards for the bottle racks on the island benches are constructed with galvanized iron castings which permit of an unobstructed view through the laboratory. For the usual small individual sinks continuous narrow central troughs have been substituted, and over these troughs, which are lead-lined, runs a horizontal water-pipe, carrying numerous taps. Large wash-up sinks (fireclay enamelled laundry-tubs) and ample draining racks are provided against the side walls. The fittings include two large fume-chambers, a rostrum, and blackboards, water still, and an open-air working balcony with gas, water, and drainage. The ventilation is by exhaust fans, with gas-jets as a stand-by.

The design of the buildings and fittings is the result of close co-operation between Professor Read, Head of the Department of Organic Chemistry, and Professor Wilkinson. The general contractor was Mr. J. G. Taylor, and the fittings were carried out by Messrs. Jones and Pike.

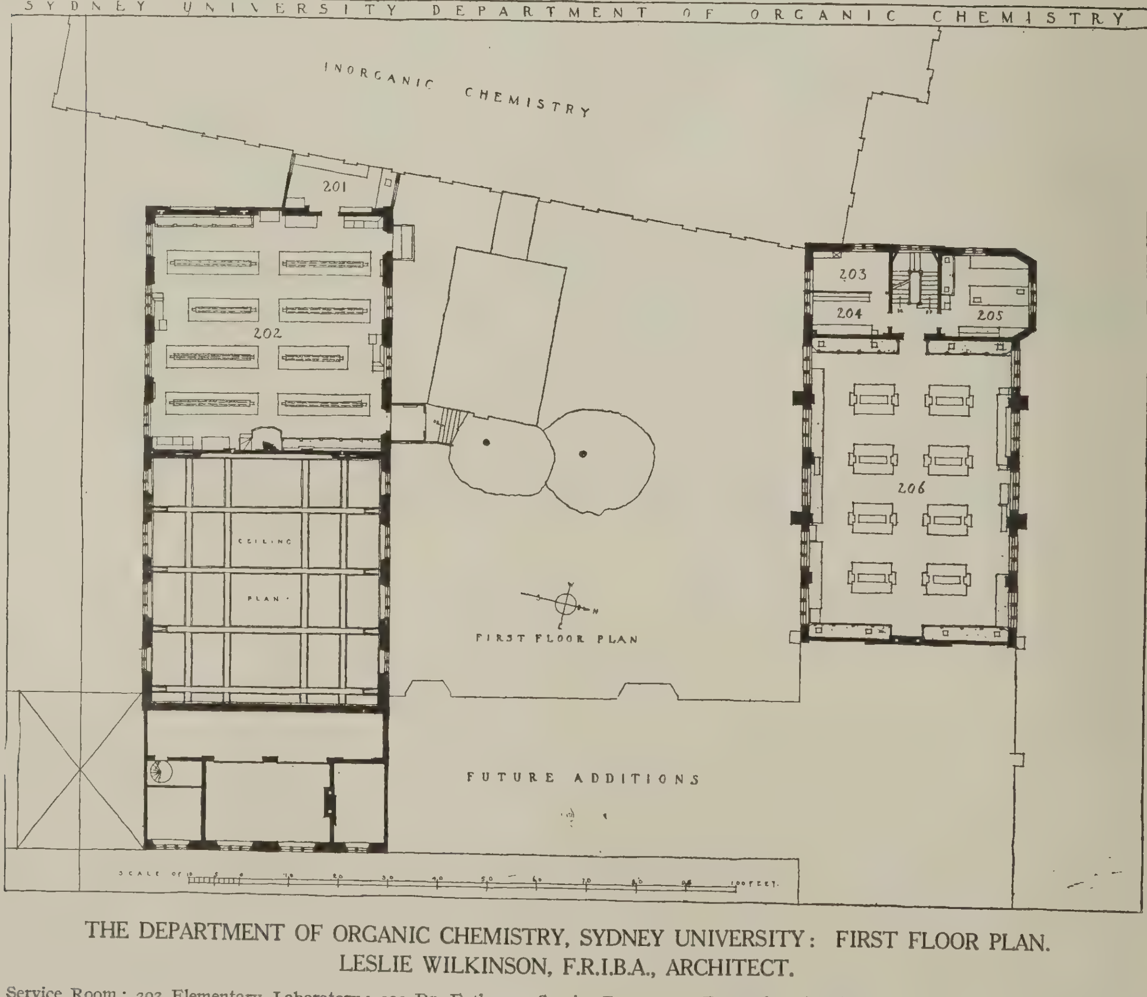


THE DEPARTMENT OF ORGANIC CHEMISTRY, SYDNEY UNIVERSITY: GROUND FLOOR PLAN. LESLIE WILKINSON, F.R.I.B.A., ARCHITECT.

101 Research Laboratory No. 4; 102 Lobby; 103 Dr. Harker; 104 Preparation Room; 105 Technical Laboratory; 106 Exit Stairs; 107 Lecture Theatre; 108 Stairs; 109 Research Laboratory No. 2; 110 Lavatory; 111 Lobby; 112 Polarimeter Room; 113 Office and Fine Chemicals; 114 Research Laboratory No. 1; 115 Corridor; 116 Balance Room; 117 Ante-Room; 118 Professor Read



LECTURE THEATRE, SEATING 300. (NO. 107 ON PLAN.)


SYDNEY UNIVERSITY DEPARTMENT OF ORGANIC CHEMISTRY
INORGANIC CHEMISTRY
201
202
203
204
205
206
CEILING PLAN
FIRST FLOOR PLAN
FUTURE ADDITIONS
SCALE OF 10 5 0 10 20 30 40 50 60 70 80 100 FEET

THE DEPARTMENT OF ORGANIC CHEMISTRY, SYDNEY UNIVERSITY: FIRST FLOOR PLAN.
LESLIE WILKINSON, F.R.I.B.A., ARCHITECT.

201 Service Room; 202 Elementary Laboratory; 203 Dr. Earl; 204 Service Room; 205 Research Laboratory No. 3; 206 Advanced Laboratory.

Timber Measuring.—II

By Professor HENRY ADAMS, F.S.Arc., Etc.

WHEN growing timber has much taper the ordinary method of measuring does not give the true con-ts, but the custom is established and the ce has been made to fit, and it is inter-ing to compare the figures. For pur-ses of comparison assume the frustum a cone 20 ft. long having 26 in. quarter t at one end and 6 in. quarter girt at other. Then by the ordinary method

$$\frac{\text{girt in. middle}^2 \times \text{length ft.}}{144} = 35{\cdot}5 \text{ cub. ft.}$$

formula for frustum of cone and also prismoidal formula $\frac{1}{3}h\,(\mathrm{A}+a+\sqrt{\mathrm{A}a})=$ 2 cub. ft., or over 44 per cent. more an by the common method. By girting shorter lengths the error is reduced t not eliminated. If the girt be taken $\frac{2}{5}$ of the height the result will be proximately correct, in this case = cub. ft. The thickness of bark is herwise allowed for as previously plained.

Ornamental trees are measured as other ees, but they are valued by some sur-yors at half price, and by others at full ice, or at special prices, although they ay not be cut down even by a tenant r life "without impeachment of waste."

The following is a sample of the entries a book of the measurement of stand-g timber.

o.	Description.	Length.	¼ Girth.	Contents ft.	Price per ft.		Value of tree.		
					s.	d.	£	s.	d.
1	Oak	25	17	50	2	6	6	5	0
2	Elm	40	25	·170	1	0	8	10	0
3	Ash	15	14	20	1	9	1	15	0

The following pre-war prices for stand-g timber are useful for comparison :

Oak in lengths under 10 ft., 80s. to 100s. per load; 10 ft. and under 20 ft., 100s. to 115s. per load; 20 ft. and under 30 ft., 115s. to 130s. per load; 30 ft. and upwards, 130s. to 150s. per load.

Elm under 20 ft., 6d. to 8d. per cub. ft.; 20 ft. to 40 ft., 9d. to 1s. per cub. ft.; 40 ft. and upwards, 1s. to 1s. 9d. per cub. ft.

Ash, 1s. 3d. to 2s. 6d. per cub. ft.
Beech, 8d. to 1s. per cub. ft.
Cedar, 2s. per cub. ft.
Scotch fir, 4d. to 8d. per cub. ft.
Walnut, 2s. to 3s. per cub. ft.

When timber is felled and trimmed it is worth about 10 per cent. more than when standing.

To get the sale contents of a tree by slide rule, set 144 on A to length in feet on B, and against quarter girt on D find the cubic feet contents on C, but when D scale commences at 4, divide the gauge point 144 by 16, making 9 on A. Example : quarter girt, 18 in.; length, 16 ft. Set 144 on A to 16 on B, and against 18 on D we have 36 on C. Or when D commences with 4, set 9 on A to 16 on B, and against 18 on D we have 36 on C. For measuring squared timber, scantling, or boards by means of a slide rule, to obtain true contents, set 12 on B to width in inches on A, and against the length in feet on B will be the area in square feet on A. Then set 12 on B to the area on A, and against the thickness in inches on B will be the contents in cubic feet on A. Example : 22 ft. of 9 by 3. Set 12 on B to 9 on A, and at 22 on B will be 16½ on A, equal 16½ ft. super. Then set 12 on B to 16½ on A, and at 3 on B will be 4.1 on A, equal $4\frac{1}{10}$ cub. ft. The slide rule is a logarithmic scale. The lines A, B, and C are known as "double lines," being all divided identically; and line D having divisions twice the size, is known as the girt line. It requires some little practice to be sure of the results, but by making a selection of examples and working them out arithmetically, a check can be had upon the work of the slide rule. Lines A, B, and C are marked from 1 to 10 twice over. The first point may be taken as 1, 10, or 100, the second 1 will then be 10, 100, or 1,000, and the intermediate divisions will vary accordingly.

Fig. 5 shows the contents or "Quantity Marks" on timber called also "Race Marks."

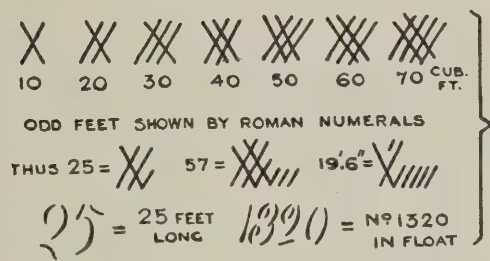

10 20 30 40 50 60 70 CUB. FT.
ODD FEET SHOWN BY ROMAN NUMERALS
THUS 25 =
57 =
19'6" =
= 25 FEET LONG
= Nº 1320 IN FLOAT

FIG. 5

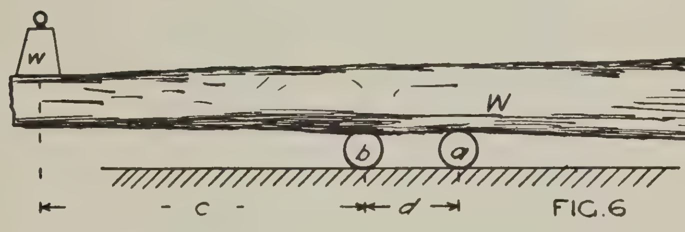


FIG. 6

It is useful to know the weight of a log of timber. The common rule is 40 cub. ft. of rough or 50 cub. ft. of hewn timber make one load of one ton. For railway purposes, pitchpine, pine, spruce, and Baltic fir timber are reckoned as weighing 50 cub. ft. to the ton; birch, oak, ash, elm, and some other hard woods are reckoned as weighing 40 cub. ft. to the ton; mahogany is generally carried at 480 ft. super of 1 in. × 12 in. to the ton.

The actual weight of a rough log may be ascertained by the method shown in Fig. 6, requiring only a 1-cwt. weight and a hard wood roller. Balance log at a to find centre of gravity, add weight w to small end, and balance at b,

$$\text{then } w \times c = \mathrm{W} \times d\,;\ \therefore \mathrm{W} = w \times \frac{c}{d}$$

The centre distances will require to be carefully measured. For example, let $c=12$ ft. 3 in.$=147$ in., $d=1$ ft. 2 in. $= 14$ in., $w=1$ cwt. Then $\mathrm{W}=1\times\frac{147}{14} = 10{\cdot}5$ $=10\frac{1}{2}$ cwt., weight of log.

Rough planks, boards, etc. (except hard woods), are always reckoned as weighing 50 cwt. per standard, and when planed 42 cwt. per standard.

(To be continued.)

[The previous article in this series appeared in our issue for May 30.]

Liverpool University School of Architecture

Appended are the results of the annual examinations and the prizes and scholarships award of the Liverpool University School of Architecture. Fourteen students passed the Degree of B.Arch. at the end of their fifth year, and six the equivalent Diploma in Architecture for non-matriculated students. These twenty students are *ipso facto* exempted from the Final Examination of the R.I.B.A. except for the passing of a special paper in professional practice. As was the case last year, a number of them however have already obtained their A.R.I.B.A.'s through the War Final. Among the students who obtained their diplomas at the end of the fifth year is a lady, Miss Musker. She is the second lady student in England to qualify in this way, the first being an A.A. student—Miss Cooke, who qualified last year. The third year students who obtained the Certificate in Architecture are exempted from the Intermediate examination of the R.I.B.A.

FACULTY OF ARTS.
DEGREE OF B.ARCH.
Fifth Examination.
Exempting from Final Examination, R.I.B.A.
Honours in Architectural Design.
Class I.

Brooke, D.
Edwards, W. B.
Fry, E. M.
Knight, C. R.
Mahon, S. E.
Owen, G. L.
Williams, E.

Class II.

Higham, E. H. H.

Honours in Architectural Construction.
Class I.

Hutton, C. H.
John, L.

Class II.

Billimoria, H. F.
Raafat, M.
Vallis, R. W. H.

Ordinary.

Pritchard, H. W.

Fourth Examination.
Honours in Architectural Design.

Bloodworth, C. T.
Bridgwater, D. L.
Fry, E. M.
Howitt, L. C.
Knight, C. R.
Owen, J. H. L.

Honours in Architectural Construction.

Donaldson, R. W.
Gabr, A. L.
Turner, R. H.
Vallis, R. W. H.

Ordinary.

Ashburner, E. H.
Jenkins, W. V.
Miller, G. H.

Third Examination.
Exempting from Intermediate Examination R.I.B.A.

Astbury, F. N.
Barton, H. L.
Minoprio, C. A.
Peters, H. A.
Phillips, H. G.
Shaw, C. C.
Wills, T. T.

Second Examination.

Aspland, A.
Dewsnup, Sarah, J.
Dunphy, Norah.
Spencely, H. G. C.

First Examination.

Davies, E. F.
Heal, R. G.
Hutchinson, May.
Mackenzie, K. R.
Ridge, G. A.
Vaughan, Olwen.

Hon. University Scholarship.—Williams, Edwin (winner of Rome Jarvis Scholarship).

Holt Travelling Scholarship (Third Year) £50.—Astbury, Francis Nicholas; Thearle, Herbert.

Special Award of £20.—Silcock, Frances Thelma.

Honan Travelling Scholarship (given by Liverpool Architectural Society), value £50.—Velarde, Francis Xavier.

Henry Jarvis Travelling Scholarship.—Williams, Edwin; Edwards, Wilfred Bythell.

The Lever Prize in Architecture.—First Prize: Astbury, Francis Nicholas. Second Prize: Silcock, Frances Thelma.

The Lever Prize in Civic Design.—First Prize: Townsend, Arthur Cecil. Second Prize: Knight, Cyril Roy.

The John Rankin Prizes for Sketch Designs, £12 each.—Fifth Year: Owen, G. L. Fourth Year: Bridgwater, D. L.; Velarde, F. X.

FACULTY OF ARTS.
DIPLOMA IN ARCHITECTURE.
Fifth Examination.
Exempting from Final Examination, R.I.B.A.
Distinction in Architectural Construction.

Jones, R. H.

Ordinary.

Hirst, H.
Musker, Doris.
Townsend, A. C.
Woolley, E. G.

Fourth Examination.
Distinction in Architectural Design.

Velarde, F. X.

Third Examination.
Exempting from Intermediate Examination, R.I.B.A.

Cowley, A. D. R.
Crossley, F. H.
Dixon, Doris E.
Evans, H. B.
Fox, H. L.
Hereward, G. E. S.
Silcock, Frances T.
Thearle, H.
Wall, Maud A. M.
Wilkinson, Sheelah A.

Second Examination.

Alderson, W. R.
Butling, G. A.
Heald, J.
Isherwood, J. H.
Todd, A. C.
Zwinger, L. G.

First Examination.

Chahriman, V. S.
Cotton, A. C.
Dobie, W. H. S.
Hall, D.
Lewis, O. G.
MacGillivray, I. D.
Maxwell, J. B.
Metcalfe, J. G.
Mocatta, Marjorie M.
Stout, H. B.
Sumner, B. A.

CERTIFICATE IN ARCHITECTURAL DESIGN.

England, N. R.
Mansergh, B. G. L.

CERTIFICATE IN ARCHITECTURE.

Astbury, F. N.
Barton, H. L.
Cowley, A. D. R.
Crossley, F. H.
Dixon, Doris E.
Evans, H. B.
Fox, H. L.
Hereward, G. E. S.
Minoprio, C. A.
Peters, H. A.
Phillips, H. G.
Shaw, C. C.
Silcock, Frances T.
Thearle, H.
Wall, Maud A. M.
Wilkinson, Sheelah A.
Wills, T. T.

The Holland and Hannen and Cubitt's Prizes for Working Drawings.—First Prize (£15): Hutton, C. H. Second Prize (£10): John, L. D.

Rome Finalists, 1923.—Fry, E. M., Higham, E. H. H., Knight, C. R., Owen, G. L., Williams, E.

The Henry Jarvis Student.

Below we publish a portrait of Mr. Edwin Williams, A.R.I.B.A., B.Arch., the winner of the Henry Jarvis Studentship. He is a fifth-year student at the Liverpool School of Architecture, and, as announced in another part of this issue, has just obtained the degree of B.Arch. He served for three years at the front in the 6th Liverpool Rifles, and during his career at the Liverpool School of Architecture has obtained the Lever prize in architecture, the Lever prize in civic design, and a Henry Jarvis travelling studentship. With the latter he has worked during his long vacations of the past three years in Paris, Brussels and Berlin. In Paris he worked in the atelier of M. Jaussely, patron in the Ecole des Beaux Arts. The winning designs of the Rome Scholarship and the Henry Jarvis Studentship were illustrated in our last issue.

MR. EDWIN WILLIAMS, A.R.I.B.A.

The Bartlett School of Architecture

Following is the prize list for session 1922–23 of the University of London College Bartlett School of Architecture :—

Donaldson Silver Medal : O. M. Welsh.
Herbert Batsford Prize (First Year) : H. Kendall.
Andrew Taylor Prizes :—
  (*a*) Second Year Building Construction : E. Forster.
  (*b*) Third Year Studio Work : G. L. L. Morgan.
Ronald Jones Prizes :—
  (*a*) Mediæval Architecture : Leonora F. M. Payne.
  (*b*) Renaissance Architecture : F. S. Bardell.
Lever Prizes in Architecture :—
  First Prize, £15 : Barbara Pouschkine.
  Second Prize, £10 : E. Burckhardt, M. A. Sisson.
Lever Prizes in Town Planning :—
  First Prize, £15 : H. S. Triscott.
  Second Prize, £10 : L. M. Austen, J. R. M. Simpson.
First Class Certificate in Architecture : Helen M. Benham.

Building Costs

The Inter-Departmental Comm
appointed by the Ministry of Healt
survey the prices of building mate
have issued their interim report. Al
concurrently with the appointmen
the committee, the National Light (
ings Association announced an inc
of 10 per cent. in the prices of ce
goods used in house building.
prolonged negotiation, a new and red
scale of prices took effect on Februa
of this year. "We reserve our judgme
the committee state, "as to the bas
this February scale, and express
opinion in regard to it, because we
still waiting for certain information
more detailed investigation may be n
sary. But there is one observation w
may be usefully made at once. I
happened that almost simultaneo
with the announcement of the Febr
prices, the cost of pig iron, the
material of light castings, began to
In January the price of No. 3 Cleve
was 92s. per ton, in February 105s.,
in April, when the peak was reache
was 127s. 6d. Then, on May 1,
Association made an increase of 10
cent. on the February prices of cer
lines of goods. It was, of course, note
the time that these were the very g
used in building small houses, but we
on record the statement made to u
the Association that this had not
to do with the announcement in M
that the Government were about
give further subsidies for the erectio
such houses.

"The representatives of the Ass
tion agreed with us in Glasgow that w
the effect of the Ruhr occupation
prices passed away, the recent incr
ought to be reconsidered. The outp
pig iron in this country has been gre
augmented in the last few weeks,
the price of No. 3 Cleveland has alr
fallen to 115s. a ton. Except in the
of coke, we are not aware that any of
other costs either of manufacture or
tribution have increased since Febru
wages have been stationary and rail
rates and national and local taxa
have tended downwards. It seems t
therefore, that by their own showi
reconsideration by the Association of
May increase is almost due."

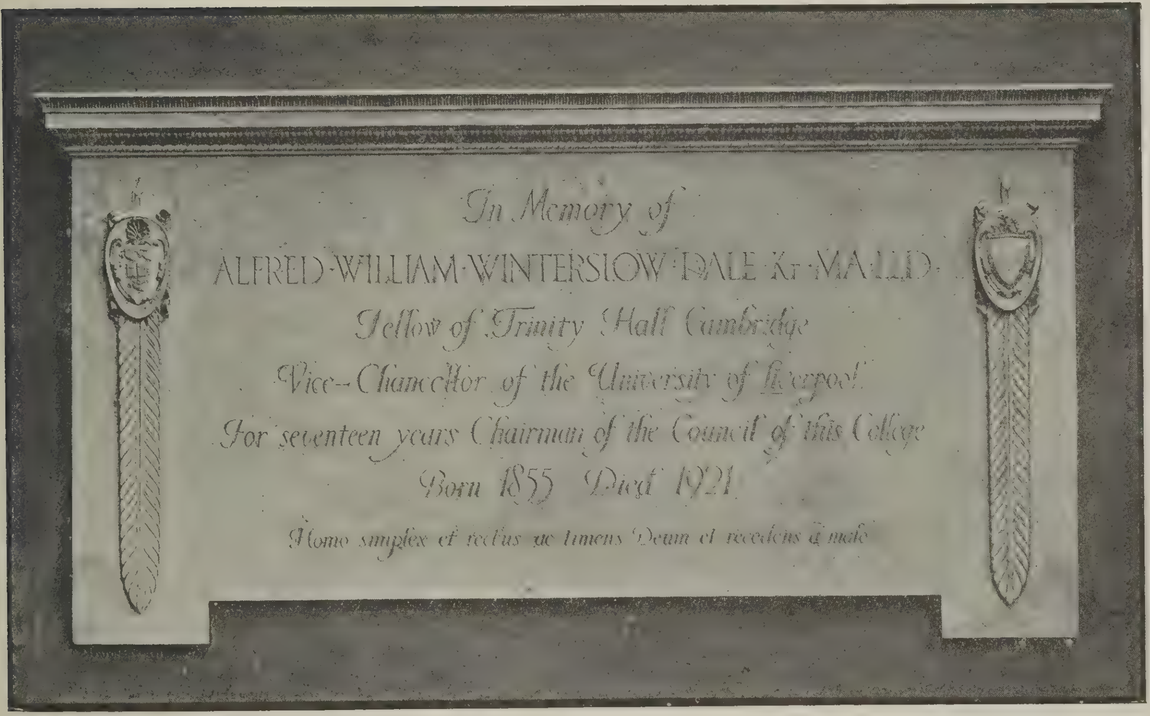
The report also deals with the ques
of bricks, which the committee stat
engaging their attention. "We
received certain specific complaints
increase in price, of which the
important refers to South Lond
proceeds the report. "These we are
vestigating. The prices tabulated in
schedule to this report indicate no gen
rise of price in the country as betw
April and June.

"There are, however, certain feature
the brick position to which we call at
tion. There has been a rapidly increa
demand in London and the south-
during the last few months, and there
also been a considerable increase in
duction. So far as our information g
it would not appear that costs of
duction and distribution have materi
increased of late. Coal has increase
price, but railway freights have
reduced, and also taxation both nati
and, on the average, local. Moreo
fixed charges can now be spread ov
larger turnover."

Wednesday, July 18, 1923. Vol. LVIII. No. 1489.

THE ARCHITECTS' JOURNAL & Architectural Engineer

With which is incorporated "The Builders' Journal."


In Memory of
ALFRED·WILLIAM·WINTERSLOW·DALE·Kt·M.A.·LL.D.
Fellow of Trinity Hall Cambridge
Vice-Chancellor of the University of Liverpool
For seventeen years Chairman of the Council of this College
Born 1855 Died 1921
Homo simplex et rectus ac timens Deum et recedens a malo

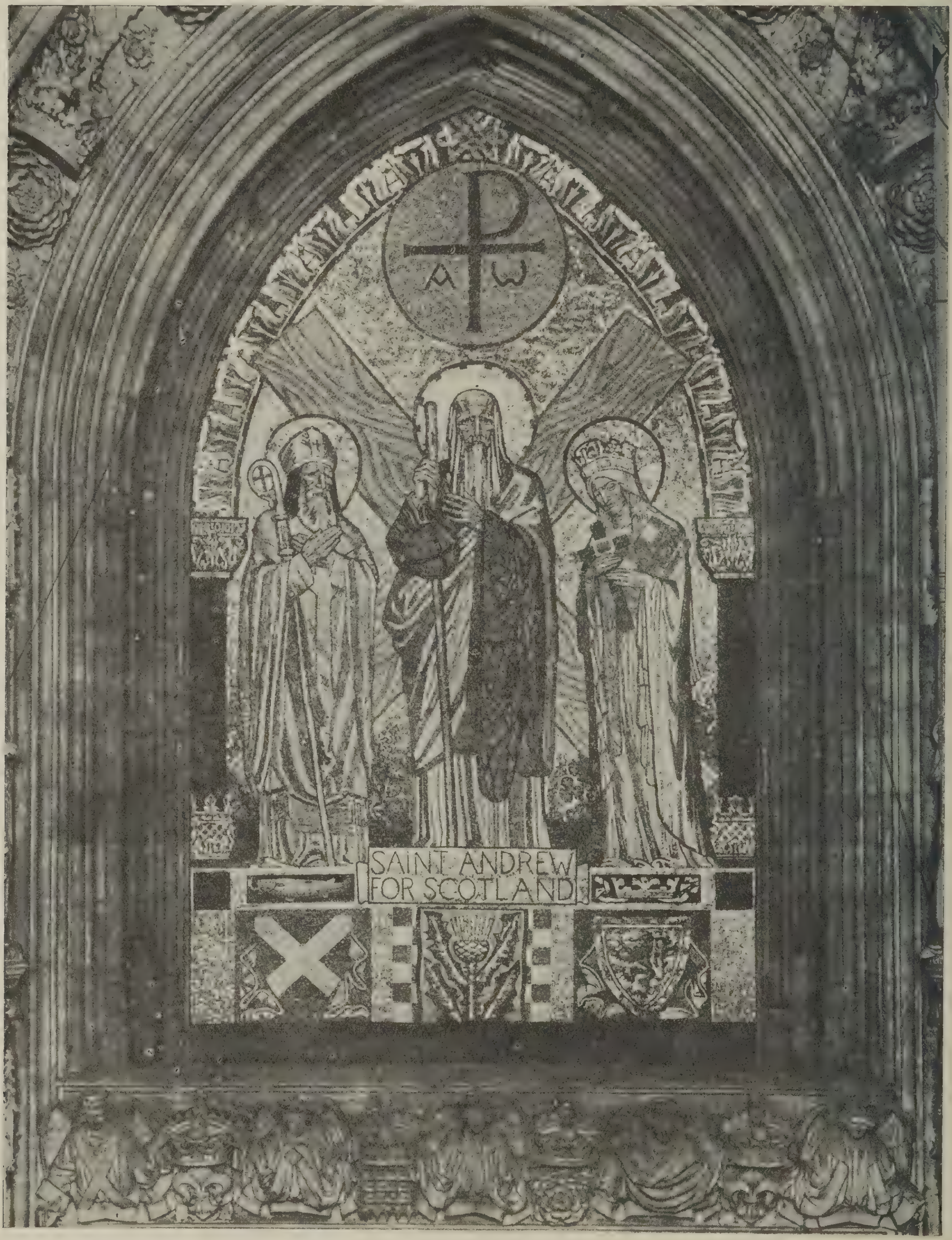
MONUMENT ERECTED IN MANSFIELD COLLEGE CHAPEL, OXFORD.
LIONEL B. BUDDEN, M.A., A.R.I.B.A., ARCHITECT. G. H. TYSON SMITH, SCULPTOR.

The tablet is of cream Echaillon marble mounted on a slab of green Westmorland slate. The lettering and enrichments are picked out in gilt.

27-29 Tothill Street, Westminster, S.W.1.

Mosaic in the Lobby of the House of Commons

Designed by R. Anning Bell, R.A.



This mosaic, erected in the Lobby of the House of Commons, is of "St. Andrew for Scotland." It is a glass mosaic, worked from the front on the scaffold from the artist's cartoon by Miss Gertrude Martin and her sister and other assistants. The figures are St. Andrew in the centre with St. Margaret and St. Mungo beside him. Above the figures of the saints is a circle containing the Chi Reo.

THE
ARCHITECTS' JOURNAL
27-29 Tothill Street, Westminster, S.W.1.

Vednesday, July 18, 1923 Volume LVIII. No. 1489

Town Architecture

A RETROSPECTIVE view of a period will often show a definite relationship between its architecture and its other predominant artistic activities. Thus the classic formality of the architecture of the Georges has its counterpart in the sedate measures of Pope, just as the Gothic revival progressed side by side with the romantic movement in literature and painting. And posterity will see the present artistic turmoil reflected in the incoherence of contemporary architecture.

Unfortunately, many adherents of a movement work with such intensity and with such a limited vision that the question of fitness—fitness of form to purpose or to environment—is often entirely lost sight of, and thus it is that we find the favoured architectural forms of a period appearing with utter disregard as to place or purpose. The Georgian forms, for example, were supremely urban. In this conscious formality is reflected the intricate ceremonies of a leisured and graceful society, and insomuch as the same social habits were pursued by the upper classes when living in the country the employment of the same architectural forms is perhaps permissible. In this way, even if a suitable relationship between the buildings and their rural surroundings is lacking, there existed an intimacy between them and the formal lives of their occupants, for these never relinquished their essentially urban note. The succeeding period saw a revival of this state of affairs, and an architecture more eminently suitable to rural surroundings crept into our streets, breaking into the placid fronts of terraces and piercing the skyline with a variety of picturesque excrescences.

To-day the same process may be seen at work, and it is as if, with the never ceasing emigration from country to town, the country folk are bringing their architectural forms with them, or, and this would seem on the whole to be a more plausible view, it may be that the townsman, pushed, through lack of space, towards the urban periphery, is determined to make his home savour of the countryside; he must introduce a rural note into his crushingly urban life, and so he surrounds himself with a kind of hybrid rural architecture. The fact remains, however, that certain architectural forms are more suited to town than to country, and there is a danger to-day of this fact being overlooked so that town architecture is losing the distinctly urban note with which it should, of course, be invariably stamped.

It must not be thought that this urbanity is necessarily a matter of style or even of material. Westminster Palace is no less urban than the Central Hall, or the sedate brick-fronted squares of London than their stone- or stucco-fronted neighbours. Although both style and material may be the immediate cause of a distinctly urban or rural effect, actually the effect of urbanity in architecture arises from some more subtle cause. It is the fashion of late to seek analogies between architecture and dress, such analogies, although dangerous in the hands of the inexperienced, have their uses, often succeeding, as they do, in drawing the attention to a hitherto unobserved aspect. Architecture, no less than dress, is largely a matter of habit and convention, and just as we are often at a loss to explain why certain clothes seem definitely suggestive of, and more suitable to, an urban environment, so, too, the more discriminating must know that certain buildings are expressive of the town life. With clothes, as with architecture, the cause is not necessarily one of style or material, although these may be important contributory factors; it is rather in that mysterious quality known to tailors as cut. Architecture, too, has its cut.

One thing that proclaims an urban note is a certain uniformity and reticence. Just as a man on coming into a town is obliged to conform with certain regulations devised for the smooth running of a complex organization, so, too, should the architecture subscribe to a code of good manners. In the country a man, short of insulting and molesting his neighbours, may behave more or less as he likes. If he destroys the amenity of a neighbourhood by erecting an ill-bred building which disfigures the whole surrounding countryside on a hill-top, he may be said to be insulting his neighbours, but if his building be hidden discreetly within his own estate, be it ever so ugly, little can be said beyond the regrets of a wasted opportunity. The town, however, offers no such seclusion for idiosyncrasies. Town architecture must, therefore, be mannerly, and the urbanity of a town's architecture will be a measure of the urbanity of its citizens. Simplicity or grandeur are no measure of urbanity. A university town, a cathedral city, the small capital of an impoverished district, or the metropolis of a mighty empire, will express themselves in distinctive architectural idiom, as distinct, to revert to our analogy, as the academic gown and the flowing surplice, the mayoral badge of office, and the regal splendour of a mighty court. But the distinctive urban quality of the architecture will transcend these differences.

The fault with our towns to-day is two-fold. First, the suburbs are fast losing any kind of urban distinction; they display a confusion of ideas. The street as a unit of composition is being lost sight of; indeed, street architecture, except in the heart of our cities, is rapidly becoming an obsolete art. The second fault is a question of manners. It is generally realized that the standard of good manners in human intercourse is becoming lower. Reticence, deference, and respect are qualities whose rarity is becoming a matter of regret amongst those who were familiar with pleasanter codes. Town architecture reflects this change in ideals. The recognition of the change is the first step towards an improvement, and for this reason we welcome the recent remarks of Professor Reilly at the Manchester Luncheon Club. Manchester is the centre of an urban district which it influences in spheres of thought and action. At present its architecture is no better or worse than most other towns up and down the country. If it takes to heart the words of the Professor it may in time become an example of restrained and orderly town architecture to the whole country.

It may be gathered from what we have said that the improvement that we look for must ultimately come from the citizens themselves. The qualities which go to make a good citizen must be understood and cultivated, and in due course they will be reflected in the town's architecture. Architects can help, at the moment perhaps, in no better way than influencing public opinion towards a nobler conception of the qualities of citizenship, and indicating how the present confusion of thought and spirit of self-assertion are destroying the essential qualities of good town architecture. It is still the fashion to admire the dignified and reticent work of the eighteenth century. Yet it is for the most part these very qualities that are absent from contemporary work. These qualities it is that it should be our endeavour to emulate rather than attempt to imitate the actual forms in which a particular age expressed them, for it is these qualities with which all the best town architecture has always been informed.

The Wren Society

Shortly after the Wren Bi-centenary celebrations, a group of admirers of Wren met at the suggestion of Mr. Mervyn E. Macartney and decided to form a Wren Society. There is real need for such a body for, in spite of his fame, Wren's life and work are still enveloped in a good deal of obscurity that might and should be dispelled. The objects of the society are, in the words of Mr. W. H. Ward, who is acting as honorary secretary, to "hunt out his drawings and other documents—portraits, letters, reports, accounts, and miscellaneous documents . . . and to issue them in published form to subscribers." There is certainly much that could thus be done to improve our knowledge of Wren and his work. His drawings, of which there are many known examples in museums, colleges, Government offices, and in the hands of private individuals, have never been fully catalogued or sifted. Even the invaluable All Souls' Collection has never been reproduced as a whole. Wren must surely have suffered as much as any man so famous could suffer from the lack of reliable biographical data. "Parentalia" itself is by no means impeccable, and Miss Milman's biography is full of errors. Sir Lawrence Weaver, in checking forty-seven of Miss Milman's dates, found forty-five of them wrong, by from one to twenty-five years. Here, then, is work for the society to do. It should enjoy as much success as the Walpole and similar societies, which have shown convincingly what can be done by an enthusiastic body of subscribers. The Earl of Balfour has consented to become president of the society, which has a distinguished list of vice-presidents, including the Earl of Crawford and Balcarres, Viscount Milner, Lord Leverhulme, Sir Aston Webb, Mr. J. Alfred Gotch, and Mr. Paul Waterhouse.

Architects and Advertising

In opening an exhibition of architectural drawings by students of the Liverpool School of Architecture, Lord Leverhulme had a few words to say to architects on advertising. He adapted some familiar lines, as follows :—

Lives of artists all remind us
  That if architects are wise,
They will fling their modesty behind them
  And will boldly advertise.

We are afraid that his lordship is no better skilled in advising architects than he is in adapting poetry. But, of course, he did not mean to be taken literally. That there is a germ of truth in what he said cannot, however, be disputed. (Here we tremble to think of the wrath of our valued but volcanic contributor, Karshish, who has highly explosive views on this particular subject.) For how can an architect improve his practice if his work remains unknown ? Merely by the recommendation of clients, or by chance, which are likely to be slow and unreliable processes. Modesty, even in the case of an architect, may be carried too far. If he is reluctant to help himself he must let others do the helping for him ; and that is really what hap pens. The architectural Press is the best means of makin an architect's work known to the public. If a man wishe to know about cars, antiques, or poultry-farming, h instinctively turns to the journals that are devoted to thos interests. The same principle applies to architecture "Publicity," not "advertising," is the word that Lor Leverhulme would probably have used if he could hav found another to rhyme with it.

Why not a Wren Monument ?

It is odd that there should be no public monument t Wren in the City that owes so much of its beauty to hi architectural genius. True, if we would see his monument we have but to "look around," but there is really littl merit in thus evading our responsibility. And it should no be forgotten that the famous epitaph itself was really subtle rebuke to the clericals who very meanly refused t allow a monument to be erected to Wren in St. Paul's That it should be regarded as a direct command to posterity to refrain from erecting a monument is absurd. If w remain content to "look around" we may one day fin nothing to look upon, especially if the vandalistic designs of the Bishop of London's Committee with regard to the City churches are carried into effect. We cannot regard it as a credit to London that it should contain no monument to its greatest architect. Perhaps the Wren Society may be able to do something towards remedying the omission.

Competitions

"Competitions" is by no means a suitable topic for the hot weather, for it merely generates more heat, withal justifiable heat. Within a few days of one another, however, two competitions have aroused no little controversy—first, the Manchester War Memorial competition, which was abandoned, and then the Bournemouth Pavilion competition. In both cases the awards of the assessor have been called into question, in the first case by the promoters, and in the second by the competitors. Obviously it is impossible for an assessor to please everybody, and unsuccessful competitors must naturally feel a certain amount of chagrin at their failure to draw a prize. But that two competitions should give cause for so much dissatisfaction from directly opposite points of view does seem to suggest a defect in our system of assessment. No reflection is implied upon either assessor ; both are distinguished architects of recognized distinction, taste, and ability. What the critics maintain is that no single assessor can possibly give the close analytical attention to every point of a competition that has possibly attracted a hundred or more designs. The remedy, they assert, is the adoption of the jury system which, it is said, has proved successful in France and the United States. As we observed last week, we doubt whether it could be successfully adapted to the peculiar conditions of this country because it would mean the multiplication of assessment fees (which is offensive to our frugal-minded authorities) and because of its inherent disadvantages. The whole question is ripe for discussion, and we shall welcome the views of our readers upon it.

Monuments on the Embankment

The Victoria Embankment promises to become the memorial roadway of London. Already no other thoroughfare in the Metropolis can boast such an array of monuments as we find on the Thames-side roadway, including, as it does, Boadicea, Cleopatra's Needle, the Belgian monument, the R.A.F. Memorial (unveiled last Monday), and a host of smaller ones in the Embankment gardens and elsewhere along the river front. Bazalgette probably realized that the Embankment would be used for this purpose, for he provided a number of excellent sites for monuments, notably at the various stair-heads, upon one of which the R.A.F. monument is erected.

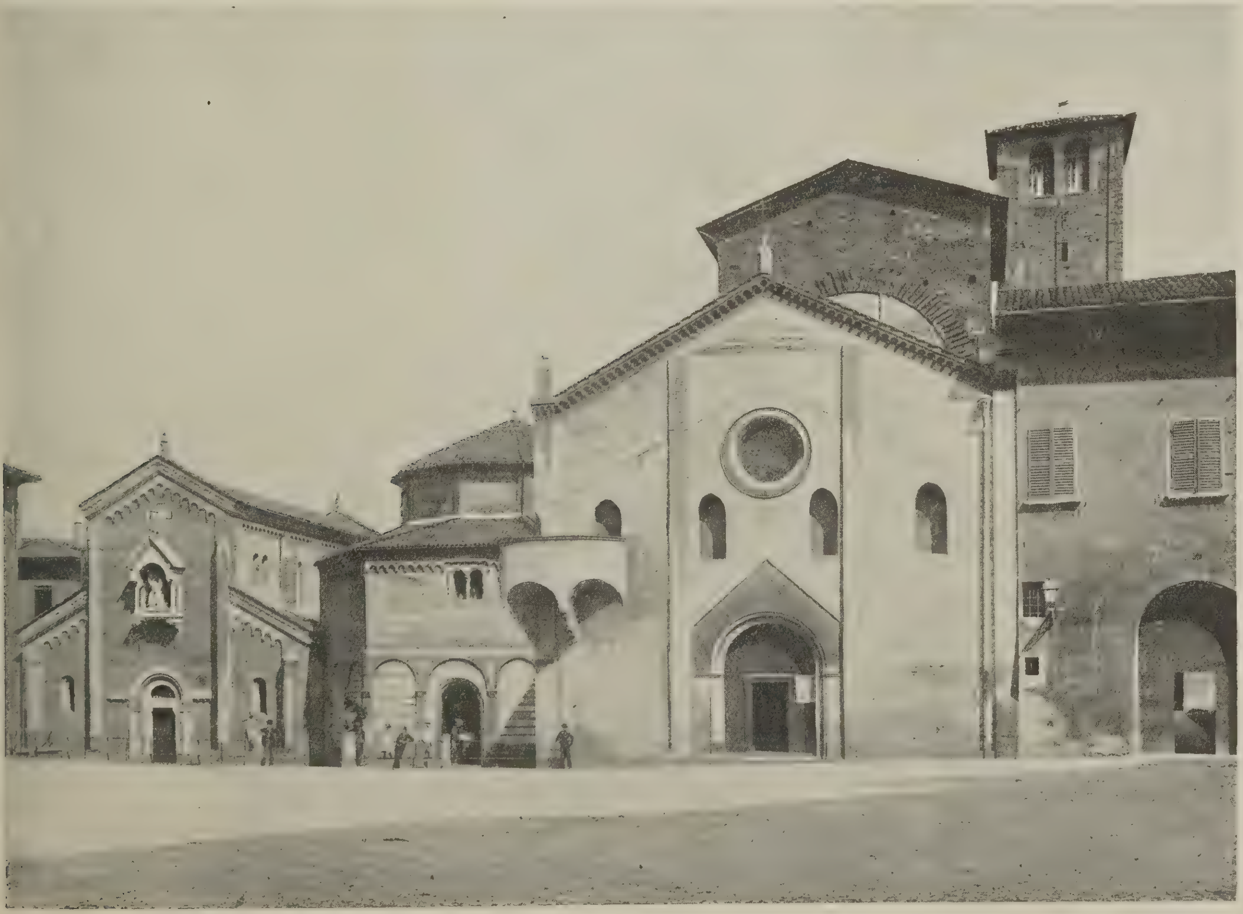
Bologna and its Churches

By E. BERESFORD CHANCELLOR, M.A., F.S.A.

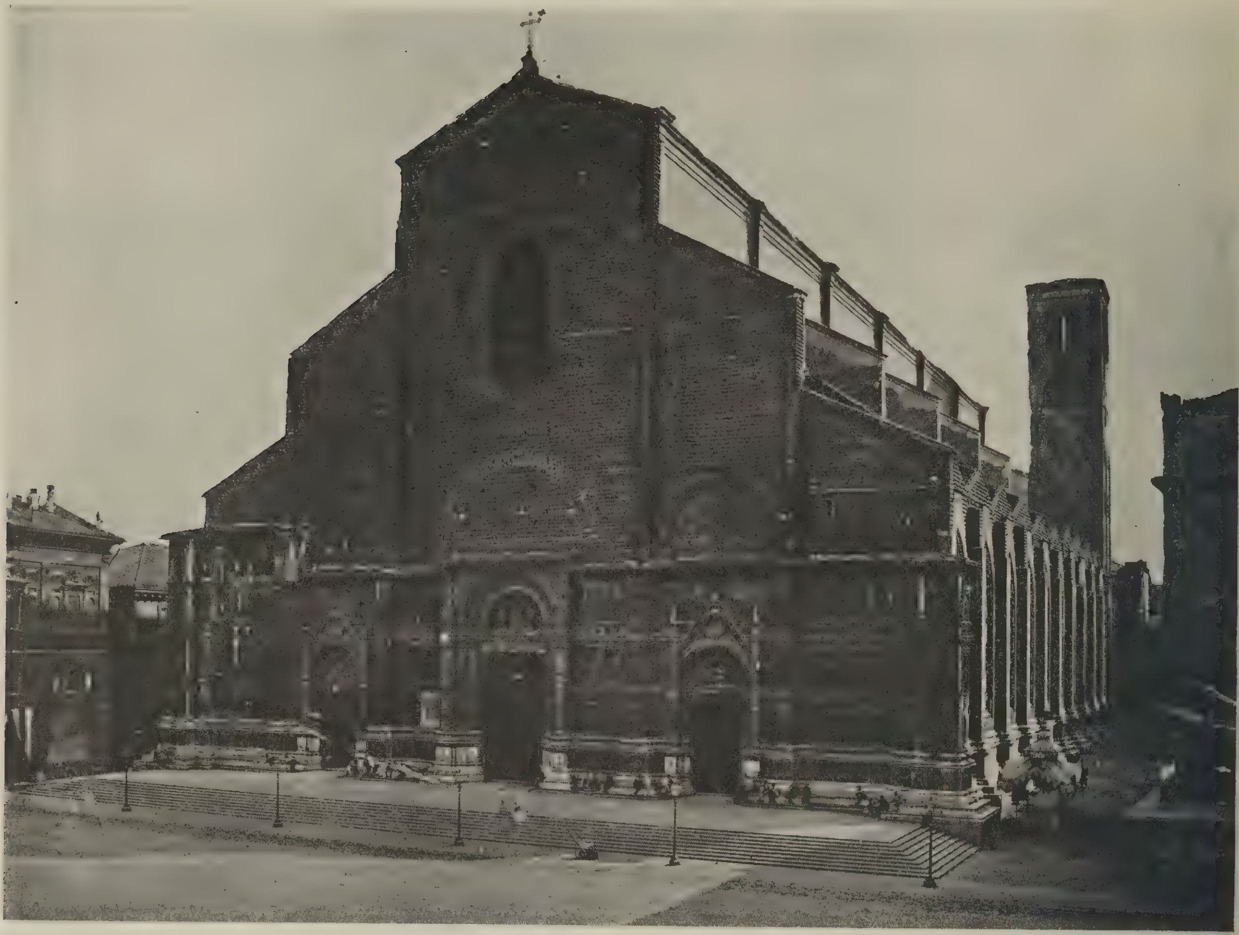
WHILE the beauty of such places as Perugia and Florence, Siena, Verona, and Venice, is well known the extraordinary fascination of Bologna seems to have escaped general recognition. Certain cities and towns have a curious quality of, as it were, concealing their intrinsic charm beneath a kind of commercial cloak. Bologna is an example of this. It is a large and busy city, a sort of Clapham Junction of northern Italy; and, in consequence, those who come to it come either for business purposes or because it forms a convenient stopping-place between such better-known artistic centres as Florence and Venice. It thus presents itself superficially as a spot in which to stay a few hours rather than to loiter a few days. Those who know, however, realize that it more than amply repays whatever length of time the traveller may be able to afford; for this cloistered city should be regarded in any terms but those of sausages! It is compact of beauty in all sorts of forms: wonderful arcades of endless varieties of architecture dating from the Middle Ages to our own day; immense palaces whose one-time glory has, indeed, departed, but has left them as relics of those far-off days when artistry went hand in hand with utility; glorious churches erected when religious zeal sought the aid of beauty and strength in their fashioning.

The history of Bologna can be read in the annals of the gracious land of which it is one of the outstanding features; something of its monuments can be learned from the familiar pages of Baedeker and Murray; but only by wandering in its streets or penetrating its shy little by-ways can one really come to feel its beauty. Here I must confine myself to a few words about its churches, leaving its other monuments for another article should the will of the Editor permit me a further outlet for enthusiasm.

Of these churches the most notable are St. Francesco, St. Petronio, and the amazing St. Stefano. There are many others, but these are the most important. The first is probably the most perfect monument of mediæval architecture which Bologna possesses. It was built by the Franciscan Friars between the years 1236 and 1263, but unfortunately the name of its designer is unknown. Like nearly all churches here, it is of immense size, and is constructed in undressed brick in the Lombardic Gothic style, a curious and interesting feature being the flying buttresses which spring from the apse and the sides. It possesses two bell-towers of striking beauty, one dating from 1260, the other from between the years 1397 and 1402, the latter being the work of Antonio di Vincenzo. The splendid and vast interior, with its massive columns and its innumerable chapels in the apse, contains a number of mural monuments, in one of which can be detected the gracious work of the great Rossellino. At the close of the eighteenth century, if it can be believed, this remarkable church was used as a custom-house, then as a kind of gigantic storage, and all sorts of buildings were erected around it, while its interior was wholly disfigured and desecrated. But happily this has been proved to be not irremediable, for in 1886 the work of restoration was taken in hand by the late Signor



CHURCH OF SAN STEFANO, BOLOGNA.



BASILICAN CHURCH OF SAN PETRONIO.

Vilatiani Apelecchia, and is still in progress, although nearing completion, under the able supervision of Cav. A. Ruffiani.

In the precincts stand three stone open tombs, under pyramidal canopies gleaming with green tiles, and dating from the thirteenth century; these contain the bodies of those learned commentators, Accursio, Odofredo, and Rolandino Romanzi, and add a lonely touch to the beauty of the rich and matured brickwork which forms their background.

St. Petronio, whose architect was the Antonio di Vincenzo just mentioned, was begun in 1390, and was originally designed to be larger even than St. Peter's at Rome, for the Bolognese architects seem to have thought in terms of giants. It was, too, to have contained no fewer than fifty-four chapels, and to have had four towers and a vast central dome. This immense scheme never materialized. Its form was to have been that of a Latin cross; and what we see to-day is merely the base of that cross, although its length measures no less than 140 metres! The main entrance was designed and actually executed by Jacopo dalla Quercia, who occupied twelve years over the work, and completed it to the amazement of the Bolognese who imagined that no one could compete with Agostino and Agnolo of Siena, who had already executed the marvellous high altar in St. Francesco. The interior of St. Petronio vies with that of the Duomo at Florence for audacity in treatment and breadth of design, as well as for a solemn simplicity quite overwhelming in its effect. The introduction of very ample clerestory windows, however, gives it a lightness which is painfully absent in Brunelleschi's masterpiece. It is interesting to remember that those windows once shed light on an historic scene, and one so far-reaching in its effects, for here, in 1530, Charles V received from the hands of Pope Clement VII the imperial crown.

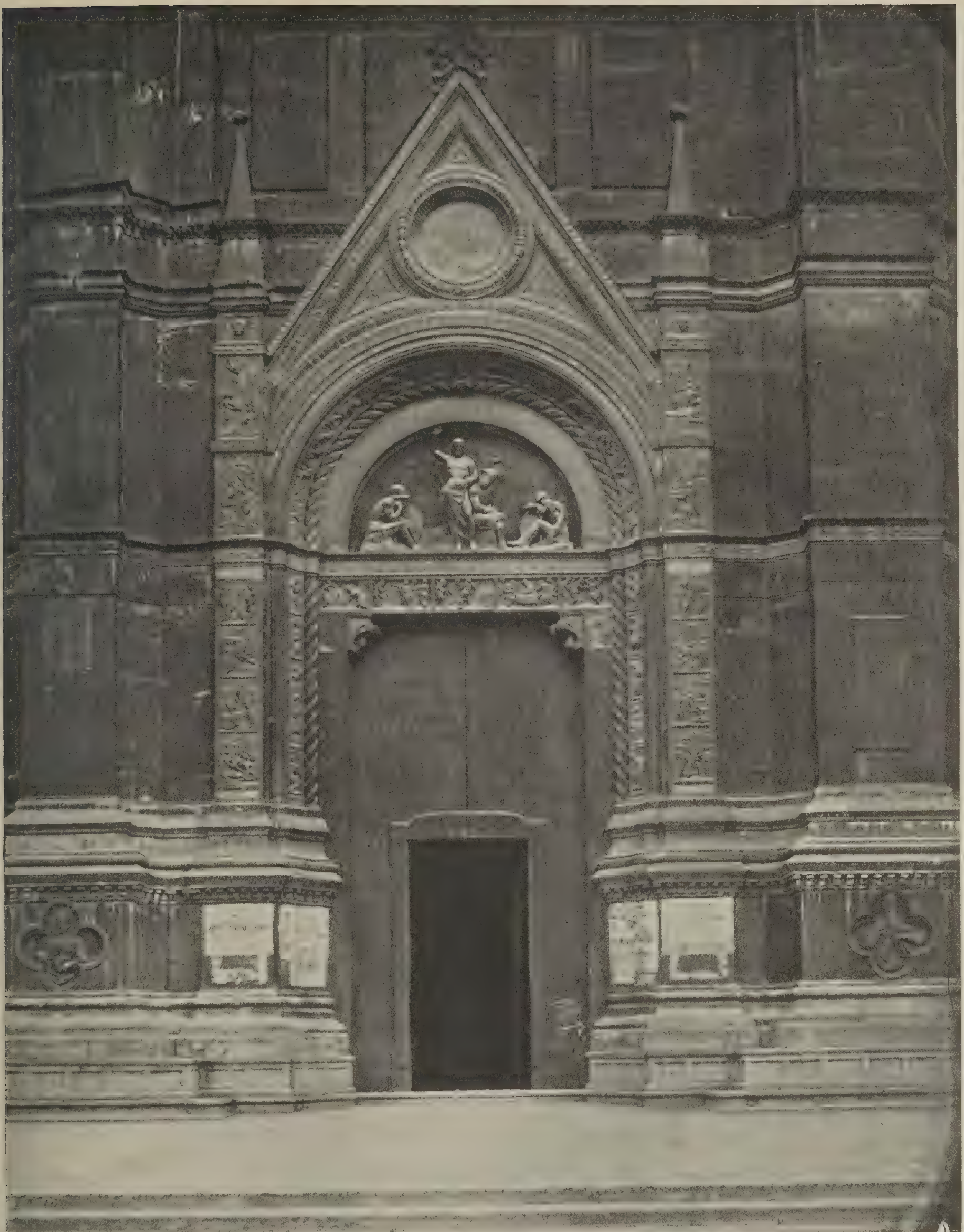
The last church to be noticed, St. Stefano, is an even greater wonder than either St. Francesco or St. Petronio. For it is not one church, but a collocation of no fewer than seven churches, joined together, indeed, but each complete in itself. As one of these was founded, according to tradition, by St. Faustiniano, the third Bishop of Bologna, in the fourth century, this may properly be regarded as the city's oldest place of worship. It is probable that the church known as the Holy Sepulchre was originally a baptistery attached to the other six, which also possess a cloister in common, formed by two galleries, one superimposed on the other, and a thing of pure beauty. One of the churches is circular, and in the midst rises a tabernacle reached by a spiral staircase of exquisite form and workmanship.

At this moment several of these churches are in process of being carefully and judiciously restored. It is obvious that the work is being carried out with the same judgment as is exhibited in the restoration of St. Francesco. As they now are they form an object-lesson in faithful and reverent restoration, and apart from their intrinsic charm and interest, merit for this reason a visit, not only from lovers of the picturesque, but also from ecclesiastical architects who should not fail to study what one age has here left and what another is doing its best so piously to preserve.

There are many other churches in Bologna which no one who spends any time in the city will omit visiting. Corpus Domini, with its exquisite doorway executed by Sperandio; St. Spirito with its remarkable façade, another example of careful and judicious restoration; St. Domenico, with its wonderful Arca del Santo, a marvel of sculpture executed by masters from the thirteenth to the sixteenth century, where Euzo, the captive king of Sardinia, lies buried and Guido Reni. But it is St. Petronio, St. Francesco, and St. Stefano which will make the chief appeal to all who realize and love the beauty of past Italian church architecture.

Architecture of the Italian Renaissance. 20.—Porch of the Church of San Petronio.

Antonio di Vincenzo, Architect.



The main entrance of San Petronio, which is flanked by subsidiary entrances (one of which is shown above), was designed and executed by Jacopo dalla Quercia, who occupied twelve years over the work.

THE LIBRARY
OF THE
UNIVERSITY OF ILLINOIS

The Business of an Architect

8.—The Care of Drawings

By C. MURRAY HENNELL, F.S.I.

APART from general matters I have, up to the present, dealt principally with the clerical work in an architect's office. This should be carried on by clerks who have, or should have had, some isiness training, and who are more or less orderly and ethodical in their ways. It is not a very difficult matter get correspondence filed according to one's wishes, and such a way that any required letter can readily be found, it this is seldom the case with drawings, which are of iemselves awkward things to file on account of their vary-g sizes, natures, and the materials of which they are made. he difficulty of keeping them in a proper way is increased y the fact that architectural draughtsmen have usually it little business acumen about them, and are generally ss, rather than more, methodical in their habits—evidence the so-called artistic temperament, which is frequently ade an excuse for untidiness and disorder. Such evidence iould have no place in the office of an architect, and the ioner it is learnt that it is not artistic, even though it may "Arty," to be untidy, the better.

Drawings are valuable documents, so why should they allowed to stray about, get dirty, torn and lost, as they equently do in so many drawing offices? The first safeiard against this is to have a system for filing the drawings. should be simple enough to be understood by every one, id a rigid rule should be made that the system shall always adhered to, and the principals and chief assistants should sist that perfect order shall prevail in the drawing office.

It is of great assistance in the care of drawings if they are, far as possible, of the same size. It is, of course, quite ipossible to adhere to a stock size for every drawing, but uch more might be done towards this end than is usually tempted. It will be found that a drawer full of drawings the same size is much easier to cope with than one in which very "threepenny bit" is sandwiched between two "halfowns."

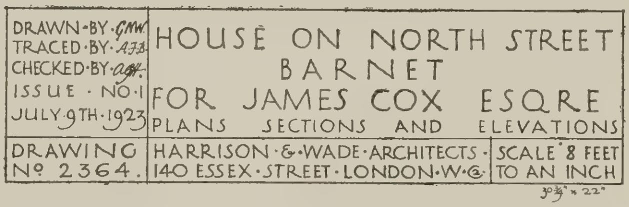
Imperial size sheets (30¾ in. by 22 in.) are very conenient to handle, and will be found suitable for the greater imber of working drawings, with the exception of some etails, which must of necessity be larger. In any case, is best not to make any drawing larger than "Double lephant" size (40 in. by 27 in.) if it can possibly be voided, for very large sheets are most difficult to deal with, id invariably get crumpled and torn beyond all hope of demption. A large detail can be drawn just as well on vo double elephant sheets, each with a clear "marking ie," as on one sheet of double that size. On the other ind, a land survey should, if possible, be drawn on one ieet, which must be mounted on canvas or Holland before se—many months before use, in fact—and allowed ioroughly to season. The papers on which many surveys ive been drawn have been known to shrink to such an ktent, and unfortunately to shrink unevenly, that they ould never be accurately scaled, often proving to be several et out in quite a short-scaled length.

Drawings should not be rolled more than can be helped, id should be kept flat in nests of drawers. These are est of not smaller size than "Antiquarian" (53 in. by r in.), and a number of shallow drawers is better than a w deep drawers.

Every job should have its own drawer or series of drawers ich being indexed by a label on the front. The drawers in be subdivided, if necessary, by brown paper folders, so labelled. In addition to drawings for individual jobs, iere will be a number of what may be termed "standard" drawings, which can be used over and over again, and this applies principally to details for "housing" or other small domestic work. For these it is as well to keep a series of drawers, each of which will be labelled "Standard Windows," "Standard Doors," "Standard Fireplaces," and so on.

I am not advocating a lot of repetition work, but it inevitably happens that the same detail will often be wanted again, and it will serve a very useful purpose if a junior employs some of his time in making ink tracings of such details as his principal decides may well be regarded as "standard" for future use.

Every drawing should have a title, and the following is a suggestion for a useful arrangement of this :—



DRAWN·BY·G.M.W.
TRACED·BY·A.J.B.
CHECKED·BY·A.G.H.
ISSUE · NO·1
JULY·9TH·1923

HOUSE ON NORTH STREET
BARNET
FOR JAMES COX ESQRE
PLANS SECTIONS AND ELEVATIONS

DRAWING
Nº 2364.

HARRISON·&·WADE·ARCHITECTS·
140 ESSEX·STREET·LONDON·W·C·

SCALE 8 FEET
TO AN INCH

30¾" × 22"

This has all the primary information that is required about a drawing, and, if placed in the right-hand bottom corner, it can readily be seen and understood without removing the whole drawing, and others with it, from the drawer. Many drawings that one sees have this information, or less, scattered all over them. The name of the job will probably be at the top, the scale in the middle, the name of the architect in the right-hand bottom corner, the date, if any, somewhere else, and probably no drawing number on it at all. Assistants will compete with one another in the shapes and sizes of their titles, the arrangements of the wordings and the beauties of their hieroglyphics, until it becomes almost impossible to understand, without close scrutiny, what it is all about. Let it be insisted upon that the tablet, as shown, shall always be in the same place, and of the same size and arrangement, and it is clear at a glance whether all that is required has been filled in and whether the drawing has been checked, and by whom.

If there is no "number" on an architect's drawing, it is obvious that he does not keep a register of the drawings prepared in his office, and that he has not realized the usefulness of both "numbers" and the "register." The latter can be arranged to give such information as the architect fancies, but the following are useful headings :

Drawing No. Job. Description. Scale. Size. Date of Completion. Remarks.

Under "Remarks" can be the nature of the drawing, whether in ink on tracing linen, pencil on paper, and any other required data. Further columns, such as "Draughtsman," "Checked by," "Number of Prints made," etc., can, of course, be added, but it seems undesirable that the register should be made cumbersome with too much information and "red tape." The register proves useful in many ways, and reference to it will frequently save looking through a pile of drawings to ascertain whether a certain detail has ever been prepared or not. It is important that every drawing prepared should be entered in the register and given a number, which is so convenient for quoting to builders and others.

Even when we have established our system and have plenty of drawers, it is no easy matter to make the draughtsmen keep the drawings in their proper places. Many of them seem to have an extraordinary desire to keep by them a pile of drawings, most of which have no bearing at all on the work in hand, or else they have the top or "miscellaneous" drawer crammed to overflowing with tracings, etc., which should be in their proper homes.

As in the case of correspondence, all drawings of jobs that are completed and done with should be cleared out of the drawers, neatly rolled up in brown paper, labelled, and put with the other "dead men" in the store room, where the rolls should be alphabetically arranged with all the labels visible.

Prints of drawings, until they are sent out, can very well be kept in the same drawer as the originals, but it is best to have a separate folder for them in that drawer. In some offices the record of prints made and sent out is kept in the drawing office, even in the register of drawings itself, but I have found that this record is usually dealt with more thoroughly and satisfactorily by the clerk who actually rolls up and sends out the drawings. This can be easily recorded in a book divided into columns in the following manner, each job having a separate page.

It is a good plan for the principal to keep in his room nest of drawers, containing prints of drawings which h can show to clients, prospective or actual. This save searching in the drawing office and the disturbance of bot staff and original working drawings. He will probably onl require the small-scale drawings and no details.

These drawings should, of course, be arranged unde headings, such as :

Cottages for Housing Schemes (subdivided in Types).
Houses—four and five Bedrooms.
Houses—six and seven Bedrooms.
Flats.
Shops.
Schools.
Factories.
Churches and Chapels.
Alteration works.

(*To be continued.*)

[*The previous articles in this series appeared in our issue for April* 4, 11, 25, *May* 9 *and* 30, *and June* 27.]

Register of Drawings sent out.

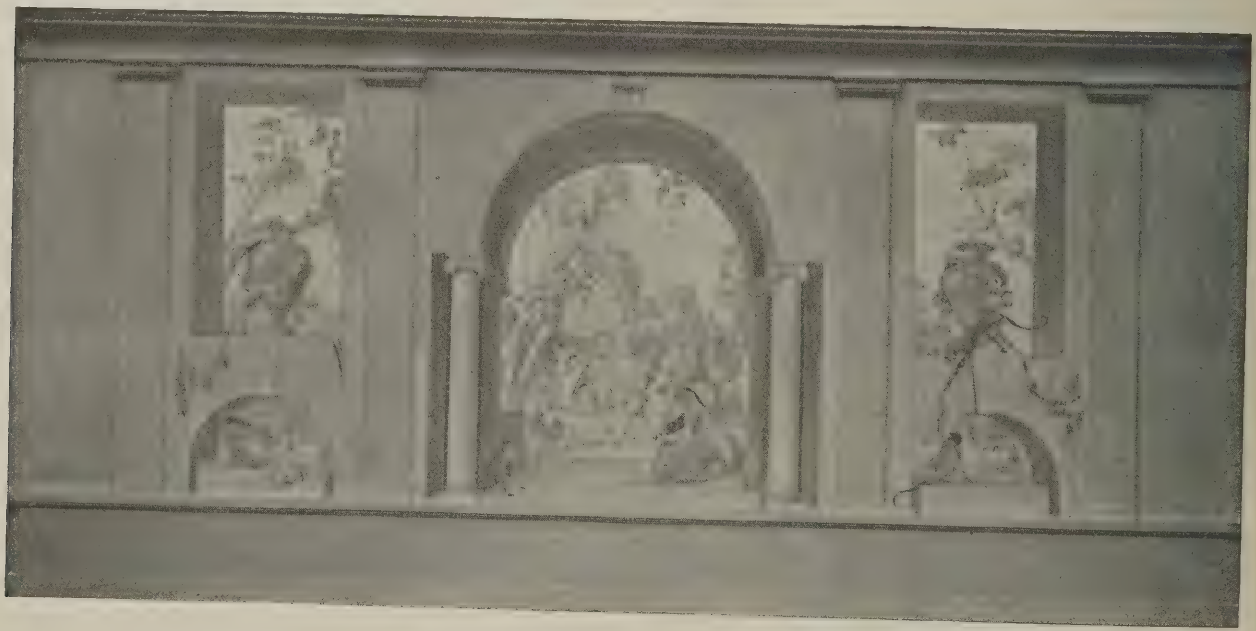
House at Barnet for James Cox, Esq.

Drawing No.	Description.	Scale.	Contractors.		Quantity Surveyor.		Local Authority.		Client.		. . . .	
2364	*Plans, Sections, and Elevations.*	$\frac{1}{8}$	*2-Cartridge.*	*11.8.23*	*1-Cartridge. (Returned*	*10.7.23 23.7.23.)*	*2-Linen.*	*20.8.23*	*1-Cartridge.*	*10.7.23*		

"The Decoration of the Walls of a Room"

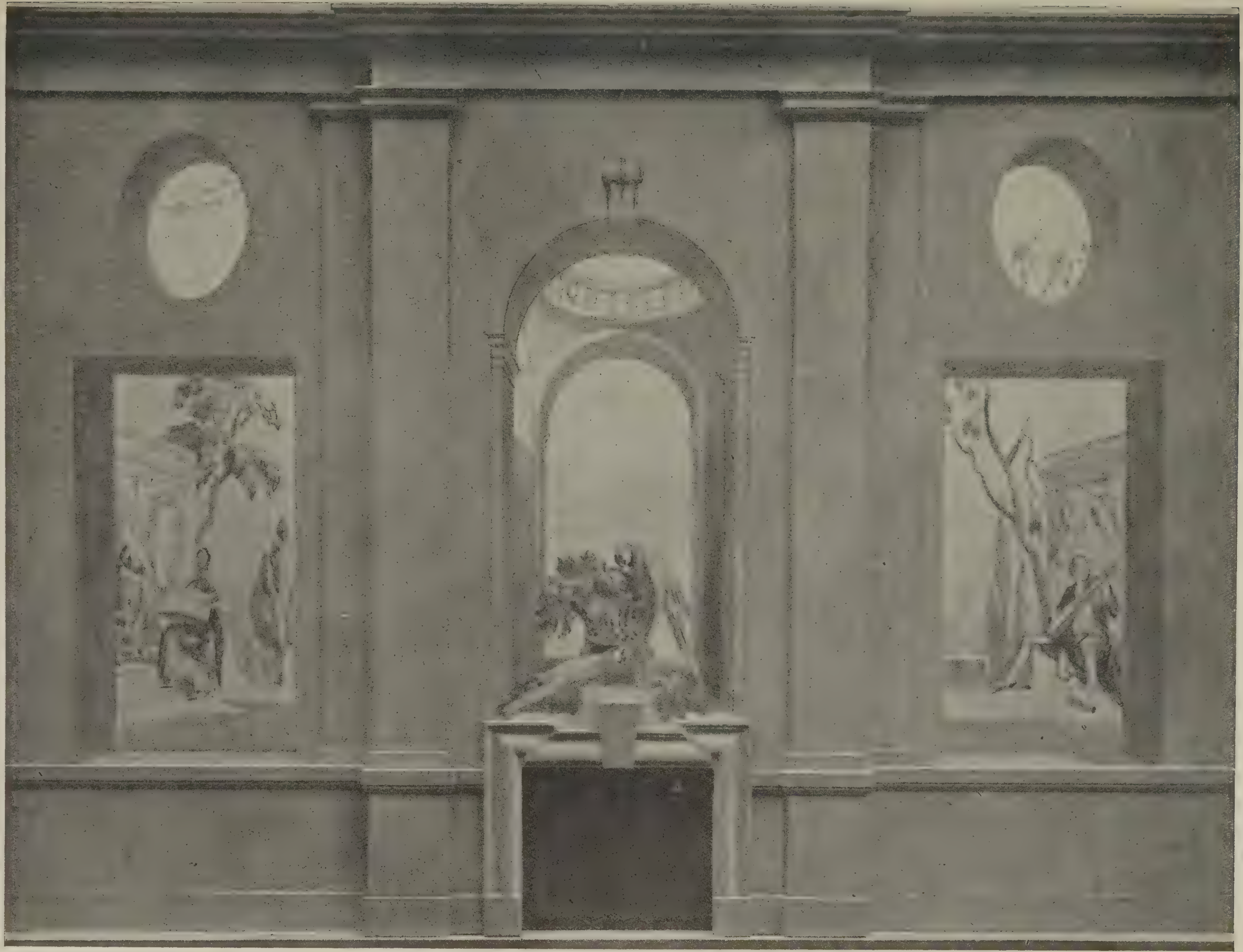
By A. C. BLUNT, PHILIP CONNARD, A.R.A.,
and A. S. G. BUTLER, A.R.I.B.A.

THIS decoration is intended for a room not larger than an ordinary London drawing-room, and the perspective and points of vision have been worked out for such a room, so that the figures, etc., are life-size at the point at which they appear to stand. This was one of the methods by which Tiepolo and others increased the effect of spatial extension. It should be pointed out that the pilasters, cornice, fireplace, and dado are real, and project from the wall face. The rest is painted. The room may be supposed to be 38 ft. by 23 ft., and about 14 ft. high, with windows on one side opposite the long wall. It will be noticed that the shadows on the short walls are painted in relation to these windows, being on the left and right side respectively. The decorations are the joint work of Mr. A. C. Blunt, Mr. Philip Connard, A.R.A., and Mr. A. S. G. Butler, A.R.I.B.A.



THE WALL FACING THE WINDOWS

Designed by A. C. Blunt, Philip Connard, A.R.A., and A. S. G. Butler, A.R.I.B.A.

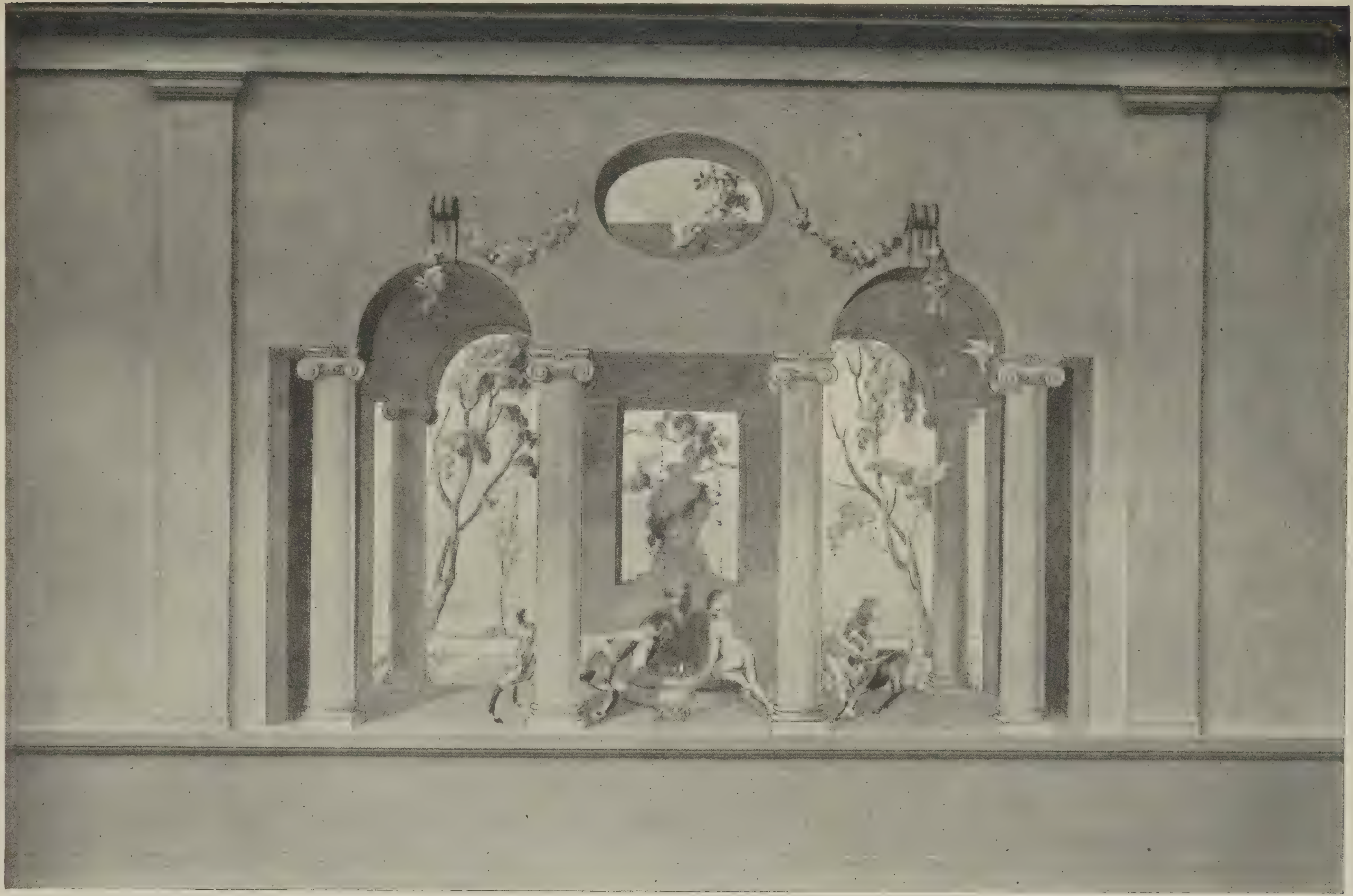


The fireplace end of the room is lighted from the right, and responsive shadows are painted falling to the left. In these decorations the style is based on that of Tiepolo in Venetia, in which an appearance of spatial extension is given to a room by deliberate painting of architecture in perspective behind the picture plane of the wall space.

THE LIBRARY
OF THE
UNIVERSITY OF ILLINOIS

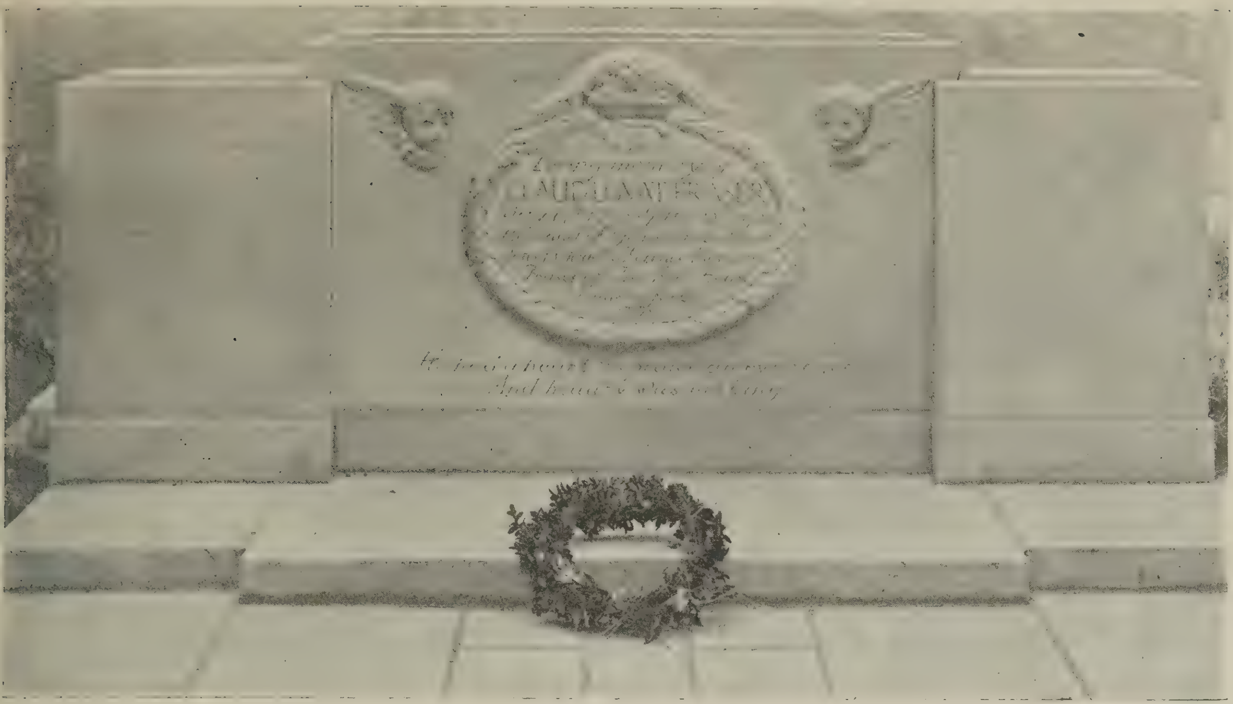
"The Decoration of the Walls of a Room"

Designed by A. C. Blunt, Philip Connard, A.R.A., and A. S. G. Butler, A.R.I.B.A.

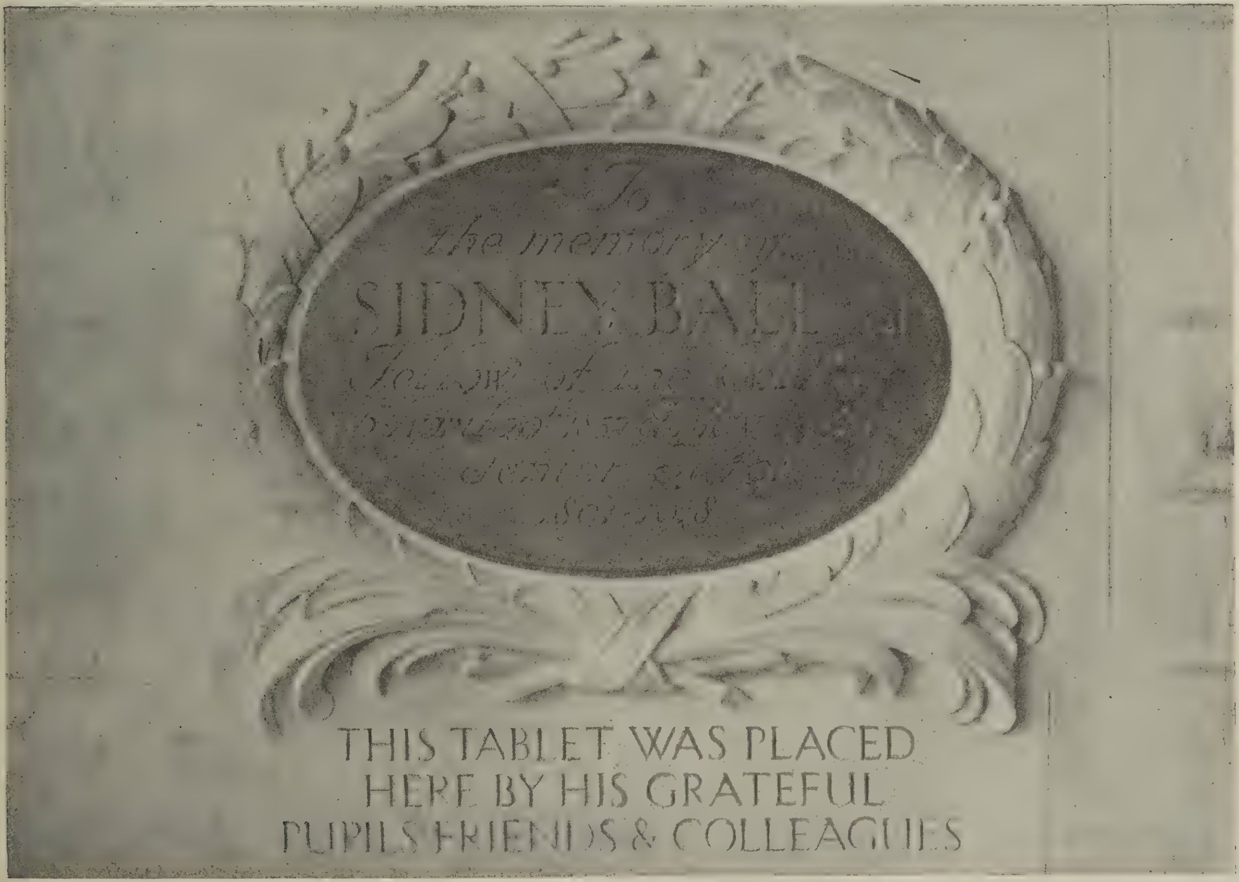


This is an illustration of the end wall opposite the fireplace, with the light coming from the left. In these decorations, architecture and painting are truly combined. They are a step towards a form of treatment for "quite moderate sized rooms" that might be made greater use of.

THE LIBRARY
OF THE
UNIVERSITY OF ILLINOIS



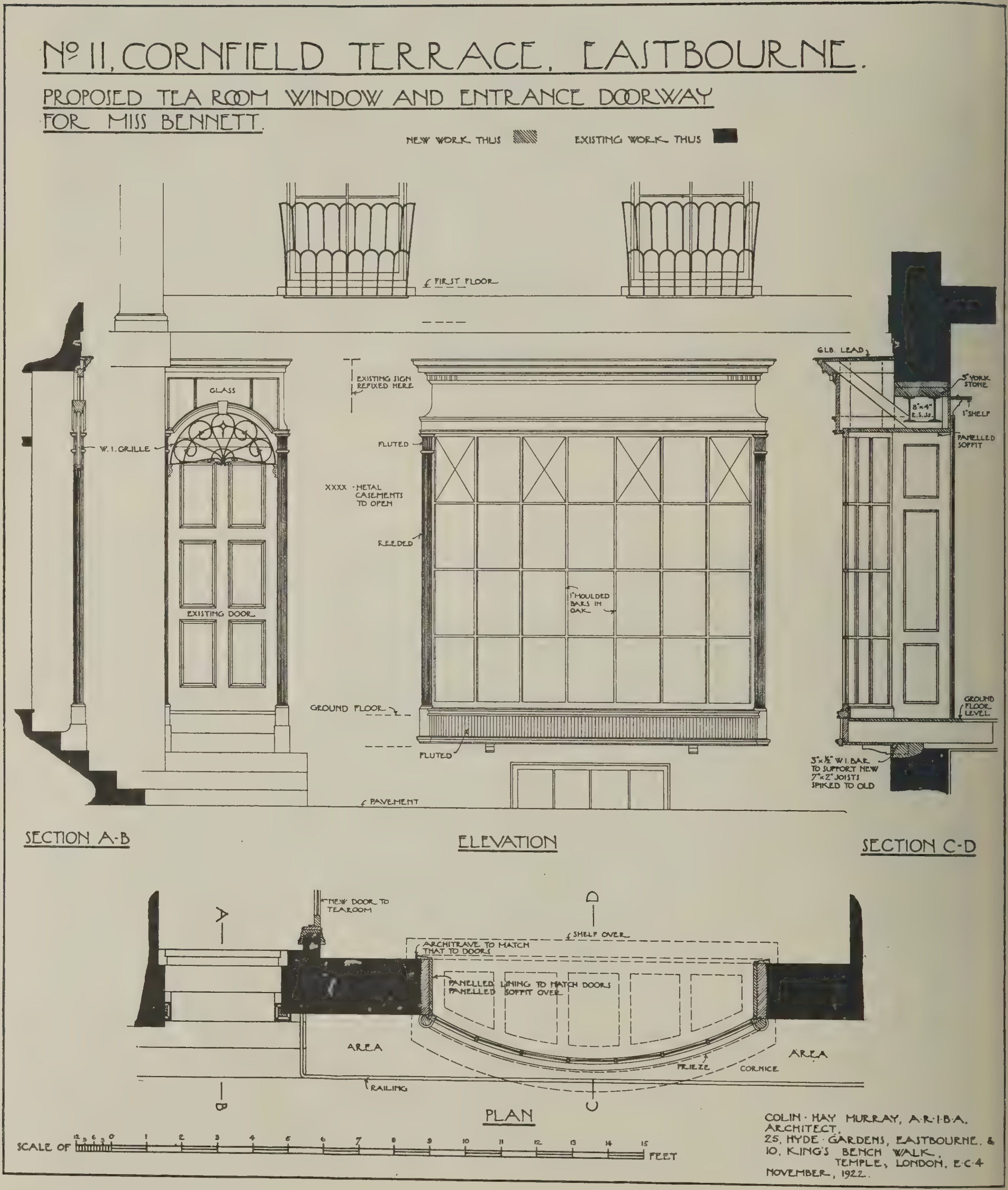
Claud Lovat Fraser's home was at Buntingford, Herts, and his grave has been placed in Layston Churchyard, belonging to the Parish Church. The grave and lay-out were executed by Messrs. J. and E. Armitage, in Portland stone. Mr. Maufe's design is in sympathy with Lovat Fraser's own work.



The Sidney Ball Memorial has been erected at the end of one of the Colonnades of Laud's Quad in St. John's College, Oxford, where the late Sidney Ball was a Fellow and Senior Tutor for many years. The memorial is of Portland stone set in flush with the existing stone wall. The elliptical panel is of Cumberland slate, and the incised lettering on this is gilded, the lettering below being only slightly coloured. The work was executed by Messrs. J. and E. Armitage.

CLAUD LOVAT FRASER'S GRAVE, BUNTINGFORD, AND THE SIDNEY BALL MEMORIAL, OXFORD

EDWARD MAUFE, M.A., F.R.I.B.A., ARCHITECT

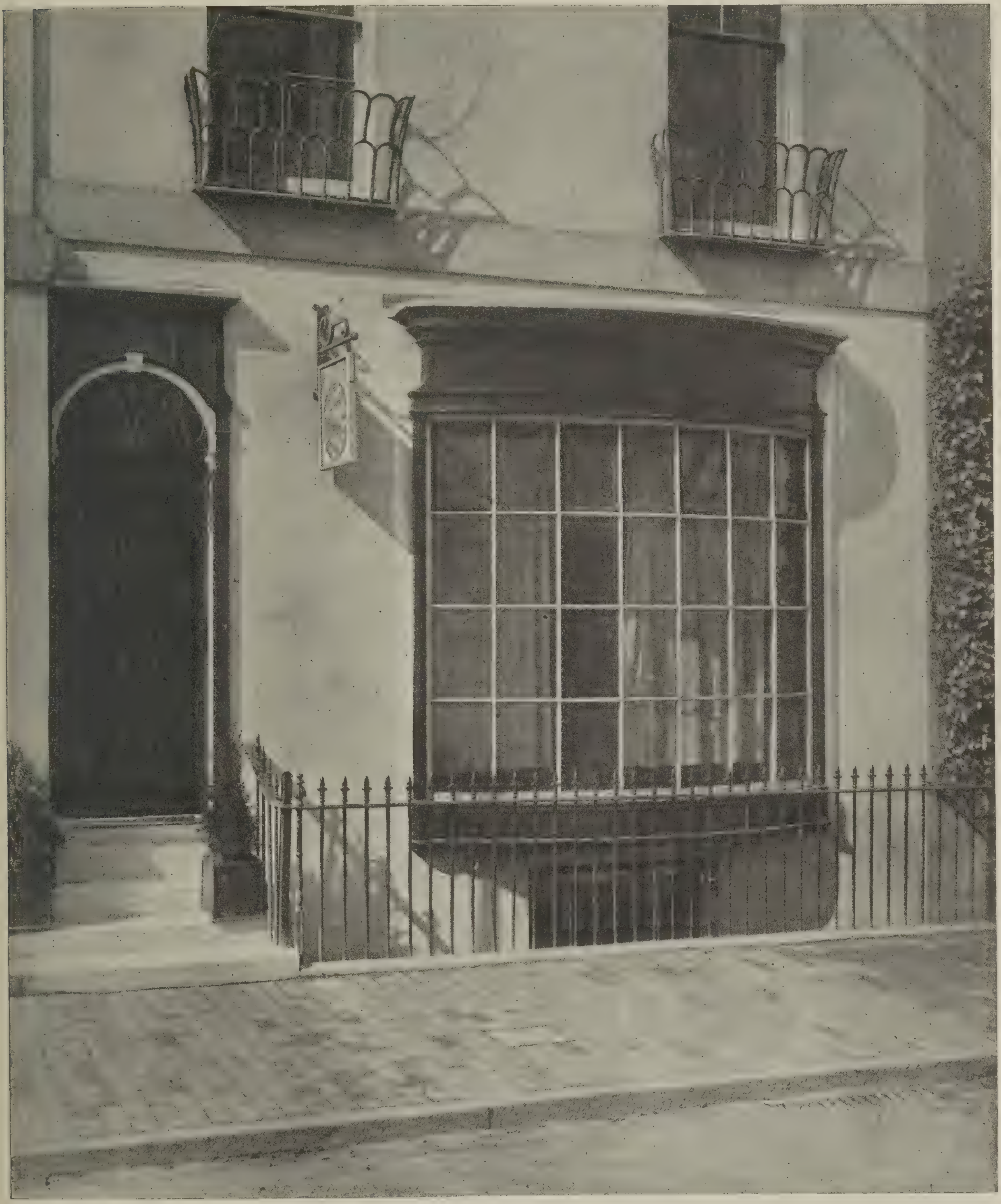

No. 11, CORNFIELD TERRACE, EASTBOURNE.
PROPOSED TEA ROOM WINDOW AND ENTRANCE DOORWAY FOR MISS BENNETT.
NEW WORK THUS ▨
EXISTING WORK THUS ■
FIRST FLOOR
GLASS
W. I. GRILLE
EXISTING DOOR
EXISTING SIGN REFIXED HERE
FLUTED
XXXX - METAL CASEMENTS TO OPEN
REEDED
1" MOULDED BARS IN OAK
GROUND FLOOR
FLUTED
PAVEMENT
GLB. LEAD
5" YORK STONE
8"×4" R.S.Js.
1" SHELF
PANELLED SOFFIT
GROUND FLOOR LEVEL
3"×½" W.I. BAR TO SUPPORT NEW 7"×2" JOISTS SPIKED TO OLD
SECTION A-B
ELEVATION
SECTION C-D
NEW DOOR TO TEAROOM
A
B
C
D
SHELF OVER
ARCHITRAVE TO MATCH THAT TO DOORS
PANELLED LINING TO MATCH DOORS
PANELLED SOFFIT OVER
AREA
FRIEZE
CORNICE
AREA
RAILING
PLAN
SCALE OF 12 9 6 3 0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 FEET
COLIN · HAY MURRAY, A·R·I·B·A. ARCHITECT,
25, HYDE · GARDENS, EASTBOURNE. &
10, KING'S BENCH WALK, TEMPLE, LONDON, E·C·4
NOVEMBER, 1922.

NEW TEA-ROOM WINDOW AND ENTRANCE DOORWAY, NO. 11 CORNFIELD TERRACE, EASTBOURNE
COLIN HAY MURRAY, A.R.I.B.A., ARCHITECT.

(See opposite page.)

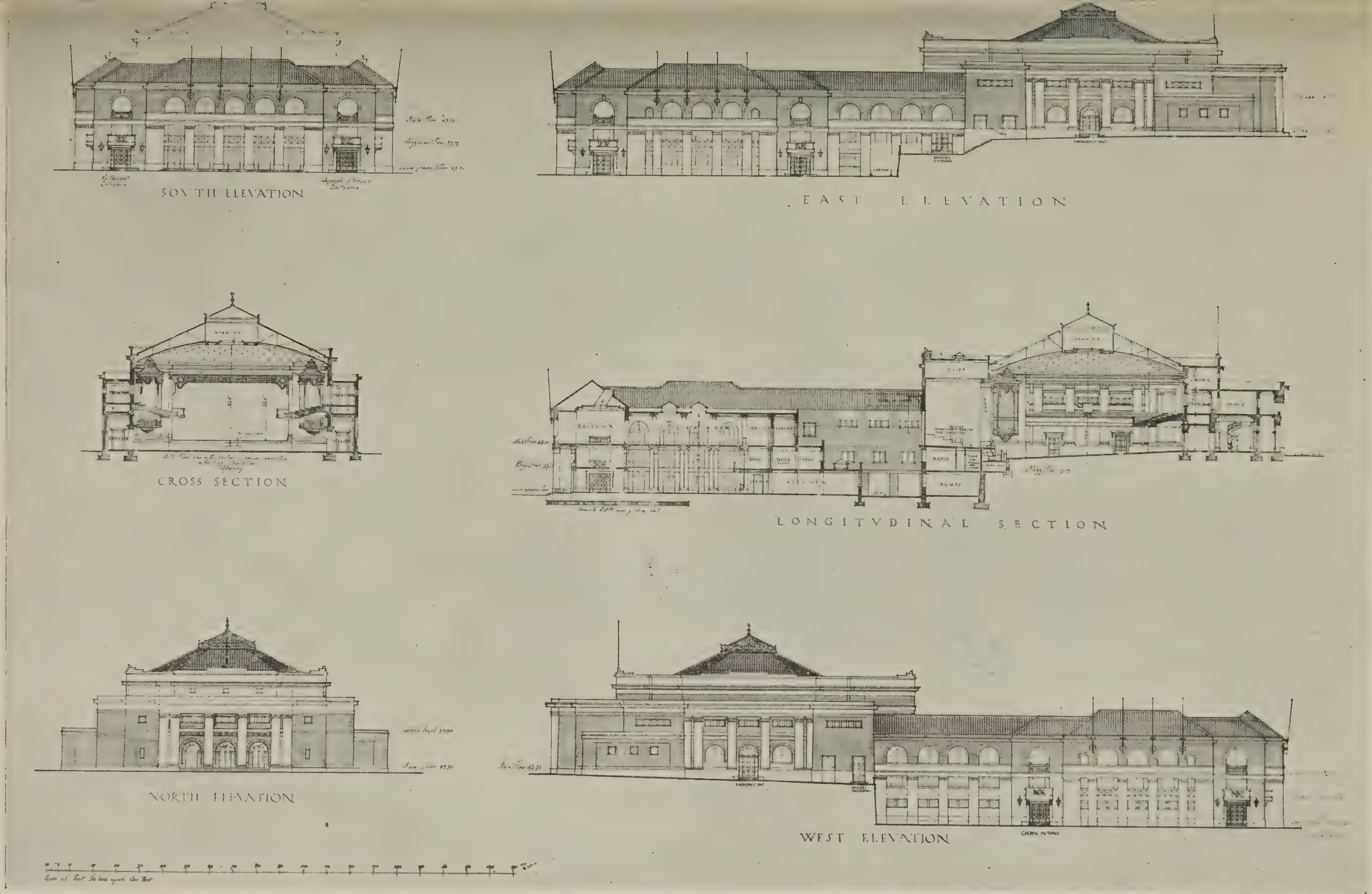
Shop Fronts. 14.—No. 11 Cornfield Terrace, Eastbourne

Colin Hay Murray, A.R.I.B.A., Architect



This illustration shows the new entrance and the new window which have been added to the Tea Room called "The Good Intent." They have been designed as a compromise between the original purely domestic appearance of the house and an actual shop. The signboard was in existence and has been reused. A detail drawing of the alterations appears on the opposite page.

THE LIBRARY
OF THE
UNIVERSITY OF ILLINOIS

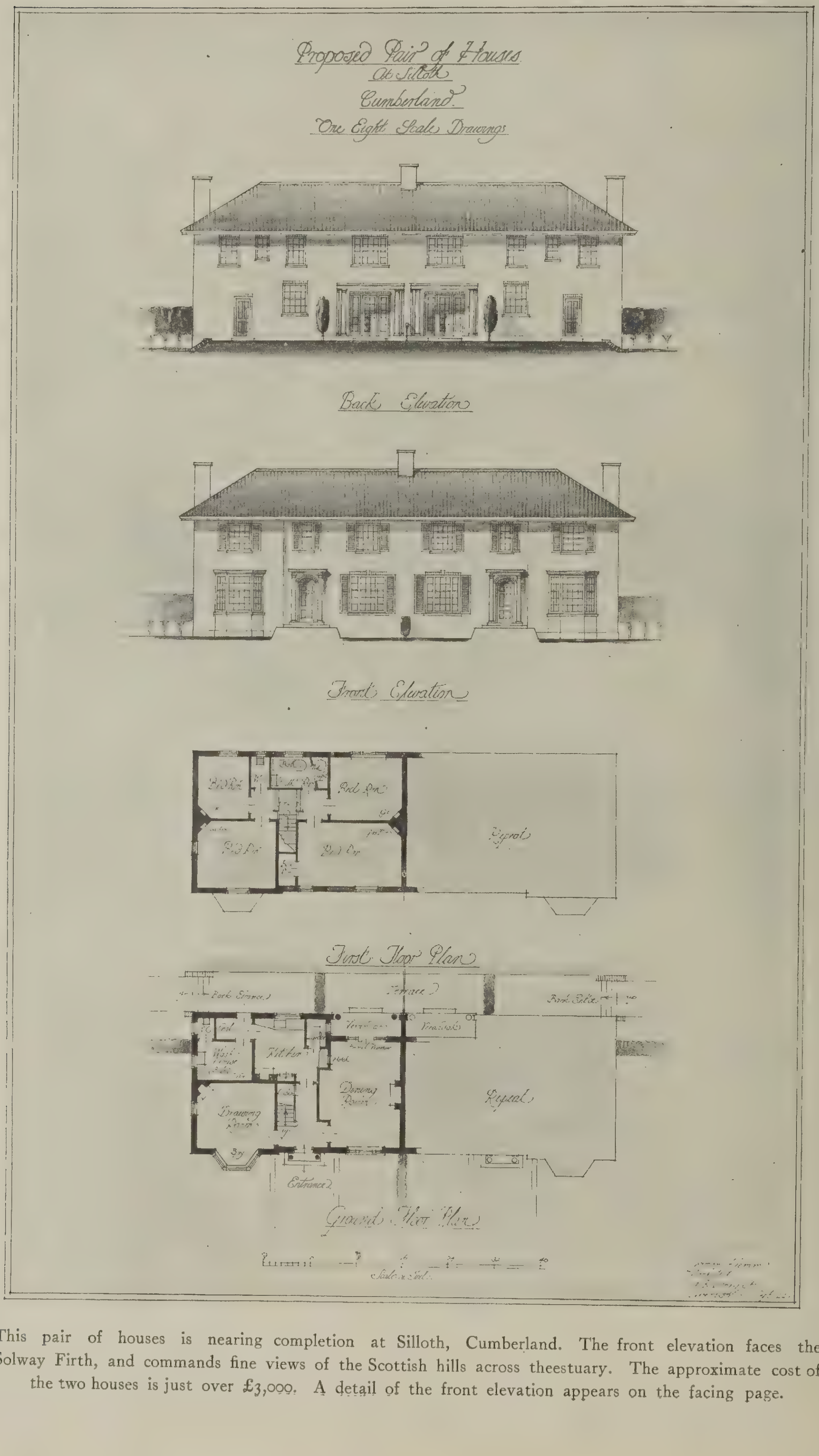


BOURNEMOUTH PAVILION COMPETITION: FIRST PREMIATED DESIGN. G. WYVILLE HOME AND SHIRLEY KNIGHT, AA.R.I.B.A., ARCHITECTS.

(Other drawings of the first premiated design, and of the second and third premiated designs, appeared in our last issue.)

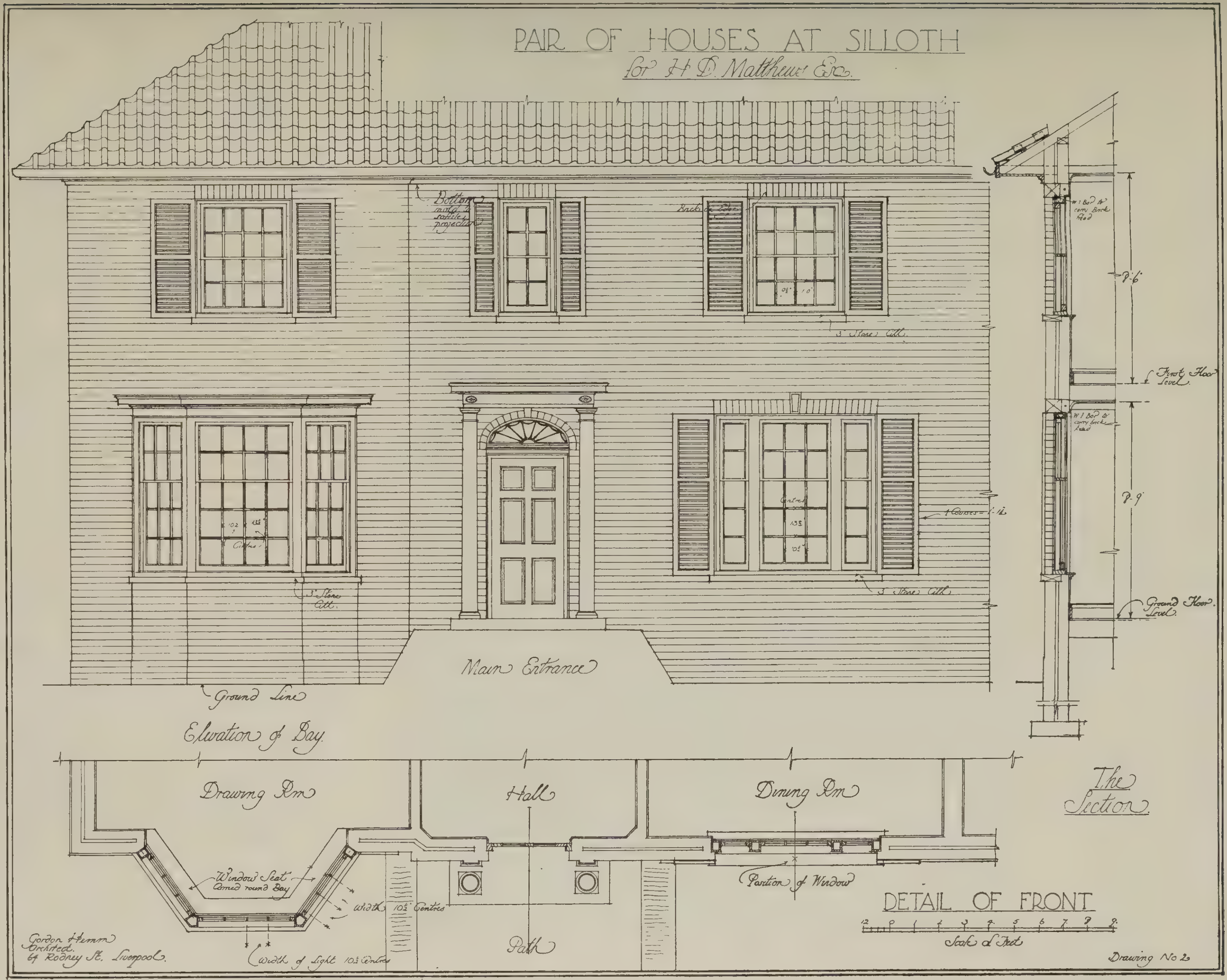
A Pair of Houses at Silloth, Cumberland

Gordon Hemm, Architect



This pair of houses is nearing completion at Silloth, Cumberland. The front elevation faces the Solway Firth, and commands fine views of the Scottish hills across the estuary. The approximate cost of the two houses is just over £3,000. A detail of the front elevation appears on the facing page.

Gordon Hemm, Architect

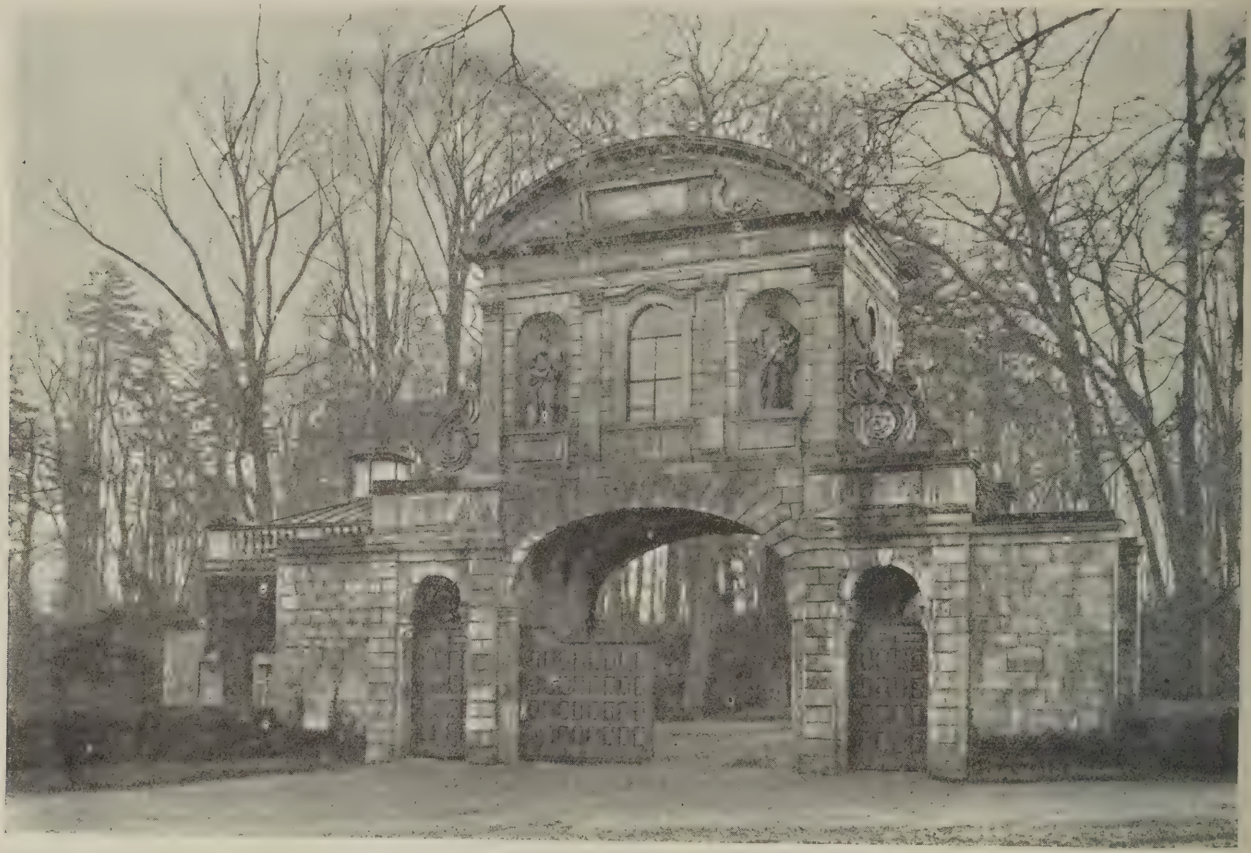


The slightly projecting porches to the front elevation—a detail of which is shown above—form a pleasant contrast with the plain, unbroken wall surfaces which are relieved by the Italian shutters to the windows. The walls are of local brick, buff in tone; the roofs are of rich brown pantiles and the woodwork is painted green.

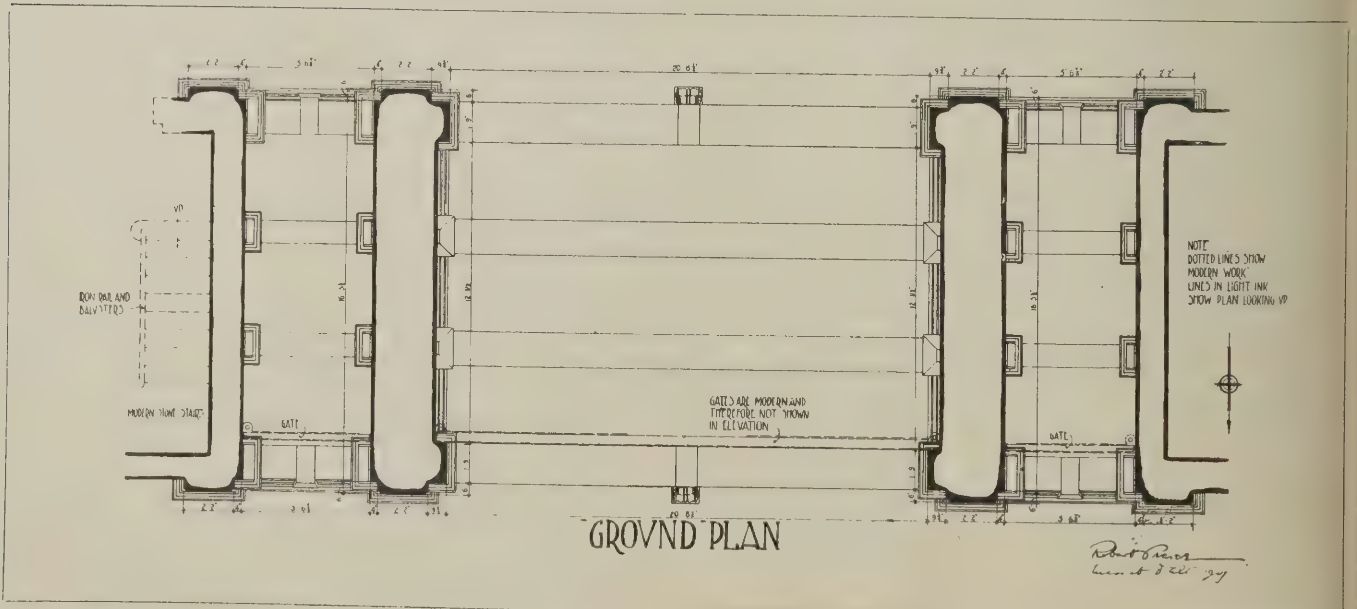
Temple Bar, as Re-erected at Theobald's Park Hertfordshire

SIR CHRISTOPHER WREN, Architect

It is nearly half a century since the historic Temple Bar was removed from its London site, and without much interest on the part of Londoners, eventually found its way, via a builder's yard, to its present location as the entrance to Theobald's Park, the Hertfordshire residence of Sir Hedworth Meux. Wren was responsib for its erection, which was in 1670, and it was in 1878, to b precise, that its removal took place. It is built of Portlan stone throughout, and cost £1,397. Wren selected John Bushwell as his sculptor.



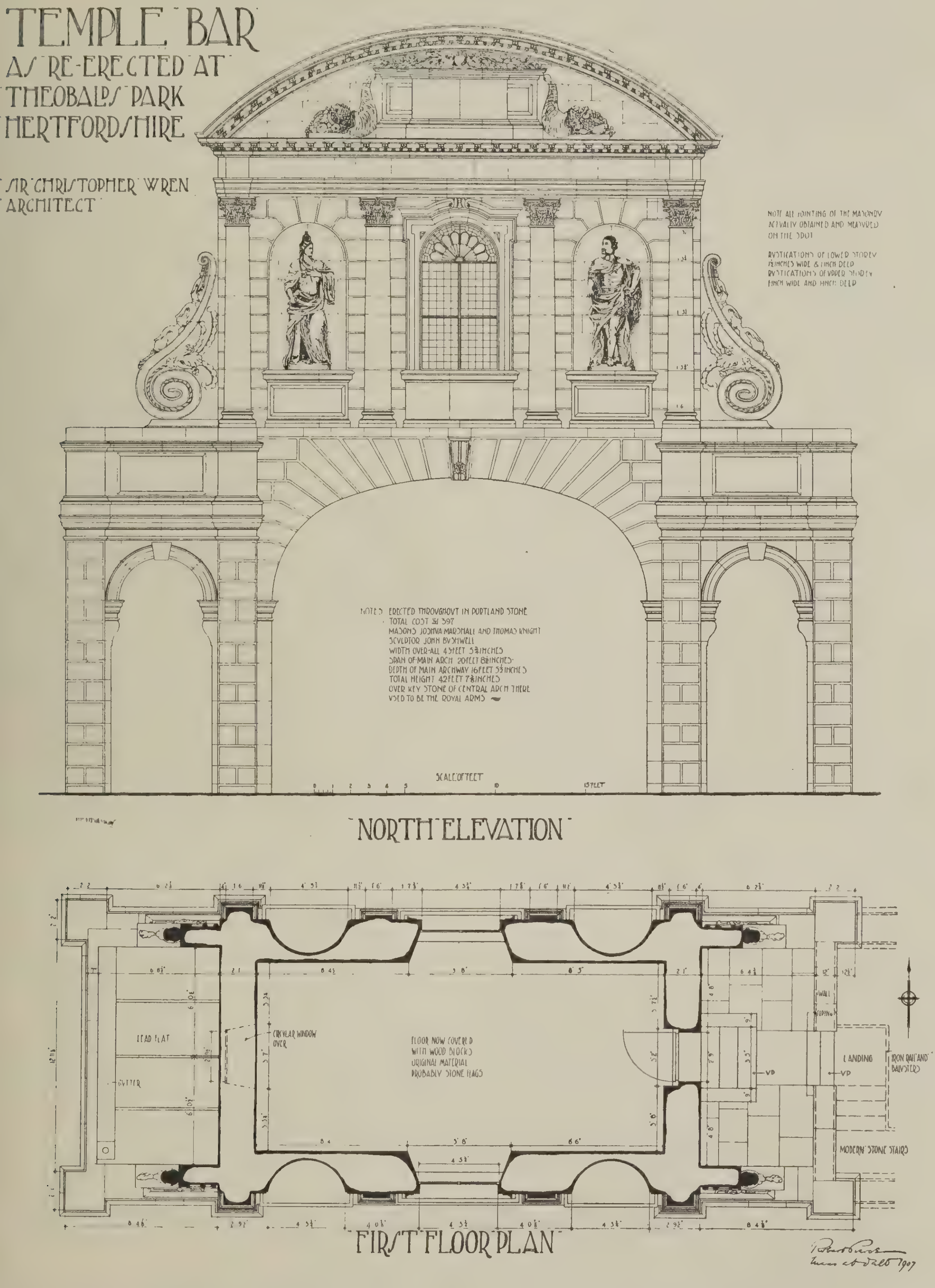
TEMPLE BAR, THEOBALD'S PARK, HERTFORDSHIRE.



VP
IRON RAIL AND BALVSTERS
MODERN STONE STAIRS
GATE
GATES ARE MODERN AND THEREFORE NOT SHOWN IN ELEVATION
GATE
NOTE DOTTED LINES SHOW MODERN WORK LINES IN LIGHT INK SHOW PLAN LOOKING VP
20 6½"
GROVND PLAN

Measured Drawings. 36.—Temple Bar.

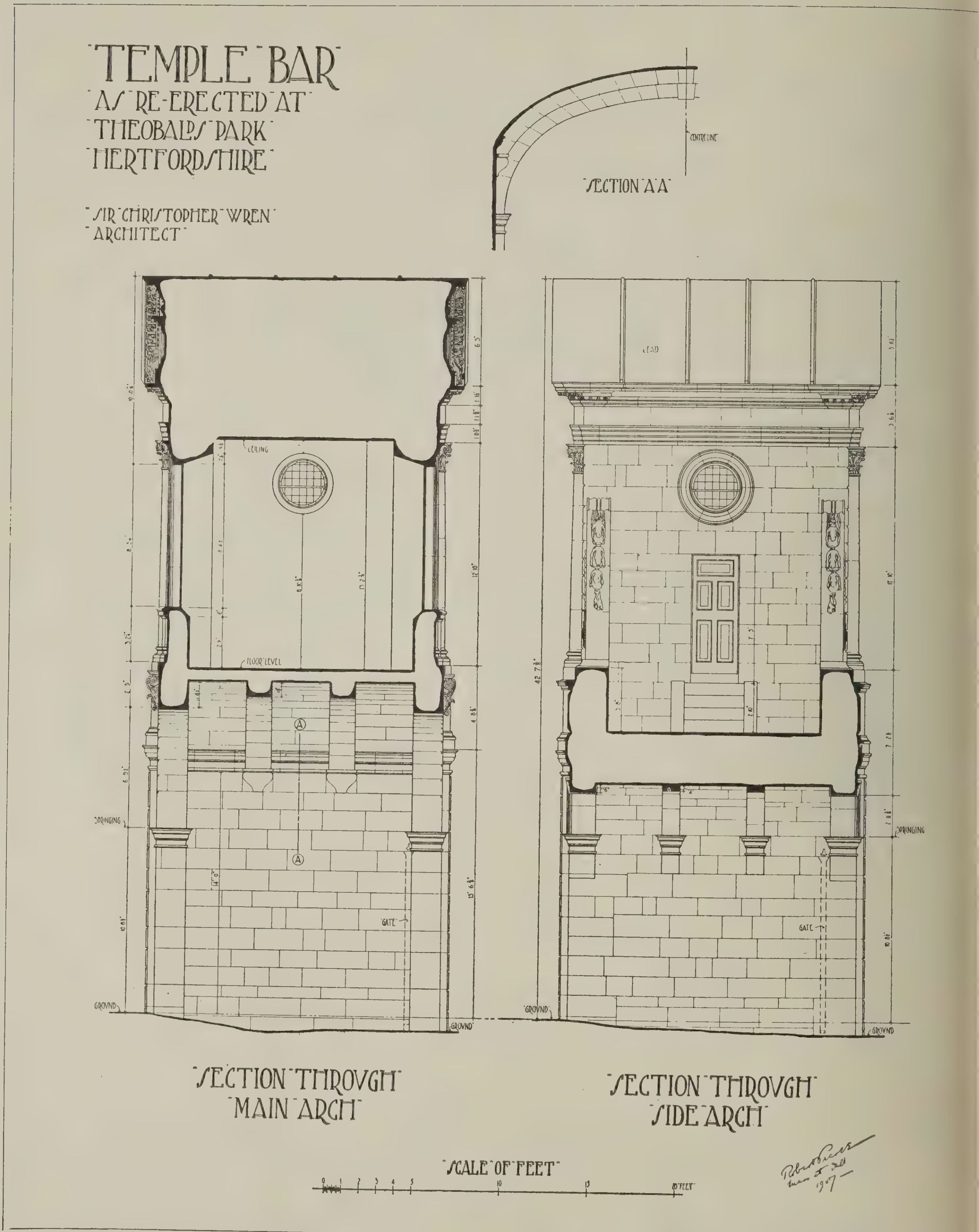
Measured and Drawn by Robert Pierce.


TEMPLE BAR
AS RE-ERECTED AT
THEOBALDS PARK
HERTFORDSHIRE
SIR CHRISTOPHER WREN
ARCHITECT
NOTE ALL JOINTING OF THE MASONRY ACTUALLY OBTAINED AND MEASURED ON THE SPOT
RUSTICATIONS OF LOWER STOREY 1½ INCHES WIDE & 1 INCH DEEP
RUSTICATIONS OF UPPER STOREY 1 INCH WIDE AND 1 INCH DEEP
NOTES ERECTED THROUGHOUT IN PORTLAND STONE
TOTAL COST £1397
MASONS JOSHUA MARSHALL AND THOMAS KNIGHT
SCULPTOR JOHN BUSHWELL
WIDTH OVER-ALL 43 FEET 5¾ INCHES
SPAN OF MAIN ARCH 20 FEET 8½ INCHES
DEPTH OF MAIN ARCHWAY 16 FEET 5½ INCHES
TOTAL HEIGHT 42 FEET 7⅜ INCHES
OVER KEY STONE OF CENTRAL ARCH THERE USED TO BE THE ROYAL ARMS
SCALE OF FEET
0 1 2 3 4 5 10 15 FEET
NORTH ELEVATION
LEAD FLAT
GUTTER
CIRCULAR WINDOW OVER
FLOOR NOW COVERED WITH WOOD BLOCKS ORIGINAL MATERIAL PROBABLY STONE FLAGS
WALL
COPING
LANDING
VP
IRON RAIL AND BALUSTERS
MODERN STONE STAIRS
FIRST FLOOR PLAN
Robert Pierce
mens et delt 1907

Temple Bar was erected in London in 1670 from the designs of Sir Christopher Wren. It was removed from its London site in 1878 and eventually re-erected at Theobald's Park. The main elevation shown above is self-explanatory. Sections through the main and side arches appear on the following page.

Measured Drawings. 37.—Temple Bar.

Measured and Drawn by Robert Pierce.



The above sections should be studied in conjunction with the drawing of the main elevation reproduced on the previous page.

Contemporary Art

Knoedler's Gallery.

During the sunny days of the old Grosvenor Gallery, Sir outts Lindsay received from Paris what was the most attering demand ever made by artists to distributors of orks of art. It began by acknowledging Turner as the reat modern master, and ended with the signatures, mong others, of Degas, Monet, Pissarro, Renoir, Sisley, nd Manet. The letter's object was to obtain exhibiting pace at the fashionable gallery. Now if, in London, we ere so fortunate as to have a gallery so fashionable, it ould be begging for examples of the works of the signaories of the wonderful letter. Failing such a gallery, it is atisfactory that London is still publicly privileged to see uch works at semi-private galleries like those of Messrs. noedler and Messrs. Agnew. Small such shows must e, but from experience we know that they are great in uality.

The present exhibition at the Knoedler Galleries covers a eriod of about 140 years, a period including the birth of ngres and the death of Renoir, happily including also some reat artists still alive. It is the fashion to say that Ingres as the signal representative of the classic school of his me, but he was only classic in manner and in taste; he as in spirit a realist, and, moreover, in practice he was a omantic, and he was the precursor of the freedom which d to the letter of the artists to the Grosvenor Galleries, he letter of the free artists in France. A study of his Mdlle. Gonin, plustard Mme. Thomegeux," dated 1821, n this exhibition is sufficient to indicate this. Its classicism es only in its serene repose; its romanticism in its supreme aturalism. Anything was possible to an art that could roduce such a portrait, as anything was possible to an art hat could produce Turner.

Géricault carried the romantic spirit a little farther in pite of his formalism, and cleared the way for Delacroix nd the full tide of Romanticism, and for the beginning of he flow of Impressionism, soon to arise, and that of the lein-airists : in point of fact from Ingres to Millet covers the hole convulsion from the old to the new, and its settlement y the end of the nineteenth century. These years are epresented, not only by examples of those men who signed he letter, but by such other masters as Monticelli with his ormal impressionism, Courlet with his mild naturalism, amnier the belated romantic, and Eugène Carrière the nqualified impressionist.

Agnew's Gallery.

Here the examples exhibited are more inclusive, for aul Cézanne is represented, but not well. Manet, on the ther hand, is seen in his completely truthful "Le Bon ock," and in his hardly less superb "La Brioche." It is ell to see these masterpieces instead of inferior works of heir creators, for it must be confessed that in some ases reputations have been made in Paris and estroyed in London. In the twenty works here to be seen here is nothing destructive to that extent, however, while most of the reputations of the artists represented can only e enhanced. Degas, by way of example, is seen, not only y two very fine ballet pictures, but by one of horses (and t the Knoedler Gallery by two more), which are the more nteresting as following the plastic equine studies seen ecently at the Leicester Galleries. Moreover, there are imortant pictures by Monet, Sisley, and Renoir, and one by outure, which almost make an exhibition in themselves.

Tooth's Gallery.

The range of French art to be seen in Bond Street is xtended a little at Tooth's Gallery where Hennen is represented by a characteristic reclining nude, Harpignies by the nportant and large "Le Château de Clisson," and Royhet by a fine "Cavalier." A small and simple "Spanish Girl," and the "Head of a Boy," by Mancini, are among the miscellaneous pictures, which include also Lord Leighton's "Summer Slumber," and three sea-pieces by Henry Moore.

Independent Gallery.

Extreme modernism as practised in England is exemplified in Duncan Grant's work. Frankly, the still-life is best shown in No. 7, where it is made to resemble a jolly Victorian piece of comfortable wool-work. Other pieces of still-life are naturalistic, and in some cases verge on a realism which is neither empty nor uninteresting. In these Duncan Grant is more himself and less the disciple of Cézanne and Cézanne's followers.

Paterson's Gallery.

Benjamin Nicholson, son of a distinguished father, and his wife Winifred, are also among the moderns, and do not mind exhibiting the stages by which their present position has been reached. That Benjamin possesses a palette of many colours is to be seen in at least two landscapes, here shown, whose remembrance is entirely pleasant. Mrs. Nicholson's development is less pronounced.

The Gieves Art Gallery.

Ernest Castelein is a Belgian, I believe, and as an artist holds that women should be made as beautiful as powder and paint can make them—and says so. He does not despise clothes, and makes a brave show of them as well as of their wearers. He paints very smoothly, and leaves nothing to light nor to the imagination: fashionable women and, no less, fashionable men are his best sitters.

The Vicars Galleries.

That the art of mezzotint in colours is still in a healthy state in England, the forty-two plates of Sydney E. Wilson, the output of about nineteen years of work, very emphatically prove. The show is a brilliant one, and the mezzotints included are after well-known pictures by Greuze, Reynolds, Gainsborough, Romney, Morland, and others.

Design and Industries Association.

With a view of showing how much better it would be in England if books were once more illustrated by woodcuts, a fine exhibition of modern French work in this direction is now on view at 6 Queen Square, just off Southampton Row. After Bewick, a splendid school of wood-engraving was established in England which flourished abundantly till the middle of the nineteenth century, and culminated in the work of the brothers W. J. and H. D. Linton. Process work killed it at a later stage, but before doing so H. D. Linton had been to Paris to teach the craft again, for it had been lost in France for many years, and W. J. Linton had gone to America, there to teach the truth as practised by Bewick in his white line, and to strengthen the fine school of American wood-engraving. Then process held sway for half a century, now it is in a decline, and both here and in France and America the great art and craft of wood-cutting is again coming into its own.

The Fine Art Society.

Nearly sixty etchings have been brought together in this show, many of them nudes, some of them portraits, but few of them architectural. They proclaim Zorn's joy of life, for they are all by the great Swedish painter-etcher-sculptor. They are all accomplished, and they are all characteristic: no one would mistake an Anders Zorn. This is a fine and representative collection.

KINETON PARKES.

The London University School of Architecture Exhibition

It is always engrossing to watch the exhibitions of a school of architecture and get an idea of the kind and quality of teaching obtaining, and the amount and quality of work done there from time to time. The exhibition of students' work at the London University School of Architecture is no exception, and the work which was on public view at Gower Street gave one the impression of increased vigour on the part of staff and students alike. A proof of the school's increasing appeal lies in the fact that the curriculum is being enlarged and lengthened; a "Degree of Architecture" is about to be instituted, to be won by students at the end of their fifth year when that, too, is added; so far it is only a four years' course. With the change students will be able to get a "Diploma," to be recognized by the R.I.B.A., on passing into the last year. All this is to the good, and the competition should become keener.

In the most advanced section on view at the exhibition are three designs for "A University Athletic Centre." Mr. Theobald has sent in a set of some merit, and one which has been thoughtfully considered. The elevations have a pleasant reticence, and the fenestration is successful, and is made the more attractive by the treatment of the Corinthian portico. Unfortunately the rendering is too slight. A pure line drawing would have been better than the attempt made in monotint. Mr. Sisson has chosen to round off both ends of his "Gymnasium" and "Baths," and to give a little too much substance to the central block. The Ionic portico is a little too lively for the long, plain wall surfaces about it which, to our mind, are inadequately considered, the windows suffering from a paucity of handling. The central feature above has too many openings. The side elevation is somewhat unhappy; with such a formal scheme it might have been better to treat the returns of both entrances alike, or, at any rate, make them butt against the main fabric at a more or less uniform height. The rendering is also much too timid. In the scheme of Mr. E. G. W. Eve the side elevation is the best. It hangs together and shows a distinct sense of rhythm.

The next subject in importance was "A Concert Hall," for which five or six designs were sent in. All the plans, in a way, are similar, with entrances on three sides and the bulk of the design assuming a rectangular shape. Mr. O. M. Welsh has gone in for Neo-Grec elevations; he is not the only one. His five large doorways are flanked by two small ones, but the subtle disparity of size between them is not yet happy; a contrast has been sought but not found. The section shows possibilities. Mr. D. Greenidge has a poor elevation; the lack of coherence between the organic parts is very noticeable. Both designs have almost identical plans. The best of this series is the design submitted by Mr. P. M. Patker. The plan is condensed, has an adequate foyer and a wider stage, and the elevations have dignity and refinement.

The three designs for a "Jutland Memorial," though not original, have reached a certain modicum of excellence. Mr. G. Nicholson's suffers from an unhappy outline; the battering given is still tentative. Mr. Patker's, taking it all round, is the best because it is the most effectively monumental.

We liked Mr. Morgan's design for two industrial dwellings. It is simple and straightforward, and one feels that its author is not oblivious of modern problems and methods, even though the drawings smack of transatlantic methods. There are some useful measured drawings of St. Magnus the Martyr, London Bridge, and a neat-looking section of the staircase at Cromwell House. The work submitted by the first and second year reaches the standard to be expected.

A special room is reserved for the designs submitted for the "Lever Prize Competition." The subject was a "King's Cross Improvement," and the first prize of £15, in the town-planning section, was won by Mr. H. S. Triscott. The winning lay-out, once selected, was then passed on t the architectural section for two elevations to King's Cros Station. The first prize of £15 was won by Miss Barbar Pouschkine, a young Russian lady of promise, whom w congratulate for a scheme delicately rendered. Hers is no a very considerable contribution, no doubt, but it is pleasant one. The three big arched openings, however accord none too well with the sequence of small window on either side: the change is too abrupt, making the façad appear frankly *décousu*. The second prize of £10 wa divided between Mr. A. Sisson and another gentleman whose name, we regret to say, was illegible. Mr. Sisson has certainly evolved a nice side-elevation. The illegible gen tleman has failed to introduce much scale in his main elevation which, for all that, does strive to express a station without the use of columns, heavy rustication and sculptured motifs. His five bays, it is true, are, o rather seem, too large, and their framing defective, but the mere attempt to attempt without the crusty help of convenient formulæ is worth encouraging. May we suggest that the view from the corner would not be pleasant?

The work done by the evening school, considering the usual disadvantages of such arrangements, is creditable to staff and students. Wisely, no ambitious schemes are tackled. The designs for "A Country House to cost no more than £5,000," a "Golf Country Club," and a "School Library," are carefully studied.

G. H.

Strand-on-the-Green

It may be of some interest, from the public point of view to state that the R.I.B.A., through its Art Standing Committee, made enquiries of the local authority as soon as it obtained knowledge of the intention to build a new wall and make other changes affecting the amenities of Strand-on-the-Green, Chiswick. The Institute wrote several times officially to the Chiswick Urban District Council offering its advice, with a view to the contemplated works being carried out in the way least calculated to spoil a very charming portion of the Thames-side. But it was only after long delay that the Chiswick Council expressed its willingness for representatives of the Institute to meet its members and officials to discuss the question.

Members of the R.I.B.A. Art Standing Committee accordingly attended a meeting at the site, and then discovered that the whole of the foundation of the new section of walling at present being dealt with was actually in position, and a fairly long stretch of concrete walling almost completed, faced with rubble walling of a most mechanically uninteresting kind entirely out of harmony with its surroundings. The Institute's representatives pressed that the exposed portion of the wall still to be completed should be faced with old bricks of the character shown in portions of the existing adjacent river walling and in the very charming houses lining that part of the river, and should be finished with a thin plain stone coping, also of the character of the work in the vicinity. It was understood from the surveyor to the Council that they had a quantity of suitable old bricks in store that could be used, and after discussion the chairman of the Council and other members attending agreed that this change in treatment of the wall should be arranged for.

About three weeks later a letter was sent by the clerk of the Chiswick Council to the secretary of the Royal Institute stating that they felt a difficulty in making this adjustment of their contract, and that they were accordingly proceeding on the lines originally arranged for. The Institute is unable to understand the difficulty to which the clerk of the Council refers, as variations of this sort in a contract are usually easy of adjustment, and it would appear that in this case the change suggested and agreed upon might even have effected a saving in the cost of the work.

In view of the concern of the local residents in this matter, and the public interest that has been shown in preservation of the amenities of a recognized riverside beauty spot, the R.I.B.A. considers that these facts relating to the question should be known.

'he R.W.A. School of Architecture : Its Aim and Work

The Royal West of England Academy School of Archi- cture has been established for two years, and has proved . educational value. Architects, builders and others ntributed liberally to the funds necessary for the estab- hment of the school, but for its continued maintenance d development an annual sum is required of at least oo over and above the amount accruing from students' s and it is essential that the list of annual subscribers ould be substantially increased. The school was founded the Bristol Society of Architects under the auspices of e Royal West of England Academy. It occupies a unique sition, in that it is the only school of architecture in the est of England, and moreover it is controlled by practis- architects, which factor contributes so much to the ccess of the Architectural Association Schools in London, which this school is affiliated.

It is the aim of the school to further the interests of chitectural education in the West of England, not so uch by training clever draughtsmen as by providing that ndamental instruction and discipline in the art, science, eory, and history of architecture which, supplemented by actice in an architect's office, shall qualify the student r the independent practice of his profession. The studios e situated in the building of the Royal West of England ademy. A school loan and reference library is available r students, and special books, photographs, diagrams, ntern slides, etc., are loaned by the Architectural Asso- ation as required. The Master of the School, Mr. G. D. ordon Hake, A.R.I.B.A., for some years master at the chitectural Association Schools, is responsible for the aching given, and is assisted, as occasion arises, by ecialists in the various subjects of the curriculum. udents of the school are Student Members of the Academy, which they are eventually eligible for election to the ssociateship (A.R.W.A.).

Appended is a list of prizes and studentships :—

Advanced. Grade 1.—The Dame Janet Stancomb-Wills avelling Studentship of £25 ; The Architectural Associa- n Design Prize of £5 5s. ; The R.W.A. Silver Medal and S.A. Prize of £3 3s.

Grade 2.—The Savory Design Medal.

Preliminary.—The R.W.A. Bronze Medal and B.S.A. ize of £2 2s.

The Students' Club, of which every student of the school a member, exists for the purpose of bringing the students gether for mutual help and recreation. Meetings are ld once a fortnight, at which papers are read by individual embers, followed by general discussion. During the mmer the club arranges excursions for measuring and etching, and provides sports.

The Constitution of the Council and the School Com- ittee is as follows :—

The Council.—President : The President of the Royal est of England Academy, Dame Janet Stancomb-Wills, B.E., H.R.W.A. Vice-President and Chairman of uncil : The President of the Bristol Society of Architects. onorary Secretary : E. H. Button. Members of Council : aham C. Awdry, F.R.I.B.A., R.W.A., Mowbray A. een, F.R.I.B.A., R.W.A., George H. Oatley, F.R.I.B.A., W.A., S. S. Reay, F.R.I.B.A., R.W.A., Sir Frank W. ills, F.R.I.B.A., R.W.A., J. Bertram Wills, F.R.I.B.A., W.A., Members of the Council of the Bristol Society of chitects ; Frank N. Cowlin, Hon.Assoc.B.S.A., E. F. bian, R.W.A., Hon.Assoc.B.S.A., Members of the ademy Council ; Advisory Director of Education : bert Atkinson, F.R.I.B.A. (of the Architectural Asso- ation).

The School Committee.—Chairman : The President (or Vice-President) of the Bristol Society of Architects. The esident of the Architectural Association (representing the Architectural Association) ; T. H. Weston, F.R.I.B.A., Lt.-Col. P. G. Fry, C.M.G., D.S.O., F.R.I.B.A., Fellows of the Bristol Society of Architects ; T. Skinner, A.R.I.B.A., H. E. Todd, A.R.I.B.A., Associates of the Bristol Society of Architects ; A Student of the School.

This appeal to the public for funds can be fully supported by precedent, for from time immemorial the arts have depended on patronage. It is a significant fact that amongst the most promising students of this school are those who are unable themselves to pay for a sufficient education.

The Study of Modern Architecture in America

Last autumn the Society of Architects on the initiative of and with the assistance of a generous donation of one of its members, established a scholarship for the study of modern architecture abroad. It is of the value of £300, and was offered this year for the study of modern architecture and methods in the United States of America. The announcement drew from the recent Convention of Architects in Washington a resolution felicitating the Society upon its action. It may therefore be assumed that the holder of the scholarship will be able to pursue his studies in the States under the most favourable conditions with the co-operation of leading American architects.

The report of the jury of assessors charged with the duty of recommending a suitable candidate for the scholarship has just been confirmed by the Council of the Society, which has awarded the first scholarship to Mr. R. A. Cordingley, of "Glenorchy," Irlam Road, Sale, Cheshire, who was articled to Mr. R. J. McBeath, M.S.A., of Sale, and after four years' army service entered the Manchester University School of Architecture, where he won the R.I.B.A. Henry Jarvis Ex-service Travelling Studentship in 1920 and 1921, and also the Manchester Institute of Builders' Travelling Scholarship in 1922. He was elected an Associate of the R.I.B.A. the same year, and was successful in winning the Rome Scholarship in Architecture for 1923.

The scope and conditions of the Society's scholarship render it not merely of educational value to the holder, but a means of securing through him for the profession a serious contribution to the information and original thought available in respect to modern architecture and its development abroad.

The Trehearne-Norman premium of £15 offered by the Society every three years for an essay on some subject of professional interest has been awarded this year to Mr. F. R. Jelley, of "Fairview," Cedar Road, Sutton, Surrey, for an essay on "The Influence of High Buildings on Civic Development." The essay when published will be found to be a useful and suggestive contribution to a subject which is being very widely discussed in professional circles at the present time.

The following candidates satisfied the examiners in the recent examination to qualify for candidature for membership in the Society of Architects : James Ernest Firth, 83 Burton Road, Lincoln ; Charles Beresford Marshall, 54 Grey Street, Newcastle-upon-Tyne ; Frederick Uriah Jenkins, 18 Cyprus Avenue, Church End, Finchley, N.3 ; Duncan St. Clair Macphail, 130 Marchmont Road, Edinburgh ; Frederick Charles Button, 5 St. Hilda Road, Folkestone.

The majority of the candidates who took the examination were relegated in various subjects, and most of them failed to reach the standard set by the Society in architectural composition and design. It is with a view to supplying a deficiency in the facilities for architectural education in this subject, with which candidates in the smaller towns are faced, that the Society's correspondence course in architectural composition and design is meeting with such support as to call for an extension of its scope and facilities.

Law Reports

Reasonable Time to Repair

Aston Construction Co., Ltd. v. *Maskall.*

June 26. King's Bench Division. Before Mr. Justice Branson.

Plaintiffs, as ground landlords, sought to recover from the defendant possession of 20 and 21 Parr Street, Hoxton, on the ground of breach of a repairing covenant.

His Lordship, in deciding for the plaintiffs, said when the plaintiffs' solicitors wrote that they were about to take proceedings the defendant's solicitors replied that the repairs were being carried out and would shortly be completed. Afterwards defendants said the repairs had been completed, and made another suggestion for the purchase of the leasehold interest by the plaintiffs. The plaintiffs asserted the defendants had not complied with the notice. The notice was in March, giving three months for repairs, and nothing material was done till July, when there was the question of purchase and sale. Plaintiffs in July made it plain they intended to proceed, and defendants took no notice for three months. He thought the plaintiffs were justified in considering that a reasonable time for executing repairs had elapsed, and they were entitled to proceed for possession. Defendant asked, in that event, for relief from forfeiture. The result was that plaintiff was entitled to judgment for possession, but defendant was entitled, having done the repairs, to relief against the consequences of breach. Plaintiffs would have costs to the date of the payment of an amount into court by the defendant.

Architects and Scheduled Work

Aston Construction Co., Ltd. v. *Bicker and others.*

June 26. King's Bench Division. Before Mr. Justice Branson.

This was an action by the Aston Construction Co., Ltd., of Eagle Wharf Road, Hoxton, seeking to recover from Mr. J. W. Bicker possession of a house situate at 24 Bracklyn Street, Hoxton. Two other defendants, named Marshall, were also cited. The contention of the plaintiffs was that there had been a breach of the repairing covenants. They also sought to recover £12, a year's ground rent.

On behalf of the plaintiffs, Mr. Chas. Wm. Calcott, of Staple House, 51 and 52 Chancery Lane, with thirty years' experience as architect and surveyor, and Mr. R. A. C. Churchward, architect and surveyor, of Victoria Street, gave evidence that the house required the work done to it that was scheduled, in order to put it in tenantable repair.

Mr. Henry Smith, of 37 High Holborn, member of the Society of Architects and Fellow of the Surveyors' Institution, for the defence, stated that he was surveyor for an adjoining estate with 3,000 properties, and in his view there was nothing the matter with this house except a small pane of glass cracked in the fanlight. Had he been reporting to a client he should have said it was in fair, but not perfect repair. He thought the requirements of repair were harsh. The house was rated at £22.

His Lordship, after hearing the evidence, held that the action failed as regards the breach of covenant. He said here the contest was over the words in the lease, "keep in complete tenantable repair and condition." Before the reversion of the property to the plaintiffs the preceding ground landlord had sent notice when ground rent was due. Plaintiffs did not do so, and they must have the £11 8s. paid into court in respect of ground rent with, on that head, costs to date of payment in. Mr. Calcott's standard in his schedule of dilapidations was out of all proportion to maintain houses of this size and character, in this neighbourhood, in complete tenantable repair. He had evidently in his mind a completely wrong idea of what complete tenantable repair meant as a matter of law. He had agreed that the house was tenantable as regarded the tenants who were in it, and one of them, in fact, had told the court that whenever she asked for anything to be done the landlord did i Mr. Churchward thought the first floor was not in tenan able repair because paint and ceiling were dirty, and h thought papering and plastering were needed. That was matter of degree, always to be considered in regard to th wants of the tenants, and his Lordship did not think th plaintiffs had made out their case. It had not been established that, even if there had been no shortage, the hous was in such a condition that a reasonably-minded tenan would not have taken it. In the three preceding years £6 had been spent on it, some of it in reconstructing a wal but in any case more than £10 a year that plaintiffs' su veyors thought was reasonable. The action, as far as i was based on a breach of covenant to repair, failed, an there would be judgment on that head with general cost for the defendants.

Alleged Water Nuisance

Cooper v. *Margrie.*

July 2. Chancery Division. Before Mr. Justice Romer.

This was an action by Mr. Hyman Cooper, seeking, a owner and occupier of 158 Falcon Road, Clapham Junctio an injunction to restrain Mr. S. H. Margrie, owner of 16 Falcon Road, from allowing water from the basement of hi premises to percolate into plaintiff's cellar and damag his goods.

Both houses were built on the site of an old water-cours known as the Falcon brook, and plaintiff's case was that th defendant's tenant in excavating the basement for the purpose of installing printing machinery tapped the culvert letting in the water which percolated into his (plaintiff's cellar.

Defendant contended that the upper part of the brook wa diverted into the sewer and the rest of the ditch was fille in and not culverted. The water in plaintiff's premises di not come from the defendant's basement, the water in eac case being due to rainfall and gravity.

Mr. F. R. Myhill, chartered surveyor, Clapham Junction gave evidence for the plaintiff; and Mr. C. W. Reeves of C. W. Reeves, Son and Rason, architects and surveyors for the defendant.

His Lordship held that the defendant's contention wa right and dismissed the action with costs.

A Builder's Successful Claim

Woodward v. *Bygraves.*

July 7. London. Before Sir Edward Pollock, Official Referee.

Sir Edward Pollock, Official Referee, resumed the hearin of the action by Mr. C. D. Woodward, builder, of Biggleswade, against Mr. Percy Bygraves, market gardener, o Upper Caldecote, to recover the sum of £1,307, balanc claimed to be due under a contract for the erection of house, store, etc., at Upper Caldecote. There was a counterclaim. The Official Referee had already given judgment o the question as to what was the contract between th parties, and on that issue he found in favour of Mr. Woodward. The question now discussed related to the amoun owing under the contract. The evidence in the case wa heard at the Shire Hall, Bedford.

Mr. Marriott was counsel for the plaintiff, while Mr Eales was counsel for the defendant.

Mr. Eales dealt with differences in figures submitted b Mr. Wood (on behalf of the plaintiff) and by Mr. Stonebridge (on behalf of the defendant), and submitted tha the figures of Mr. Stonebridge were the more reliable. O the whole case counsel contended that a sum of £420 onl was due to the plaintiff.

Mr. Marriott submitted that Mr. Stonebridge had give prices which were lower than those stated in the buildin and architectural journals at the time, and argued that th ree should accept the evidence of Mr. Wood (quantity yor) and Mr. Cockerell, who prepared the plans. The s of the account numbered 439, and it was therefore urprising that a few errors crept in. These amounted 4, and that sum should be deducted.

e Official Referee, giving judgment, said Mr. Eales called Mr. Stonebridge as his principal witness, urging Mr. Stonebridge had the advantage of measuring the l work done whereas Mr. Wood's evidence was based measurement of the plan and specification. Mr. Eales nded that in a sense it was better to have the measure- of somebody who actually measured the work than neasurement of somebody who followed the plan and fication. If there were nothing else than that, one t say, "Yes, it looks quite proper and right," but, then, were curious facts about this particular case. Mr. erell was a gentleman who prepared the plan and fication; he knew all about it. It was true the plan specification were not followed, but Mr. Cockerell said, ind the house and other buildings were erected in rdance with the plan and specification except that a in the store is six inches higher than shown in the " With regard to that Mr. Cockerell supported the s, and was prepared as far as he could to say they were nable. With regard to Mr. Stonebridge one felt that ust have made an extraordinary mistake about the s because it was perfectly clear upon the evidence of lefendant himself. According to the plaintiff's evidence s to within 250 of those carted to the premises were ; according to the evidence of Mr. Stonebridge there have been over 8,000 bricks left. That could not be use it was not suggested for one moment on behalf of Bygraves that any bricks were left over. According to Bygraves over 62,000 bricks were carted to the pre- s, and one must obviously come to the conclusion that whole of the bricks carted there were used, and, there- Mr. Stonebridge's evidence about bricks was quite ng. Then there was another matter which certainly most curious and showed that one could not place lute reliance upon Mr. Stonebridge's evidence. That was in reference to the counter-claim regarding the deficiency of work done. A claim was made by the defendant for £8 9s. When Mr. Stonebridge came to give evidence he allowed £15—nearly double the amount. That was very extraordinary; that showed one could not place reliance upon Mr. Stonebridge's evidence. Mr. Woodward seemed to be a man who was thoroughly honest and straightforward, his books appeared to be perfectly properly kept; and he showed he had expended on these buildings an amount which figured about 12½ per cent. profit. According to his (the Referee's) experience, if that was to include, as he understood it did, Mr. Woodward's own work upon it of supervision and establishment charges, it was a very small amount. Therefore, in that respect, he (the Referee) thought Mr. Woodward had not overcharged. Mr. Marriott had admitted there were certain items to come off, and there might be some little doubt about the claim for insurance liability. Therefore, he (the Referee) proposed to deduct from the amount claimed a sum of £64. There must be judgment for the plaintiff for the amount of his claim, less £64, with costs, and judgment for the plaintiff on the counter-claim, with costs.

Mr. Marriott: As the amount claimed was £1,307, your judgment is therefore for £1,243, I think.

The Official Referee: I think so.

Mr. Eales said that in view of the large amount involved and the serious matters raised by the defendant he was instructed to ask if the Referee would grant a stay of execution.

The Official Referee: Certainly; on terms of bringing the money into Court.

Mr. Eales: The whole amount, do you think?

The Official Referee: Yes. Bring the money into Court within ten days. On the usual terms you shall have a stay of execution.

Mr. Marriott: We have been waiting for our money for two years. If notice of appeal is given and the money is paid into Court within ten days, then there will be a stay of execution until the hearing.

The Official Referee: The usual undertaking.

Parliamentary Notes

[BY OUR SPECIAL REPRESENTATIVE.]

Houghton Towers.

r. Wells asked the First Commissioner of Works if he ld make an order under the Ancient Monuments Con- lation Amendment Act, 1913, for the preservation of ruins of great literary and historical interest, known as ghton Towers, Bedfordshire?

r John Baird said that as the ruins in question had not recommended by the Ancient Monuments Board to be duled under the Act as of national importance, he etted that he did not see his way to issue a Preservation r, which would have to be confirmed by a Bill in Par- ent. He, however, greatly deplored the proposed ruction of such an interesting building.

The Sale of Works of Art.

r W. Sugden asked the Financial Secretary to the sury if he was aware that famous historical and onal books, pictures, and works of art were now being by proprietors of industrial concerns to Americans to le them to pay income tax and other taxes, and whether ould make provision by legislation that such works to national or municipal collections at a fair and table price by method of valuation to prevent their ing out of the country altogether?

r W. Joynson-Hicks said that the question had been idered by the trustees of the National Gallery, who advised against the suggested legislation, as they did not think it was necessary.

Housing Progress.

Mr. N. Chamberlain informed Mr. Ede that according to a return made in 1919 by local authorities in the administrative County of Surrey, the total number of houses required by them for the working classes was 9,028, and 3,538 houses had since been built by local authorities in the administrative county. Information as to the total number of houses built by private enterprise was not available, but financial assistance had been given under the Housing, Town Planning, etc., Act, 1919, to the provision, in the administrative county, of 214 houses by public utility societies, and under section 1 of the Housing (Additional Powers) Act, 1919, to the provision of 2,249 houses. A return obtained in March last, which did not include rural districts outside the Metropolitan Police district, showed that in the County of Surrey 732 new houses of less than £35 annual value had been completed between September 30 and March 31, and that 881 houses of five rooms or less were under construction at the latter date.

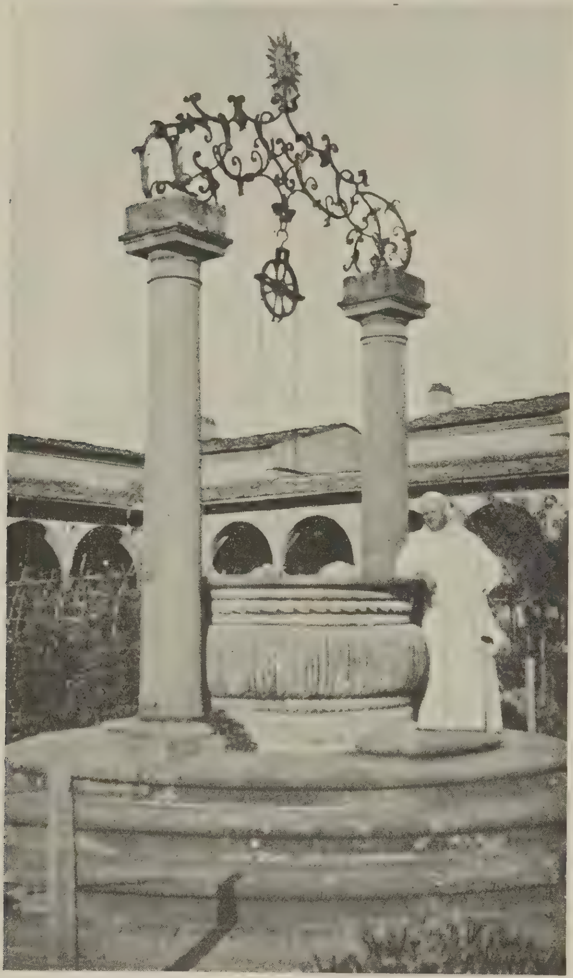
Municipal Savings and Housing Banks.

Mr. Leach, a Labour member, has introduced a Bill to enable local authorities to establish and maintain savings and housing banks.

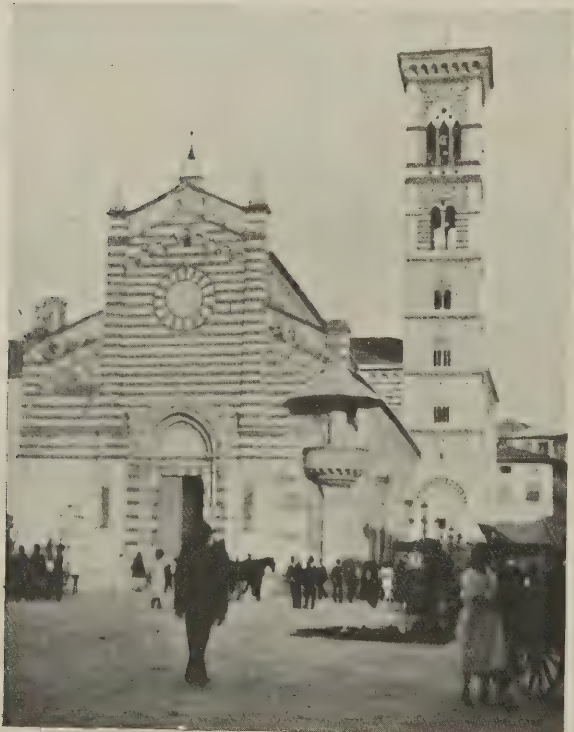
A Pictorial Review

Illustrations of Topical, Practical, or Curious Interest

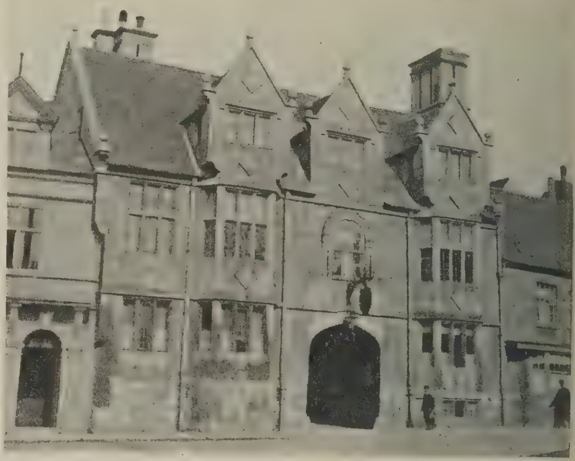
Readers are invited to send in sketches and photographs for publication in these pages. A fee of 2s. 6d. will be paid for each illustration accepted. Contributions should be accompanied by short explanatory notes.



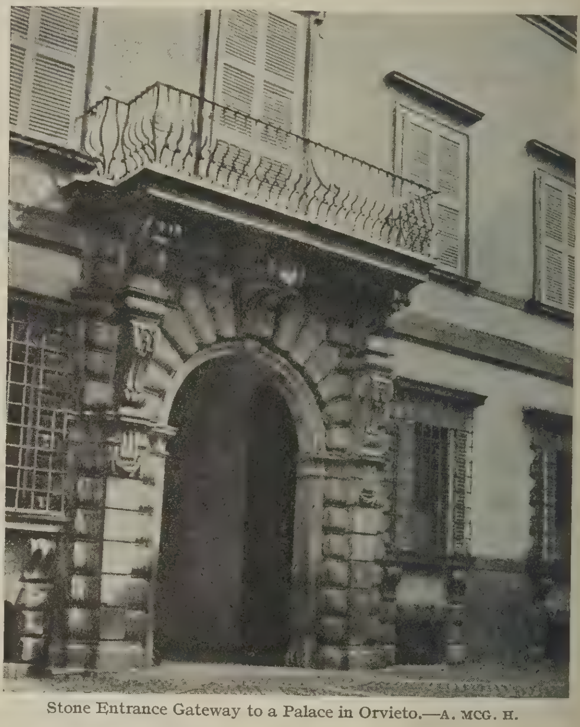
A well-head in the Carthusian Monastery at Florence (Certosa di Firenze) said to have been designed by Michael Angelo.—D. S. M.



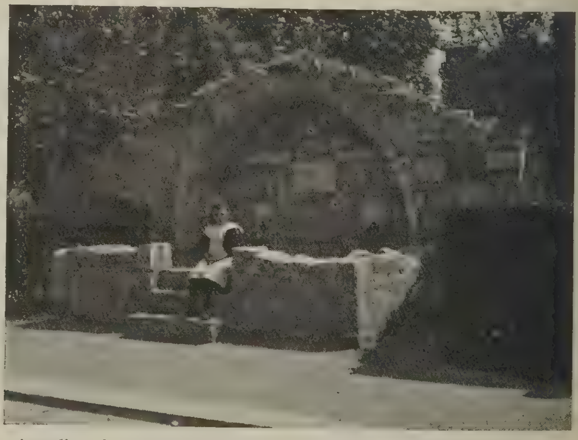
On the façade of Prato Cathedral there is an interesting corner pulpit designed by Donatello and Michelozzo (1434–8).—R. E. E.



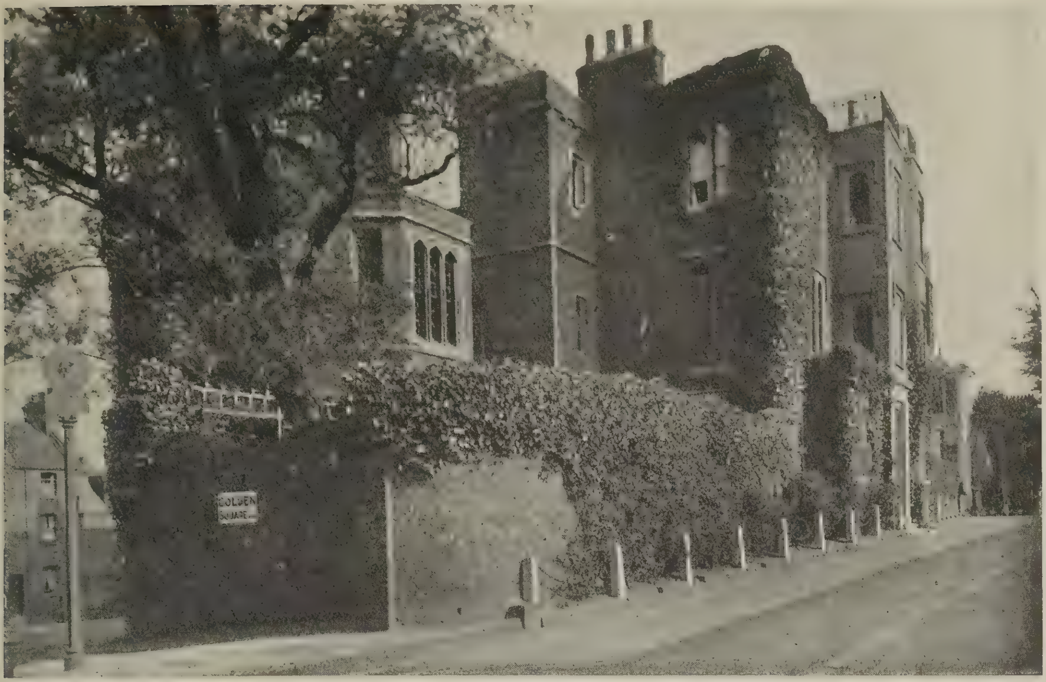
The Talbot Hotel, Oundle, Northants, built from the ruins of Fotheringay Castle. It contains the oak staircase from the castle, and the window of the banqueting hall where Mary Queen of Scots was beheaded.—J. B. T.



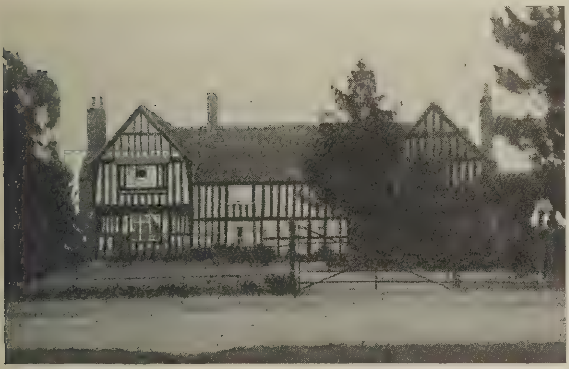
Stone Entrance Gateway to a Palace in Orvieto.—A. MCG. H.



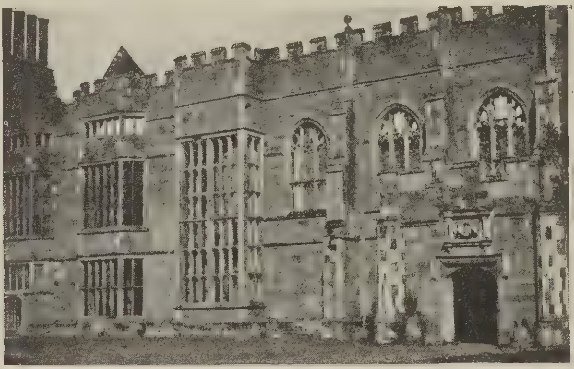
A replica of the Well of the Blessed Virgin at Nazareth in a street at Westcliff, near Southend-on-Sea. It was built in accordance with photographs of the original taken by the Rev. A. Waller, the vicar of St. Paul's, Westcliff.—J. B. T.



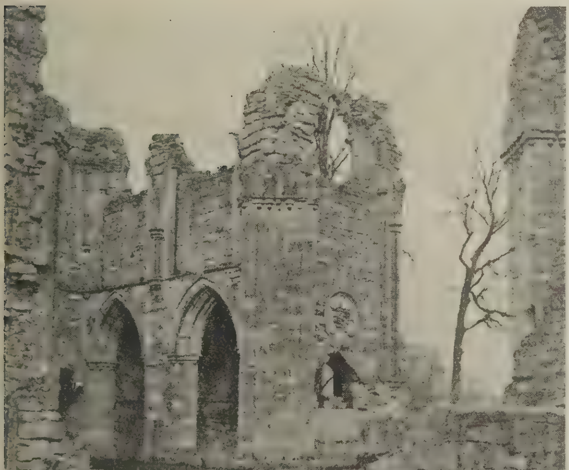
The late George Du Maurier's House at Hampstead is one of the beautiful old houses that give Hampstead its character.—H. J.



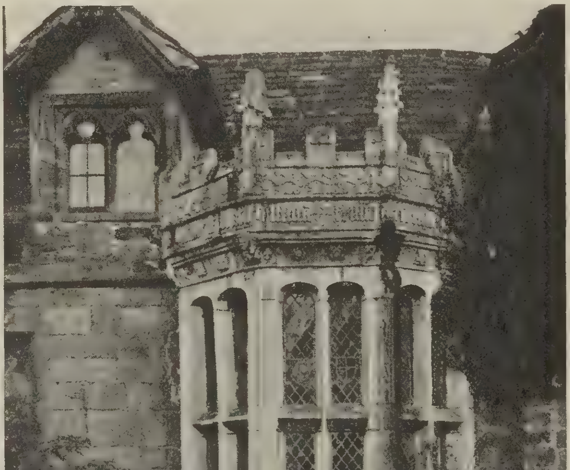
Clifford Chambers Vicarage, near Stratford-on-Avon. Tradition has it that Shakespeare was born in this house.—J. B. T.



Cowdray, Sussex. The west front shown in photo was the work of the Earl of Southampton between the years 1530–1543.—J. H.



Bayham Abbey, Sussex, was founded in the reign of Richard I. The view shows the north transept and corner of chancel.—H. A. J.



The bay window at Kiddal Hall, near Leeds, was built in 1501. The windows contain the coats of arms of the Ellis family, who owned the house.—G. P. W.

Little Things that Matter. XIX—Brickwo

By HARVEY R. SAYER, Assoc.Mem.Inst.C.E., A.R.I.B.A., F.S.I.

ARCHITECTS usually are of opinion that mortar is used in brickwork to cement the bricks together. Many bricklayers, however, in the employ of the speculative house-builder imagine that the use of the mortar is to separate them. Consequently they lay the bricks in the following manner without wetting the bricks before or after laying. They put an insufficient bed of mortar on the outer edges of the wall, and leave the middle portion of the existing bricks bare. Then they place the brick to be laid on top, and tap it down with the trowel, thinking that the mortar will squeeze along under the brick and make a solid joint in the centre of the wall. If, after the mortar has set, the brick is carefully lifted from the wall, then it will be found, in most cases, that none of the joints has been filled up.

The proper way to lay bricks is, in most cases, to wet thoroughly or soak the bricks first (this is unnecessary with Staffordshire blue bricks), and to wet the top of the existing wall, then spread a thick layer of mortar all over the wall and press down the new bricks into it, with their frogs uppermost. After being laid, the whole course should be grouted by heaping mortar on the wall, softening it with water from a "gauge-pot," and working it over the wall with the trowel until it has flowed into and filled up solid all the vertical joints.

According to the current prices for building work, published in the technical Press, reduced brickwork in Portland cement and sand costs about two pounds per rod more than reduced brickwork in lime mortar. Theoretically it can be proved that it is cheaper to build brick walls for houses in cement on modern principles than to follow the old-fashioned Flemish bond 9 in. wall in lime mortar principle, but against this theory must be set the average bricklayer's dislike for any departure from his usual custom of building.

In a 9 in. wall in Flemish bond in lime mortar the weakest part of the wall is the joint. The life of the wall, and its strength to resist compression, is the life and strength of the joint, therefore care must be taken to bond the bricks correctly. The weakest and least durable part of a brick wall in cement, with ordinary bricks, and not Staffordshire blue bricks, etc., is the brick itself, so that the bond across the wall can, if necessary, be dispensed with. Moreover, the ordinary house-building brick is generally porous, absorbing from about one-sixth to one-seventh of its own weight of water. Thus, in the case of an exposed south-west flank wall of a house, if the wall is only 9 in. thick, the headers will at times convey the wet through the wall and render the inside damp. The old-fashioned Flemish bond wall in lime mortar, by the way, is more watert
when it is badly built with empty inner joints and
snap headers instead of through bricks than when i
properly built (Fig. 1).

The damp difficulty may be overcome by buildin
hollow wall of two half-brick thicknesses with a spac
about 2 in. in between and inserting ties. A more effec
method is to build the two half-brick walls in cement
provide a cavity, about $\frac{3}{4}$ in. wide, for a height of ab
10 ft. When the joints have set this space is filled in f
above with liquid cement grout, one part Portland cem
to one or two parts of sand. This grout finds its way i
all the voids in the middle of the wall and forms a s
mass, thereby greatly increasing the strength of the
and at the same time making it more watertight (Fig.

In old buildings the brickwork often splits vertic
down the middle of the wall round the openings with
result that a space occurs between the outside portior
the brickwork and the framing of the door or wind
As this space develops there is a tendency for the out
part of the wall to bulge outwards, and it has to be ta
down and rebuilt (Fig. 3). The splitting of the wall, ap
from the bad practice of using snapped headers, is due
the lack of adequate bond round the openings. Instead
"king closers" being put in every alternate course up
sides of the opening, very often "bats," only half a br
deep, are inserted. It takes the bricklayer much longer
cut and build in a king closer than to use a bat, and i
only under careful supervision that he will insert the k
closer (Fig. 4). Where the reveals of the openings are
superior and more expensive bricks than those used for
ordinary facings of the wall some architects are cont
with one correct king closer in every fourth course.

When properly laid and bedded the old-fashion
slate in cement dampcourse is still a most efficient
provided there is no settlement under the dampcou
level. Many artificial asphalts are brittle when co
become soft in the heat of summer or near a heati
chamber, and squeeze out when under pressure. T
causes settlement and, if there is any sideway thrust, d
to the modern traffic on the roads against the walls
buildings with basements, may allow sliding on the dam
course (Fig. 5). Some architects claim that a slate dam
course cracks and becomes defective. This is due entir
to the slates being bedded in the cement compo only fo
portion of their bearing area or because the sand conta
stones of too large a size. To secure a good slate dam
course the cement compo should be free of all large partic
of sand, and each slate should be well rubbed down in

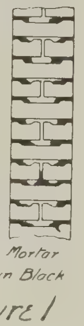


Figure 1

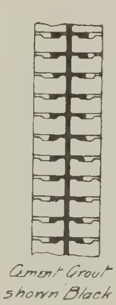


Figure 2.

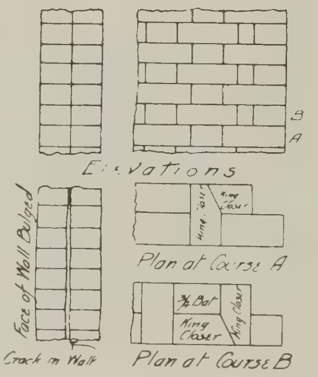


Figure 3. Figure 4.

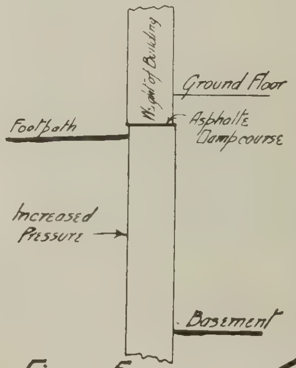


Figure 5.

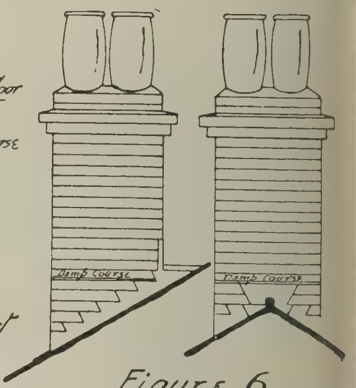


Figure 6.

e cement compo. At the same time it must be admitted at there is a greater affinity between bricks and cement mpo than between a good class of dampcourse slate and e cement compo.

The Ministry of Health's Housing Department Standard ecification for Cottages, issued in August, 1919, conned the following clause: “Slate dampcourses are to be d in all the chimney-stacks at the point where they rise ove roofs.” This is very seldom done in ordinary speculive house building. In a housing scheme carried out a local authority by direct labour this dampcourse was erted in all the chimney-stacks. One of the members the council, a builder, enquired why it was being done, in all his experience he had never seen it, and considered a waste of money. The reason why a dampcourse should inserted in the chimney-stack can be ascertained by pecting the chimney breasts in the rooms under the of of the average old house. Often an occupier complains the dampness in the wall at the top of the room over the eplace, and upon examination it is found that, generally eaking, the walls are quite dry, but the plaster over the eplace is damp. This is due to the rain striking the imney-stack above—which is very often in an exposed sition—soaking into the brickwork and slowly working way down the stack through the roof to the room low. A dampcourse inserted just above the roof through e stack stops the passage of the damp to the brickwork low. At the same time care must be taken that the ck is well protected with flashing at its junction with the of. Cement fillets so often used in inferior work are not satisfactory as lead aprons (Fig. 6).

anchester War Memorial Competition

Professor C. H. Reilly, F.R.I.B.A., in the course of an icle in “The Manchester Guardian” with regard to the andonment of the Manchester War Memorial Competition mmented upon in our last issue), says: “The difficulty ich has arisen over the war memorial is a very real one. ke any other real difficulty, there is right on both sides. e Corporation will not bind itself to accept the assessor's ard, and the architects will not compete unless it does. t us take the architects' difficulty first.

‘At bottom the architects' difficulty amounts to a recognin of the fact that there is at present in England very tle lay opinion on architecture which is reliable. There ess in regard to architecture than to any of the other arts. music, for instance, there is a large body of such informed inion, yet I doubt whether reputable musicians would mpete for a prize where laymen were to be the final lges. For it must be remembered the real prize in any hitectural competition is the structure to be erected. e premiums are only consolation prizes. Every architect npetes to win the chance of making the actual monument. thing else really matters.

‘Now for the other side. The laymen, in this case the rporation, are providing the money, and, being Englishn, they quite honestly feel that that gives them the right call the tune, though the tune be a hymn to great deeds be sung, it is hoped, through long ages. They are willing be advised by an expert, just as a man or woman in nishing a house often is, but like them they want the termining word.

“What, then, is the real remedy? I suggest it is to return the competition idea, but to empanel a jury of three perts instead of a single assessor. I would couple this th a really handsome sum to be paid to the winner if his sign is not carried out within twelve months. By paying h a fine the Corporation would be free of the competition, eed be, and could start again with a clean sheet. But I cy that with a jury the need would not arise. I think Corporation would be satisfied, and I am sure the comitors would be. A single assessor with the best will in world cannot resolve his own personal equation. The ticular assessor mentioned would have brought in as fine a field of competitors as any single assessor in the country. I know a number of the keenest young architects who were ready and anxious to compete under him. With a jury of three architects, however, more still would have come forward. I think England is the only country where the single assessor survives. In France and America the jury system is invariable. If we had it here three-quarters at least of the prejudice in the eyes of promoters against architectural competitions would, I am confident, be removed.”

[A letter on the subject addressed to the same newspaper by Mr. Paul Waterhouse is reprinted on page 113.]

Correspondence

The Bournemouth Competition

To the Editor of THE ARCHITECTS' JOURNAL.

SIR,—Close on 100 architects sent in designs for the recent Bournemouth Pavilion Competition. The problem was not a simple one, and one month's study and drawing by one man for each design is not an excessive estimate of the time required. That is equal to eight years of one man's labour. Yet the competitions committee of the R.I.B.A. still considers that a few days of the time of one man, not necessarily more gifted or experienced than some of the competitors, is sufficient for the assessing of such a mass of work.

What principles guided the assessor in the present instance the competitors will never know, since the reports are not issued to them; but it can be seen at a glance that the premiated designs contain serious practical defects of planning not to speak of more debatable points of expression, etc. That placed first has a restaurant and tea-room block in the form of a solid rectangle measuring about 140 ft. by 110 ft., the outer portions of which are called balconies and are lit by semicircular-headed openings in a massive wall. The inner portion is lit from these and from two roof lights, each about 8 ft. square. That is on the upper floor. On the mezzanine the windows are placed behind a colonnade so that the inner wall face is 10 ft. from the outer, while on the ground floor even that lighting is denied except on one side. The billiard- and reading-rooms are lit from an area. It is safe to conclude that this portion of the building will not be erected as it stands. If it is so erected public opinion on the soundness of the decision will certainly be shaken. If not, competitors' opinion will be.

These considerations are of the first importance to English architecture, for without complete confidence on both sides no progress can be made, and such confidence can result only when a thoroughly sound system of assessing has been established. In the instance under discussion no one could name an assessor whose fairness and ability are more completely beyond question, and this fact should set the matter clear of personal bias. It is the ability of any one man to give consideration—full and free from personal predilections—to each design that is in question. Preconceptions are inevitable, and only criticism by other minds can give them their true value. The advantage of trained men acting in concert is that the merit of each scheme as a solution of a problem becomes the ultimate consideration, and this, far from suppressing individuality, would tend to liberate the designer from the very real danger of studying the assessor and not the problem; while on the other hand, its results would tend to convince the public that complete suitability to its purpose was the aim of the architect—not an essay in some historical style. The objections to a jury system on the grounds of diminished fees seem to me to be unworthy of the profession, and the fact that the more highly trained architects of France and America consider it a necessity makes the continued opposition to it in this country the more surprising. I know that I am expressing opinions held by many and I trust that others interested will make their opinions known to the societies of which they are members.

J. MURRAY EASTON.

Enquiries Answered

Elm Weatherboarding.

C. F. writes: "Please advise me how to treat new elm rough weatherboarding. The boarding has received two coats of creosote, and my client is very disappointed with the resulting dark tone of the wood. Is there any possibility by treatment by lime or any other process of reducing this colour to some lighter shade, as silver-grey, for instance?"

—The creosoted boarding should in time bleach to a considerably lighter tone, and this might be expedited by coating it with a solution of hot lime for a few days, though I fear that the creosote will have penetrated so far that it may work out to the surface in patches. It is a pity that the elm boarding was treated at all as this is in my experience quite unnecessary for protection, and if left untouched, the admired silver-grey colour is reached in less than a year. G.

Sinking a Well.

G. writes: "Am I infringing any law, or can any action be subsequently taken against me for sinking a well on my own property, or on property which I have with my landlord's consent, if such a well seriously interferes with the supply in a public well just outside the property? The well in question is not very much used except in times of drought."

—You will infringe no law through sinking a well on your own property or on the property of another with his consent. We assume that your sinking will not disturb necessary support for your neighbour's land. No action can be successfully brought against you for depriving your neighbour of his supply of well-water. We assume that there is no local Act of Parliament dealing with the particular district affected. See the House of Lords case: Mayor and Council of Bradford *v.* Pickles, 1895. A.C.587.

Norman Churches near Leeds.

G. W. writes: "Are there any buildings, especially Norman churches, worth measuring in the vicinity of Leeds?"

—Adel is a nearly perfect example of a small Norman church and very suitable for measuring. The remains of Harewood Castle, built 1367 (in the grounds of Harewood House), would also be an excellent subject for measured drawings; there is an interesting stone buffet rather resembling an altar tomb in the ruined hall. E.

Acoustics of a Lecture Hall.

"Echo" writes: "In a lecture hall there is a certain amount of echo when the room is only partially filled. The lecturer delivers his address from a ceiled-in platform. The hall is lighted from the main roof under which is a barrel ceiling with ceiling lights. There are vents in the ceiling. The portion over the platform, above the ceiling, is left open, and at the other end of the room is a gallery. The walls have an oak dado, and the walls above are plastered, and the floor is of patent composition, laid on concrete. Wires have been tried across room, but have had no effect. Can your expert suggest any other remedy? The room is also used for chamber concerts."

—The hall, used for platform speaking and for music, is 59 ft. by 31 ft. on plan, and 23 ft. to the soffit of its arched ceiling (with centre of curvature at floor level). It has a recessed platform at one end and a small gallery at the other, and a total capacity of 39,000 cu. ft. The ceiling is plastered, and the walls are plastered down to the top of a 4 ft. oak dado. The floor is of concrete with a special surface finish. There is top lighting. The acoustical condition of the hall with a scant audience is said to be faulty, the inference being that when it is full there is no inconvenience.

An obvious remedy is to recondition the floor. This is now hard and resilient and promotes reverberation, which is most noticeable when the hall is not masked by a full audience. Coco-nut matting would be suitable for this purpose.

Alternatively the wall surfaces between the pilasters, from the cornice to the dado, may be covered with hair felt or with a pleated fabric (a total of 1,000 sq. ft. of wall surface).

A treatment having some incidental advantages would be to suspend from a rod crossing the hall at mid-length and at cornice level a curtain in two parts, to be drawn across, or back to the wall, and to reach within a few inches of the floor, the rod being tied up to the ceiling at its centre. Such a curtain should be of thick and soft material, and would be in use only with a small audience.

Another method would be to suspend from above the cornice, to poles projecting into the hall, banners of a thick and soft material, 4 ft. wide, dropping to within 7 ft. of the floor. There should be six of these on each side of the hall.

Good results may be expected from any one of these methods, but the first three are probably most reliable. When the hall was empty there would be a reduction in the duration of disturbing reverberations of about 40 per cent., with an audience of, say, 120, about 25 per cent.; and for the hall full, say, 360 persons, a reduction of 10 per cent.—except that the third method would show no reduction with the curtain out of use, which would be of advantage for musical performances. In a building of such moderate size the consideration of possible echo concentrations from the ceiling may be dismissed.

It would be possible to test the effect of a floor covering in an inexpensive manner by spreading evenly over the floor about two cub. yards of sawdust; this would be somewhat less than ½ in. thick, and should give some indication of what might be expected with a proper floor covering. It is in no sense surprising to learn that the stretching of wires across this hall has had no effect—the wonder is that this little fiction still survives.

W. H. THORPE.

Book Reviews

"House and Cottage Construction."

It is more than a little difficult to set down a just criticism of this new book on building construction. The first point which occurs to the reader is the important one of purpose—for whom is the book intended? A phrase in the introduction by Mr. John Good, past-president National Federation Building Trade Employers, perhaps supplies the answer: "As regards this work, it is in its way unique; though nominally a book for
builders, it combines both design
construction." That is, in fact, the
note of the work—the interdependenc
design and construction in the le
everyday type of building. The aut
hammers away lustily at this excell
theme through 220 pages of this
volume, and if he does not say anyth
very new there is otherwise nothing m
amiss with his sermon except a rat
wearisome reiteration and a somew
turgid style with a preference for qu
words in place of simple ones—"inter
ally" is perhaps the gem of the collecti
Unfortunately the illustrations gener
are not up to the text—some of the pho
graphs which Mr. Newbold says sh
"simplicity of effect gained by good p
portion," or "good proportion in place
applied ornamentation" do not appear
us to exhibit those characteristics in
marked manner. The illustrations, mo
over, are so loosely indicated that th
are difficult to connect with the text, a
a few seem to have disappeared or p
haps are hidden in succeeding volum
Some "bad" plans are shown for purp
of criticism, but their effect is weaker
by an excess of improbability—as in
where a wee drawing-room, about o
eighth the area of the adjoining kitch
and scullery, is gratuitously placed in
wrong position to bring out the conclus
that it would be better transposed w
the dining-room. In the main the desig
illustrated lean to the Early Studio St
—beams, ingle-nooks, and fireside sett
with twin gables of the double-wedge-
cheese type—which it appears still ling
in the provinces.

"House and Cottage Construction," by Harry Bry
Newbold, M.S.A. 3 vols., large octavo, 58s.
Published by Caxton Publishing Company, Ltd., Lond

Architectural Acoustics.

This pamphlet gives in concise form
results of many years' research with a vi
to producing a sound-absorbing mater
with a finished surface. It is now gen
ally realized by architects that the bui
ing of lecture theatres, auction-roor
law courts, council chambers, of fi
proof materials only is to court disast
The modern fire-resisting materials
harder than the old lath and plaster s
faces and are capable of reflecting
sound backwards and forwards eighty
a hundred times before silence ensu
The interiors of many modern buildir
consist of nothing but a series of mirr
of noise. But the ordinary absorbe
materials used to reduce reverberati
such as felt, thick carpets, curtains, et
are unhygienic for public halls, and
not popular with architects for th
reason. It is imperative that a mason
material, having a finished surfa
should be at the service of architects
this important purpose. So far
American firm, Messrs. R. Guastavi
Co., are the only manufacturers who ha
been able to supply such a mater
giving an absorption coefficient lar
enough to warrant the expense. T
curve for the absorption of Akoustoli
as finally developed from the tests of t
late Professor W. C. Sabine, gives
much as 38 per cent. absorption for t
pitch C4, which is nearly as good as
thick felt. The material can be had
any colour and is of the texture of coar
Bath stone. The English agents a
Building Products, Ltd., Columbia Hous
44-46 King's Road, Chelsea.

"Akoustolith as related to Architectural Acoustic
The pamphlet of R. Guastavino Co., Boston, Mass.

nchester War Memorial Competition

Paul Waterhouse, PP.R.I.B.A., on 9, addressed the following letter regard to the Manchester War orial Competition to "The Man- er Guardian":—

ring my Presidency of the Royal ute of British Architects, which ter- ed at the end of June, I became ant of the facts and opinions re- to in your issues of July 3 and 4. llusions in your London letter of the date, while supporting and, in fact, ending the practice of our Institute e matter of competitions, need a of supplement.

regulations are by no means y (if at all) measures of protective es-unionism." They exist—as a nt's thought will show—in the al interests alike of promoters and hitects; alike of the public and of self. They have won their way to tance along a sometimes uneasy n which architects themselves were ief sufferers. Their final and com- recognition is the secret of the in- ing fact that to-day our British ectural competitions have the finest ge in the world.

n competition, in this life of im- tions, is an imperfect way of ing an architect, but it offers to the ters of public schemes certain great tages which will be lost if the t prestige is set back. I know a deal more on the subject in general discretion would permit me to say, omething more of this particular than the courtesies of confidence justify me in disclosing. I admit o me it is a very great surprise that ported deadlock should have arisen nchester, and I cannot believe that esents the considered or permanent de of the city which has been so he patroness of the arts, the friend ists, and, may I add, the devotee of on sense.

tracts from an article on the subject rofessor C. H. Reilly, F.R.I.B.A., hed in the same newspaper, appear ge 111.]

Building Industry and echnical Education

nbers of the Manchester branch of stitute of Builders recently enter- a large number of teachers of ng subjects and other gentlemen sted in technical education in the area. Mr. John M. Macfarlane, the ent of the branch, occupied the

pening the conference Mr. Macfar- id stress upon the great importance hnical instruction to the building ry, and deplored the fact that so attention had been given to this on in the past by the industry as a In the post-war years some pro- had been made, and he looked upon esent conference as another step right direction. Mr. Macfarlane ferred to the important step which een taken by the Institute of rs in deciding to devote themselves work of education and research industry, interpreting those terms widest sense as representing the basis for all real improvements in the industry generally.

In introducing the guests of the evening Mr. J. Leask Manson, H.M.I., referred to the fact that twenty-five of the teachers present were attending a course of lectures in Manchester which had been organized by the Board of Education for teachers of building subjects in Lancashire and Cheshire. This was one of a number of such courses which had been held during the last few years, the object being to offer the best facilities possible under present conditions for the purpose of enabling teachers to keep in touch with the latest developments by attendance at lectures and at laboratory demonstrations and by participation in discussions concerning their work.

Mr. Harold Rostron, B.Sc., chairman of the council of the Union of Lancashire and Cheshire Institutes, spoke of the work of that Union in connection with technical education. The council of the Union had decided to invite employers and others interested in technical education to nominate suitable representatives to be placed upon consultative panels, so that the council could seek their advice whenever developments in courses dealing with the work of a particular industry seemed to justify such a step.

Mr. J. W. Riley spoke of the development of building courses under the Union, with which he had been associated for a considerable number of years. There had been a steady improvement in the standard of the work attempted, and he agreed that, with the promise of increased support from the industry, still further progress would be possible. The increase in numbers alone since the close of the war had been really remarkable.

Competition News

Cradley Church and Schools.

The designs of Messrs. Webb and Gray, MM.S.A., architects, Dudley, have been placed first in a competition for the new United Methodist Church and Schools at Colley Gate, Cradley.

Abbeydale Golf House.

The design of Mr. J. Mansell Jenkinson, A.R.I.B.A., of Messrs. Chapman and Jenkinson, of Sheffield, architects, has been placed first in the competition, promoted by the Abbeydale Golf Club, for a new golf house. Mr. W. Herbert Fowler was the assessor.

Pavilion at Westerlands.

The competition, promoted by the University of Glasgow Student Welfare Committee, for designs for a proposed pavilion at the University Playing Fields, Westerlands, is limited to architects having an office in and practising within the municipal boundaries of the City of Glasgow. Mr. Alexander N. Paterson, M.A., A.R.S.A., F.R.I.B.A., is the assessor. The author of the design placed first will receive the commission to carry out the work, subject to certain provisions, and the authors of the designs placed second and third will be paid as premiums the sums of one hundred pounds and fifty pounds respectively.

The design of the pavilion as regards arrangement, construction, and fittings must be such as to ensure facility of working and the minimum expenditure on upkeep. The accommodation required includes an entrance hall, with separate cloak rooms and lavatories for men and women adjoining; eighteen changing rooms, fourteen for men and four for women; bath and lavatory accommodation with provision for the quick service in the men's section of not less than fifty, in the women's of ten at one time, by baths, spray, plunge and/or ponds, basins, and w.c.'s; secretary's office to serve also as committee room; lounge; tea room; lockers for 100; kitchen with scullery and servery; balcony, giving general outlook over the field; self-contained house for groundsman, of three rooms and kitchen, bathroom, etc.; groundsman's store-room convenient to hall; drying room; and boiler room and fuel store for central heating and hot water supply.

List of Competitions Open

Date of Delivery.	COMPETITION.
Aug. 8	Church and school for the Wesleyan Circuit. Cost between £5,000 and £6,000. Apply Rev. H. Kirby, 2 Palmyra Square, Warrington.
Aug. 25	Public Swimming Baths and Washhouses, East Greenwich. Assessor, Mr. Henry V. Ashley, F.R.I.B.A. Premiums: £300, £200, £100. Apply Mr. Frederick J. Simpson, Town Clerk, Town Hall, Greenwich.
Sept. 12	Masonic Temple in Broad Street, Birmingham. Premiums: £500, £300, and £200. Sir Banister Fletcher, F.R.I.B.A., is the assessor. The competition is restricted to architects who are masons subscribing to Lodges in the Province of Warwickshire. Apply Mr. J. P. P. Dutfield, 65 Temple Row, Birmingham.
Sept. 30	Designs for a series of plaquettes in bronze illustrative of London as the capital city of the Empire, or of one or more of her main architectural features. Designs should be submitted in the form of models in plaster. The following prizes are offered:—One prize of 100 guineas, two prizes of 50 guineas, three prizes of 25 guineas. Apply Deputy Master of the Royal Mint, London, E.C.1.
Sept. 30	The best colouring of a design for the vestibule connecting 315–317 Oxford Street with 17–19–21 Dering Street, Messrs. Thomas Parsons and Sons' new offices and showrooms. Prizes: 100 guineas, 50 guineas, 25 guineas, and five consolation prizes of 10 guineas each. Assessors—Sir Edwin Lutyens, R.A., F.R.I.B.A., Sir David Murray, R.A., P.R.I., H.R.S.A., Sir John Lavery, R.A., Mr. Frank Brangwyn, R.A., and Mr. E. Guy Dawber, F.R.I.B.A. Apply Competition Department, Messrs. Thomas Parsons and Sons, 315–317 Oxford Street, London, W.1. There is no entrance fee.
Oct. 1	The Student Welfare Committee, University of Glasgow, invite Competitive Designs (limited to Architects having an office in and practising within the Municipal Boundaries of the City of Glasgow) for a Pavilion to be erected on the University Athletic Ground at Westerlands, Anniesland, at a cost of £10,000. Assessor Mr. Alexander N. Paterson, A.R.S.A. Apply Honorary Secretary, Student Welfare Committee, The University, Glasgow.
Nov. 5	Art Gallery for Hull. Assessor, Mr. John W. Simpson, PP.R.I.B.A. Apply (with cheque for £2 2s.) to Mr. H. A. Learoyd, Town Clerk, Guildhall, Hull.
No date	Erection of a Cenotaph on a site in Paragon Square, Hull, belonging to the Corporation. Conditions of the Competition together with a plan of the site will be supplied by the Town Clerk on receipt of a cheque for one guinea, which deposit will be returned to competitors on receipt of a bona-fide design. The estimated cost of the work amounts to £4,000, and premiums of £150, £75, and £50 are offered for the designs placed first, second, and third respectively. The assessor is Mr. Stanley Hamp, F.R.I.B.A.
No date	Lay-out of the Bull Green Site, Halifax. Premium £50. Apply Town Clerk, Halifax.

Coming Events

Wednesday, July 18.

Inst. Engineering Inspection.—Meeting, 8 p.m.

Friday, July 20.

Art Worker's Guild.—"Roofing Materials." 8 p.m.

The Week's News

Public Hall for West Norwood.

It is proposed to erect a public hall in West Norwood.

More Houses for Wolverhampton.

Wolverhampton Corporation are to erect 100 houses at £362 16s. each.

London Hospital Extension.

The foundation-stone has been laid of the new casualty department of the Royal Northern Hospital.

Stafford Housing Scheme.

Stafford Town Council have decided to erect 148 new dwellings at an estimated cost of £78,620.

Holywood Electricity Scheme.

Holywood Urban District Council have decided to acquire a site at Seapark for the erection of a power station and plant, in connection with the town's electrical scheme.

An Old Leatherhead Mantelpiece.

A carved oak mantelpiece from Emlyn House, one of Leatherhead's oldest houses, has been given to the Leatherhead Urban District Council by Mr. H. K. Reeves.

Peterborough Cathedral.

Although the Peterborough Restoration Fund has now received some £18,000, it is estimated that £12,000 more is required to complete the work contemplated and already in hand.

The Reconstruction of Wearmouth Bridge.

Sunderland Town Council have appointed a special committee to deal with the question of reconstructing Wearmouth Bridge. The expenditure involved will be at least £250,000.

Newcastle Housing Scheme.

The Newcastle Corporation Housing Committee recommend the City Council to sanction the erection of flats in Delaval Road. It is proposed to erect 86 three-roomed flats and 120 four-roomed flats.

Restoration of St. John's Church, Perth.

Plans for the restoration of the ancient St. John's Church, Perth, have been approved. A first instalment of the work will be begun under the supervision of Sir Robert Lorimer. The total estimated cost is £30,000, but the first stage will cost only about £10,000.

Stanwick Hall to be Demolished.

It is reported that Stanwick Hall, an old country mansion in the North Riding, about nine miles from Darlington, is to be demolished. It was a fine house as far back as the thirteenth century. Antiquarians say that a portion of a huge British camp was in the neighbourhood of the hall. Earthworks 20 ft. high can still be seen, and seven years ago many ancient weapons and ornaments, including a bronze water clock, now in the British Museum, were found within the Stanwick entrenchments.

Langwith Sewerage Scheme.

The Blackwell Rural District Council (Derbyshire) have asked Messrs. W. H. Radford and Son, of Nottingham, to prepare a sewerage and sewage disposal scheme for the villages of Upper and Nether Langwith, to include the new housing schemes now in progress.

Motorists and the Horse.

Mr. Stenson Cooke, Secretary of the Automobile Association, appeals "to all motorists, during this exceptional weather, to give way more than usual to our friend, the horse. Even an empty van with 'way on' is a trouble to pull up and restart, and the few seconds conceded are surely nothing by comparison with the good turn done."

The Donaldson Silver Medal in Architecture.

The University College Committee have awarded the Donaldson Silver Medal in Architecture of the R.I.B.A. to Mr. Oliver Martin Welsh. Mr. Welsh matriculated in June 1917, and after service in the war, began his university career in 1919, and passed the Fourth Year Diploma examination this year.

The late Mr. Martin L. Saunders.

We regret to record the death, at Bromley, of Mr. Martin L. Saunders, A.R.I.B.A., F.S.I. Educated privately at Blackheath, he commenced his career as an architect and surveyor in the house where he was born. The holder of several appointments from public bodies and large commercial companies, he had superintended the erection of many buildings in the City and Metropolis.

New London Thoroughfare.

The Corporation of the City of London are considering an improvement concerning the site of the old General Post Office, in St. Martin's-le-Grand. It is proposed to construct a new street, 60 ft. wide, from Newgate Street to Foster Lane, and thence to Gresham Street by Wood Street. It is also proposed to widen Gresham Street between Wood Street and Milk Street to a minimum of 60 ft., and from Milk Street to Old Jewry to 50 ft. This new street would be made and the improvement of Gresham Street carried out as opportunities occurred at a total estimated cost of £1,532,000. The London County Council have decided to meet half the cost of the proposed widening of Gresham Street.

R.I.B.A. Final Examination.

Attention is drawn to the fact that designs prepared at recognized schools submitted for approval by candidates for admission to the R.I.B.A. Final Examination in lieu of the same number of R.I.B.A. Problems in Design must in all cases contain the name of the school, and be countersigned by the master of the school.

The Development of Moor Park.

Mr. Willard Reed Messenger, of New York, who has for many years studied housing conditions in America, and since the war has organized several syndi for the construction of apartment h in New York, has had a conference Lord Leverhulme in London in co tion with his plan for the develop of the 3,000 acres estate at Moor Rickmansworth.

L.C.C. Housing Policy.

In a report submitted to the Lo County Council the Housing Comm of the Council state that up to Marc last the capital expenditure on all d ings and estates amounted to £11,838 Accommodation for about 117,000 sons has already been provided. have been taken to invite builders, b ing societies, and others to submit posals, as it is felt that, with such operation, the present needs are likely to be met.

Conversazione at Manchester.

On July 5, a conversazione was in the Municipal College of Techno Manchester, to celebrate the comin age of the college buildings. The ceedings opened at 7 p.m. with a recep by the Lord Mayor of Manchester and Right Hon. the Viscount Burn followed by an address by the la During the evening some intere lectures were given, demonstrations seen in the laboratories and the worksh and music, a kinema display, wireless other concerts were provided. Amon lectures were "Paper Manufacture' Mr. J. Huebner, "The History of Bicycle," by Professor G. G. Storey; " Phenomena of Colour," by Professo Haldane Gee; "A Piece of Coal," by F. S. Sinnatt; "Modern Developmen Textile Decoration," by Mr. H. Cad and "Municipal Engineering in Clas Times," by Dr. G. S. Coleman.

R.I.B.A. Visit to Ocean Liner.

Through the courtesy of the Cu Steamship Company and of the Un States Shipping Board, a party of lea members of the R.I.B.A. paid a vis the "Aquitania" and the "Leviath which are lying at Southampton. Arthur Davis, F.R.I.B.A., the arch who was responsible for the inte planning and decoration of the "A tania," conducted the party and plained the problems that had to solved, and the methods that had t employed in dealing with these col vessels.

Reform of the London Building Act

The Committee appointed by R.I.B.A. in July 1922 for the purpo considering and reporting on the re of the London Building Acts have mitted to the Council an interim re covering the work done by the Comm up to the end of the session. This rep which deals with a great variety of p of the utmost importance to archi and building owners in London, wil considered by the Council at their mee on July 23. Mr. C. A. Daubney, the Secretary of the Committee, has invited to attend the meeting for purpose of assisting the Council.

scovery of Lead in Rievaulx Abbey.

uring excavation work at Rievaulx ey a quantity of lead was unearthed the west end of the nave. It is ght that this came from the roof of choir (built in 1250), and was melted n and made into ingots weighing t 7 cwt. each, with a view to removal he time of the Dissolution in 1633. he destruction was very rapid it is ght that the roof of the nave fell in possibly buried the lead before it l be removed. By the kindness of Feversham the lead has been given ork Minster to assist in the restora- of the Five Sisters Window, which of similar date.

Belfast's Big Housing Scheme.

lfast has decided to deal with the s grave housing shortage with modern nods on a big scale. Like other cor- tions, Belfast has long been faced a serious lack of skilled workmen, as as a large number of unemployed, with these facts in mind the civic orities made an exhaustive enquiry the various housing schemes which been carried out elsewhere, notably iverpool, where similar difficulties to be faced. A deputation from the st Corporation, following upon the l visit paid by Sir Crawford M'Cul- M.P., Councillor Bradley, and Mr. r (City Surveyor), recently made a al journey to Liverpool to see the us methods in operation, and, after rough inspection, came to the same usion as that at which Liverpool had dy arrived. Some thousands of es have now been built with nget" blocks at Liverpool. So fully inced were the members of the st deputation that they immediately ed to follow suit by ordering the sary plant for making a start in big scheme. In this connection the pool Corporation has been of the est possible help, offering, among things, to place at Belfast's dis- , if necessary, some of their expe- ed craftsmen to train the local ers in the initial stages of manufac-

ber for Karlsruhe and Mannheim.

e Board of Trade are in receipt, gh the Foreign Office, of an intima- from the French Government that timber requisitioned at the above- ioned places will be held for fifteen before being forwarded to the de- ted regions in case it should not be an property, and to enable the r in such event to prove his owner- All claims should be made to the h "Services de Restitution" at aden (Secteur Postal 180). In the f timber requisitioned before June 15 s may be made up to July 1. In tional cases the examining Com- n set up to consider claims is em- ed to award compensation to s of requisitioned timber even after piration of the period specified.

Garden Village near Burton.

srs. Connsmaker and Armstrong, of n-on-Trent, architects, are in com- ation with the Tutbury Urban Dis- ouncil as to the sewering of a some- extensive area of land between tone and Barton Turns. They are on behalf of Lieut.-Colonel H. E. Disbrowe-Wise, of Walton Hall, who, as the owner, is desirous of constructing a garden village. The scheme is to follow on the lines of Bournville. The area involved is about 40 acres, and it is probable that ninety houses will be erected on sites of approximately half an acre per house.

New G.P.O. for Singapore.

The scheme of Messrs. Edmond Coignet, Ltd., reinforced concrete engineers, of 125 Gower Street, London, W.C.1, has been adopted for the reinforced concrete work of the new General Post Office, Singapore, Straits Settlements, and they have been instructed to prepare the necessary working drawings. The general architectural design is by Major P. H. Keys, D.S.O., F.R.I.B.A., of Singapore. The new building will be one of the finest in the Straits Settlements. It stands on a triangular site. The principal façade is 400 ft. long, the two others being about 300 ft. each. All the façades are decorated by massive columns and elaborate cornices. The building will be six stories high, with a flat roof, and the foundations are composed of a reinforced concrete raft.

Light Castings Prices.

"Prices in the light castings industry are based on a scientific costing system, and it is unreasonable that the association should be judged upon a temporary reduction, which, as can be shown by an examination of the actual costing figures, was almost immediately found to be uneconomic and unremunerative." This reply was issued by leading members of the National Light Castings Association, whose prices were dealt with in the report issued by the Inter-Departmental Committee which is investigating building material prices. "If there is any question as to the fairness of the present prices, the association invites the most searching test and investigation of these by the Government or any accountants it may appoint for the purpose." A reconsideration of the current prices has been decided upon by the association. The report of the Committee was commented upon in our last issue.

Exeter Town-planning Scheme.

The Minister of Health, having approved Exeter Council's resolution to prepare a town-planning scheme, the Council are proceeding with the preparation of a preliminary statement of their proposals. It was not desired that developments on proper lines should be prevented or hindered during the time which must necessarily elapse before the scheme is finally approved by the Minister of Health, but the effect of the Minister's approval of the resolution is that any person who carries out any developments in the area to be affected without special permission of the Town Council will be prejudiced if the particular development contravenes the scheme ultimately approved.

R.I.B.A. Council Meeting.

Appended are notes from the minutes of the last meeting of the Council of the R.I.B.A. :—

The British Institute of Industrial Art.—It was decided to support the exhibition which is being arranged by the British Institute of Industrial Art at the Victoria and Albert Museum in September and October next. The exhibition is to consist of churchyard monuments and other architectural exhibits. Architects who wish to exhibit appropriate examples of work within the scope of this exhibition are recommended to communicate with Major A. A. Longden, D.S.O., Director of the British Institute of Industrial Art, 16 Grosvenor Gardens, S.W.1, from whom particulars may be obtained.

The Singapore Society of Architects.—The Council approved the application of the Singapore Society of Architects for admission to alliance with the R.I.B.A.

Reading Corporation By-laws.—It was decided, at the request of the Berks, Bucks, and Oxon Architectural Association, to support the Corporation of Reading in their efforts to obtain the sanction of the Ministry of Health for a provision relating to footings in their new by-laws, similar to that in the London Building Act.

Retired Fellowship.—Mr. Albert E. Murray (F.) was transferred to the list of Retired Fellows.

New Inventions

Latest Patent Applications.

16706.—Bodson, F. — Concrete, etc., structures. June 27.

16701.—Fastborg, A. A. R.—Hooks for holding together roofing-tiles. June 27.

16444.—Henkel, O., Walter, K.—Concrete linings for tunnels. June 25.

16665.—Wilkins, A.—Concrete building-blocks. June 27.

Specifications Published.

199056.—Rigby, T.—Processes and plant for the manufacture of cement.

199128.—Merrill, H. C. — Concrete, cement, and like moulded walls.

199333.—Wit, J. H. de.—Bond or tie for hollow walls.

Abstract Published.

197551.—Nailing-blocks for floors and walls.—Atterbury, G., 139 East 53rd Street, New York, U.S.A. —A precast cementitious nailing-block, ground, or sleeper to be cemented to a concrete floor or wall and to which boards may be nailed directly, is reinforced by sinuous wires, which key with the cement joint and permit the blocks to be stacked together in close contact. The base may slope downwards to the centre from each side. The wires may be replaced by separate transverse looped wires or by wire netting. In a modification the reinforcement is embedded in the face of a groove; the projecting ends may extend downwards, or be bent, and key with the cement which is forced up from the joint into the groove.

The above particulars are specially prepared by Messrs. Rayner & Co., registered patent agents, of 5 Chancery Lane, London, W.C.2, from whom readers of the JOURNAL may obtain all information free relating to patents, trade marks, and designs. Messrs. Rayner & Co. will obtain printed copies of the published specifications and abstract only, and forward on post free for the price of 1/6 each.

Trade and Craft

Messrs. R. Jenkins & Co., Ltd.

Messrs. Robert Jenkins & Co., Ltd., engineers, boiler makers, coppersmiths, etc., of Rotherham, have opened offices and showrooms at 15 Victoria Street, Westminster, S.W., where customers and friends will be welcomed by their London representative, Mr. A. Seymour Smith, who is now assisted by Mr. Cedric Jenkins.

The Metallic Construction Co., Bridgewater Chambers, Brown Street, Manchester, have been appointed Messrs. Jenkins' representatives in Lancashire and Cheshire.

The other representatives of the firm are: Messrs. R. W. Jenkins, Midlands and Potteries districts; J. Bradshaw, Wales and West of England; F. D. Sidwick, Yorkshire, Lincolnshire, Durham, Cumberland, and Eastern Counties; and Norman Anton, Scotland.

Messrs. J. W. Singer and Sons, Ltd.

The Rt. Hon. Sir William Bull, Bart., M.P., the chairman, speaking at the annual general meeting of Messrs. J. W. Singer and Sons, metal workers and bronze founders, said that he was pleased to report that even with the competitive prices now ruling, the company had been able to maintain its pre-war standard of work which had been associated with the name of Singers for seventy years. The metal work used to-day was generally of much plainer design than formerly, owing to the smaller sums available for building purposes, but he was very pleased that the company's prices for their quality of work were very low, and that on the average the percentage for the difference between the Singer quality and inferior metal work was small. They had been able to maintain their efficient staff of highly-trained and skilled workmen, and the confidence of their overseas customers was well maintained as was exemplified by the amount of work they had despatched recently to Shanghai, Hongkong, King Williamstown, Stutterheim, Bombay, Calcutta, etc.

Simplex Conduits.

Messrs. Simplex Conduits, Limited, of Garrison Lane, Birmingham, have sent us a copy of their latest booklet, No. 989. Its aim is to describe in a brief and readable manner the various wiring systems of the company and the purposes for which they may be used. In this way, many who now have only an indefinite knowledge of their performance may become more fully acquainted with main details and so arrive at a just appreciation of the considerable advantages to be obtained. From the brief description of the three wiring systems—the screwed and "Terra Grip" systems of conduit wiring and the "Durex" system—manufactured by the company it can readily be seen that there is a system particularly suitable for any type of installation, or for any conditions to which an installation may be subject. The company's tube mills are claimed to be the largest of their kind in the country and, as with the foundries, engineering shops, and all departments, are equipped throughout with the most modern plant and machine tools for the exact manufacture of sound products. In addition, the keenest supervision is exercised during all processes, and those articles not easily passing the severe inspection and searching tests are invariably rejected. The combination of this production-capacity with a thoroughly up-to-date distributing organization, possessed of every facility for the fulfilling of clients' requirements, has enabled the company to maintain an exceptional degree of service, whose advantages are available to all clients, both actual and prospective.

Holophane Glassware and Fittings.

Most of the scientifically designed reflectors and other units of Messrs. Holophane, Ltd., for use with electricity are shown in a newly issued catalogue. It is divided into sections dealing with units designed for different classes of illumination which makes it very easy to use for reference purposes. There is also a special section devoted solely to useful illuminating engineering data. A comprehensive range of fittings are shown covering all general requirements for effective and economic lighting. The catalogue is full of valuable information of everyday use to the architect. Copies can be obtained from the company at Elverton Street, Vincent Square, London, S.W.1.

Venesta Ply Panels.

Messrs. Venesta, Ltd., of 1 Great Tower Street, London, E.C.3, have sent us samples in alder, ash, American whitewood and birch of their ply panels. These panels are wood throughout and each is composed of three layers cemented by a patent process which is claimed to render it unshrinkable, unsplinterable, and practically indestructible. They may be fixed to brick walls or over old plaster. In either case the method of fixing is quite simple, and when the moulding is fixed to cover the joints a very artistic effect is obtained. Venesta period panels are very artistic when used for the walls of dining-rooms, halls, libraries, or board-rooms. The firm also supply and fix $\frac{1}{4}$ in. parquet flooring in herringbone and many other designs. It makes a perfect floor covering especially in conjunction with the period panelling. The firm design and manufacture to suit any rooms in Tudor, Jacobean or other periods in various woods. They have carried out contracts for this panelling in all parts of Great Britain and on many of the most up-to-date liners.

Windows of Character.

"Windows of Character, The Story of Polished Plate Glass," is the title of an interesting booklet which has just been issued by The Plate Glass Publicity Bureau. The booklet opens with some historical facts on early glass making and proceeds to discuss how polished glass is made. First the ingredients, early process, and "mouth blowing," are dealt with, and then a description is given of the final and most important development of all, the production of modern plate glass. The modern method is especially inter ing and the various processes from crucibles, melting, casting, annealing, cooling, cutting, grinding, polishing, spection, to the selection of the glass fully described with the aid of m illustrations. From the moment the g is cast in the rough to the time it can called polished plate it receives as m attention and processing as any diam in the hands of a "cutter." The boo also contains a number of illustration important and other buildings in wh the glass has been used. Copies of booklet may be obtained from the offi of the Bureau, 9 Southampton Str Holborn, London, W.C.1.

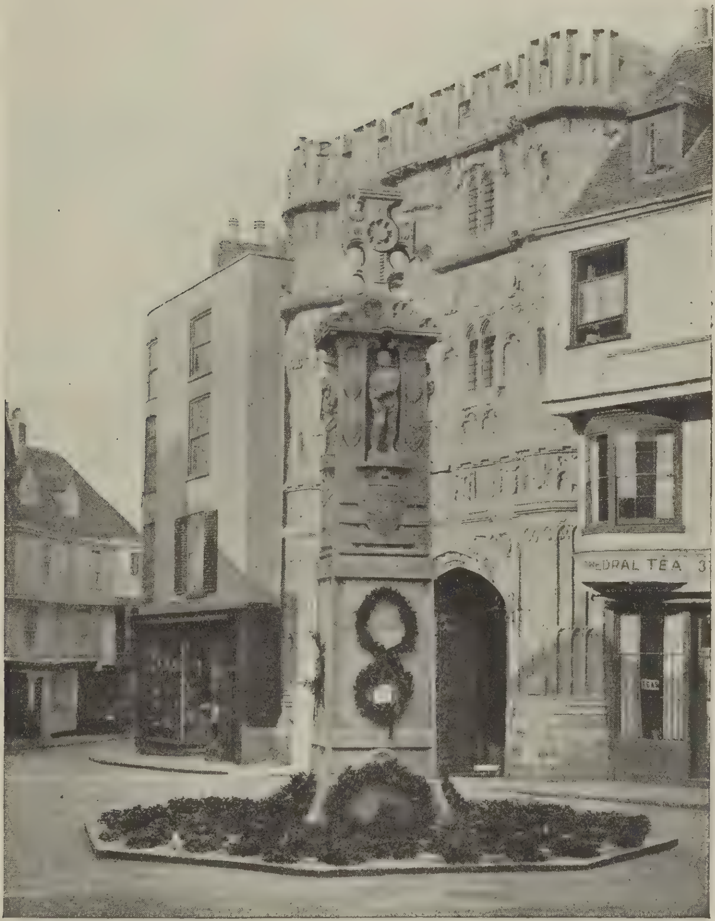
The Story of American Walnut.

"The Story of American Walnut," issued by the American Walnut Manu turers' Association, is most interesti It deals in a very informative way w the use of walnut by the master wo workers down the centuries, and is ill trated with some charming examples craftsmanship during many of the m important periods. It is pointed out t the walnut tree is older than the hun race. "In the pliocene deposits of Eur we find the fossilized remains of gr walnut trees that grew thousands of ye before the dawn of human histo Geology reveals the use of walnut by human race during the Stone A Rudely-carved objects in walnut found in the buried caves of neolit man, along with the heaps of gnav bones and flint axes. Walnut ornamen perfectly preserved, have been dug fr the mounds of the mound builders Tennessee." The authors then desc the use of walnut from the earliest rec —in King Solomon's time—to the pres day. Particular mention is made England, and its famous designers, brothers Adam, Chippendale, Hep white, and Sheraton. It is interesti though perhaps painful, to note that "1750 the cabinet-makers of Philadelp had surpassed those of England in desi workmanship, and quality of stock us They had a decided advantage in th choice of materials, as indicated by following quotation from Moore's Furniture Book: 'The material used nearly all William and Mary, and Qu Anne pieces of native make (and most them were the work of local joiners) a singularly beautiful black walnut deep, rich colour that lent rare disti tion to any article for which it employed.'" It is satisfactory to le that "The Master Furniture Makers" America are producing work that superior to that of the ancients. American Walnut Manufacturers' As ciation, a group of manufacturers walnut lumber, and veneer, was f organized in 1912. Its aim is to st dardize and continually improve conditions under which American wal is grown, felled, milled, manufactur and distributed; to keep up the sup and to foster the ideal of better furnit and better homes. The offices of company are 616 South Michigan Aven Chicago, Ill.

nesday, July 25, 1923. Vol. LVIII. No. 1490.

THE ARCHITECTS' JOURNAL & Architectural Engineer

With which is incorporated "The Builders' Journal."

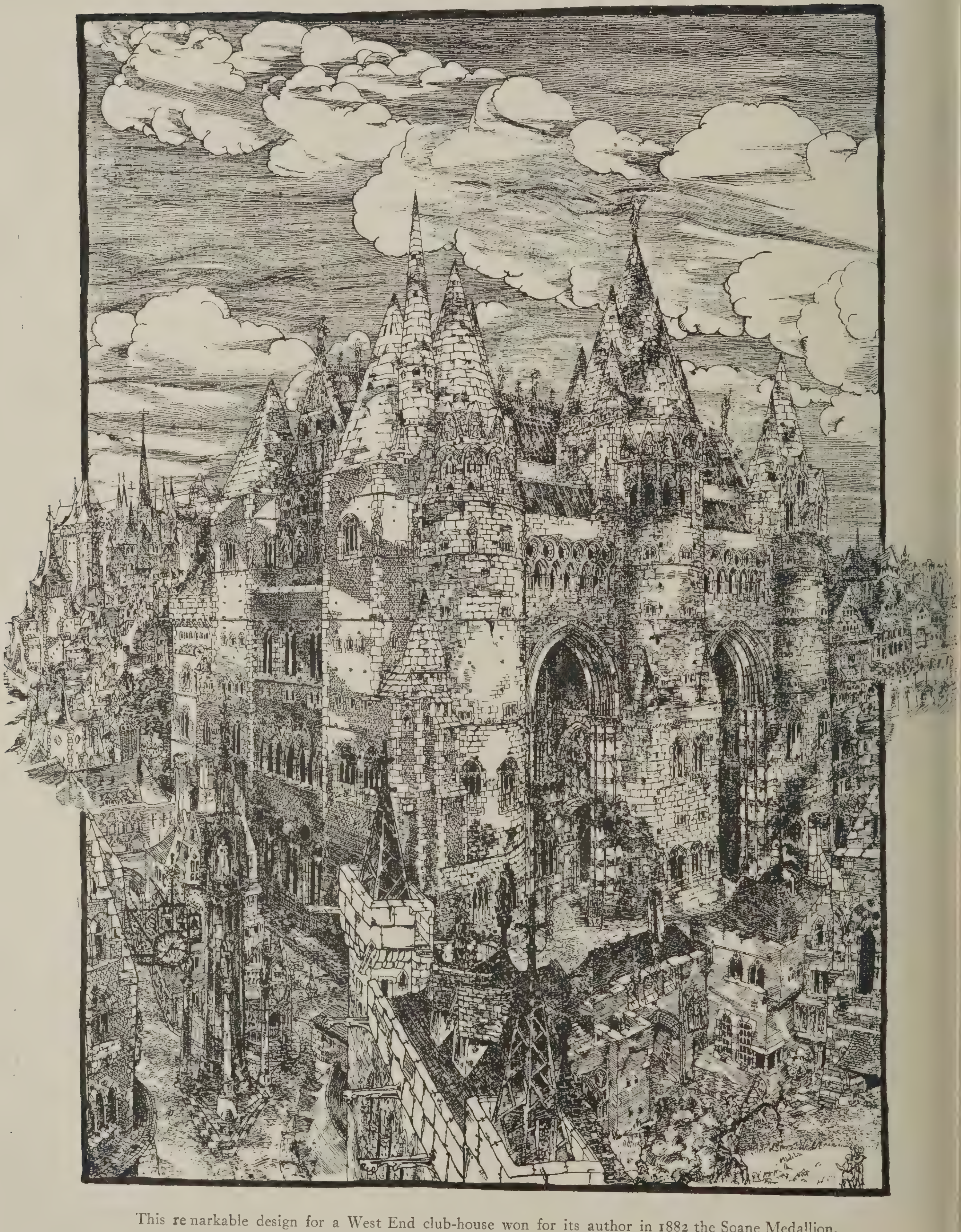


CITY WAR MEMORIAL, CANTERBURY.
PROFESSOR BERESFORD PITE, F.R.I.B.A., ARCHITECT.

27-29 Tothill Street, Westminster, S.W.1.

Design for a West End Club-House

By Professor Beresford Pite, F.R.I.B.A.



This remarkable design for a West End club-house won for its author in 1882 the Soane Medallion. An article on the work of Professor Beresford Pite, who is retiring from the Royal College of Art, South Kensington, begins on page 128.

THE
ARCHITECTS' JOURNAL
27-29 Tothill Street, Westminster, S.W.1.

dnesday, July 25, 1923 Volume LVIII. No. 1490

London of the Future

THE distinguishing fascination of architecture is that it synthesizes the practical and the visionary elements of life. An inspired building is, in fact, a perfect mergence of these two, and the perfect hitect would be he whose personality was in equipoise tween the visions which he felt and his capacity to trans- ite them, through the practical limitations of his craft, actualities. But just as the visions to which we refer not only those of single buildings, so too the limitations not only those of the physical characteristics of materials. architect may suddenly, while walking through the st End of London, have a vision of the perfect multiple re, and with consummate skill and knowledge of the ht uses and limitations of steel, stone, concrete, plate ss, bronze, and terra-cotta, in the course of time trans- e his vision into reality. But an architect may also, ring years of wandering about the City, not only in its oad thoroughfares, but in its squalid alleys, have a vision beautifying the whole, for opening up new vistas and endid approaches in the commercial quarters, and for nging sunshine and happiness into those parts where all is rkness and misery. And in the course of time, by reason his knowledge, not only of building materials, but also of far more intricate matter of finance, produce a scheme ich in the main is practical. This is the greatest service it an architect can render humanity. And it is the service which this age stands most in need, and, of the two aspects, is the visionary that is most lacking. Of practical skill ere is evidence enough—it is the quality that our buildings st eminently display; but, for the most part, they are d, calculated, book-learnt products lacking the furnace it of inspiration, such as we can even now find in ier countries.

Whenever, therefore, we find the architect as visionary welcome him, and such is the rôle in which we discover . Collcutt when we read his inspired and inspiring little ok, "London of the Future." (Leonard Parsons, ndon.) In ninety odd pages he takes us with him over ich ground. He presents to us his vision of a more utiful and a more healthy London, but his vision is vened with practical suggestions. He would have us ke our London "a city of pleasant places."

We are straightway introduced to a scheme for de- oping the south embankment from the County Hall to terloo Bridge into a well-laid-out area of workers' th brain and hand) flats. It is a scheme which seems to ve everything to commend it. The London County incil have already transformed several sordid districts pleasant places; can they not be persuaded to take in d the district upon which the very walls of their Hall it? We are given detailed descriptions of the buildings, ich are to be ten-story structures, equipped with lifts, l with the roofs laid out as playing grounds and gardens, ugh until the house-to-house consumption of soft coal ses the drifting smoke from the surrounding neighbour- d would render these roof-gardens doubtful amenities. truly pleasant places can exist in a city which persists the pursuit of this extravagant and obsolete method of ting, and the author devotes a large section to its demnation and to suggestions for alternative methods. vision of London of the future must, of course, comprehend more than the provision of a few homes for workers, and Mr. Collcutt discusses the Charing Cross and St. Paul's Bridges. Certainly until the former problem is successfully tackled that neighbourhood of the river, Trafalgar Square and the Strand, will always lack beauty. The author's scheme is for a strut bridge, which he describes in some detail.

The charm and merit of a book of this kind, however, does not lie so much in any suggestions which it may contain, for these may be but the outline of schemes which must be accepted or rejected, as in the informing spirit which stimulates the reader to play his part in the redemption of his town. The spirit which pervades this book is a surging pity for the misery, and disgust at the ugliness, amongst which most of the citizens of a modern town are forced to live. The actual style in which it is written is exhilarating. Here and there are delightful touches of irony. The question of whether the varied classes which it is proposed to house on the embankment site will fuse is discussed. "On the one hand the upper classes cannot even exist except by persuading or even entreating the lower class to come and live under the same roof, to be boarded by them, and sometimes to be arrayed in all the glory of an eighteenth-century costume. . . . On the other hand these unreasonable 'uppers' may object to any outside propinquity with the 'lowers,' even when there may be a stout party wall between them." For the most part the plain, sincere English in which the book is written, with its occasional irony, always free from any traces of acerbity, reminds us of the writing of Edward Carpenter; there is the same bewilderment at man's persistent obtuseness, and the same common-sense reasoning which makes us wonder how we tolerate contemporary conditions for another day.

We tolerate them just because most of us are not visionaries. We see, without thinking and questioning, only what is immediately around us. How many Londoners, how many London architects even, have ever thought about the wasted opportunities of the southern embankment? Or having thought about it, have troubled to take any action? How many, again, have penetrated into the squalid places of their city and talked with those unfortunately compelled to live there in order the better to understand the evil? And have done this, moreover, because they felt their responsibilities not only as citizens, but also as architects.

Is it asking too much to suggest that some such knowledge as to the way in which many of their fellow countrymen live should form part of the education of every architectural student? After all, the first duty of an architect is to provide for the needs of the people; should he not, therefore, know at first hand rather than vicariously something of those needs? To substitute for a slum blocks of healthy dwellings—although it may not call for a fine set of drawings in the Beaux-Arts manner such as every student delights in, and which might be demanded by a Municipal Crematorium on a hill, or a Headquarters on an island site for an International Margarine Combine—is a labour of which every architect might feel justly proud. We would have every architectural student fired with Mr. Collcutt's noble enthusiasm, then, indeed, our hopes that every town might be "a city of pleasant places" would be nearer realization.

Notes and Comments

Gilbert's Fountain

GILBERT'S fountain in Piccadilly Circus is again the subject of discussion, though not of vilification, as it has so often been in the past. Time was when nothing was too bad to say of it; to-day it is universally recognized as a work of genius—possibly wayward genius, but most certainly genius. The immediate cause of the present revival of interest is the rumour that, as a result of the replanning of Piccadilly Circus, some curtailment of the footway on its north-east corner may become necessary. Mr. W. Reynolds-Stephens and Mr. F. W. Pomeroy, president and vice-president of the Royal Society of British Sculptors, write to the Press to urge that the fountain shall be given not less room, but more. If the fountain is to remain in the Circus its setting ought most certainly to be improved. At the present moment it stands on an island of pavement of an entirely unsuitable shape. A little squaring up and rounding off would be all to the good. But it is a question whether so individualistic and fanciful a work of art is properly at home in a conventional setting such as Piccadilly Circus. The ideal position for it would be among the trees and shrubberies of a park. But public opinion would now, no doubt, be opposed to its removal, for Eros and Piccadilly Circus have come to be regarded as one and the same thing. Traditions of this sort ought not to be lightly uprooted. Let the fountain remain, but, like Henley's hot-weather conception, let it "frisk and sprinkle." Gilbert designed it for a play of water, without which the composition is imperfect. Cannot the L.C.C. be prevailed upon to turn on the taps so that we may see how Gilbert really meant his fountain to look?

Architecture and the Press

The daily Press has of late displayed so much interest in the subject of architecture that we should dislike to say anything that might act as a discouragement. We feel, however, that in many instances enthusiasm is not sufficiently tempered by knowledge. Some papers there are that invariably handle the subject of architecture with knowledge and discernment; others, alas! that never do. Too often do we encounter long descriptions, as well as illustrations, of buildings that are of no architectural consequence whatsoever. In many recent instances of "write-ups" there has been no attempt to discriminate between architecture and building; the mere fact that a block of buildings costing a hundred thousand pounds is going up somewhere in the West End seems to be sufficient to set the editorial machinery in motion. No one will deny the importance of this fact as an item of news, but it is not necessarily of architectural interest; and since an important function of a newspaper is to educate, it follows that a certain amount of care should be taken in the selection of subjects for illustration. The Press can help enormously in the work of cultivating public taste in architecture. To the extent that it illustrates bad buildings it must defeat this laudable object. To the editors of daily newspapers we suggest, with all respect, that they should entrust this department of journalism to competent hands.

The Durham War Memorial Site

For some obscure reason war memorial committees nearly always desire to set up their monuments on unsuitable sites. We have no space in which to examine the psychology of this peculiar obliquity; all we propose to do is to draw attention to a further instance of its operation. A short time ago the Durham County War Memorial Committee set up a wood and canvas model of the proposed Durham County War Memorial in the open space—Palace Green—between Durham Cathedral and the Castle. This aberration was quickly corrected, however, for in the evening of the same day a party of students from the local university uprooted it and dropped it in the river. This summar method of dealing with the difficulty is, of course, indefensible; it must be excused on the score of the natural exuberance of youth. There is, however, much common sens underlying the action, which crystallizes the widespread public dissatisfaction with the proposed site. Durham, a Mr. Nathaniel Lloyd points out in "The Times," is s happy in its position, in its isolation, and so free from objects competing for attention, that the utmost car should be taken to preserve these amenities, which hav existed for eight hundred years. There are many other mor suitable sites available for a war memorial—that, fo example, in close proximity to the old South Gate on th axial line of the bridge. We hope sincerely that every alternative will be considered before anything is done to disturb the ancient serenity of Palace Green.

Adam's Whitehall Screen

Strange are the vicissitudes of architecture. What one generation builds up another knocks down; and what the one knocks down the other builds up. Fortunately we have not yet reached the stage where the two processe go on simultaneously. For the moment we must commenc the building-up process, of which a good example is the restoration of Adam's Admiralty screen to its origina condition by the re-insertion of two columns that were removed, more than a hundred years ago, to provide subsidiary carriageways on either side of the central entrance For this excellent piece of restoration the Office of Work deserves our best thanks. The two columns are now in position and are rather startling in their pristine whiteness Perhaps the Office of Works may be able to apply some chemical preparation that will impart an artificial weathering capable of lasting until the wind, rain, and soot o London have combined to give it permanence.

Fashions of To-day

A writer in "The Observer" remarks that the inspiration of the Brothers Adam is needed to-day because "some o our new blocks of offices and shops in London are so austerely severe." The Brothers Adam themselves could be "austerely severe" on occasion, but let that pass. The point we would challenge is whether the new London buildings are "austerely severe." Some (a very few) may be entitled to that description, but the great majority have no claim to it whatsoever; "pettily niggled" would be in many cases more truly descriptive. London architecture suffers too much to-day, as it has frequently suffered in the past, from architectural fashion. Who cannot recal numerous fashions—often mere tricks of draughtsmanship —that have left an indelible impress on buildings, and reveal at a glance the period of their erection? "Picturesque silhouette," "breaking up the skyline," "texture," "variety of surface"—these and other catch-phrases stand very definitely for certain evanescent ideals that are reflected in the architecture of the immediate past. (Has the potency of the catch-phrase ever been fully apprehended?) At the present moment we seem to be in for a further period of "surface treatment," judging by many of the recent buildings in the City and the West End of London. Everywhere we see a positive riot of mouldings and raised surfaces. Windows must be not only heavily moulded, but doubly or trebly moulded, with the result that solids become merely tortured frames for singularly vacant voids. About it all there is neither rest nor peace; nothing that pleases or satisfies the eye. It is a real relief to turn from this to the vacuous simplicity of some third-rate example of early nineteenth-century classicism. But this "surface" fashion must surely pass, and there is some ground for hoping that it will lead to better things.

ONTHLY CAUSERIE

Joking Apart

Architectural Politics

MY fear is that when the subject of this writing reveals itself it will be found to be repulsive; but I shrink from adopting the artifice of authors that write those entrancing anecdotes the man who at last found redemption in Bilger's Pills. annot bring myself to disguise my purpose until the der's attention is engaged, and then fling the unwelcome che into his face without so much as a warning cry of eads below."

Vith this confession I will strike into the heart of the tter by offering the opinion that when politics comes in the door, good sense, sincerity, and enthusiasm too often out of the window. This is why his friends discouraged . Johnson's lurking ambition to become a Member of rliament: they knew him to be too wise, too unequivocal, fervid—that his nature made it impossible for him to edge." This, too, is why the keen, logical, versatile ellect of Mr. Hilaire Belloc rebelled against political pedients, and why the House of Commons would asedly cast up Mr. Bernard Shaw as the whale cast up nah. Is any man more dull and unprofitable than when speaks with a political object? He affects our ears and r understandings as though we gave our attention to the rking of a dog. The effect he produces is similar. There an ugly monotonous noise; we remain uninformed; we ow what is coming, and we do not want to hear it.

What, then, is to be the fate of a Royal Institute decayed a political machine? For when in place of causes parties se, politics will rule; and when politics rule the cause is cumbered by the machinery and becomes second to the ention of office and the discomfiture of the opposition. would be a calamity if the political elements which have ely invaded the Institute were allowed to harden into a stem which, once established, would become traditional d ineradicable. It is to be hoped that the new council ll be strong enough to ignore an organized opposition, d that that opposition will dissolve into its component lividualities and cease to exist as a party either in name in fact. The activities of the R.I.B.A. in kicking about cause of registration have, of recent years, resembled game of football popular in Ireland and known as aelic," in which there are no goal posts and no rules of y; the performers finding zest in propelling the ball in y direction, as opportunity serves.

If I am wrong I must hide a diminished head, but I am aware that, amid all the hurly-burly of conflict, the one son that makes registration an overwhelming necessity s ever been brought forward, or that the chief danger endant on unification has ever been acknowledged. No e, so far as I know, has pointed out that if architects not organize themselves as a closed profession the comrcial man will button them up in his pocket as he has, great part, already buttoned up craftsmen, authors, rnalists, etchers, and others who can reach their public ly through his agency; and I have never observed that yone has called attention to the fact that a unified stitute will no longer represent the ideals and ambitions those who effected its unification, but something very ferent and far inferior.

As things now are the position of architects is stronger an that of any other open profession. Engineers both il and mechanical are deeply involved in trade interests. e consequence is that there are few "consulting eneers," and they are placed at a disadvantage by rivals o, while assuming the status of professional men, do not nour the obligations of professional men, but avail themves of the opportunities associated with commercial tivities. As a bencher cannot hold the contract for tering at the Law Courts, and a doctor is not allowed to be an agent for the sale of surgical appliances, so an architect could not, without grave misconduct, specify bricks from a brickfield of which he was the owner.

Analogous prohibitions are, however, rare among engineers. They bewail the fact as individuals; collectively they acquiesce. They have been buttoned up, and they are powerless. The stream runs strongly, and unless architects take firm anchorage in professional traditions they will be swept along with it till the cathedral is manufactured as the cathedral stained glass window is already manufactured, that is, to the glory of God and the enrichment of Messrs. Poodle and Pipjohn, who spawn their products over the country as they might summer-houses and chicken-runs. Already we may observe firms of self-styled "architects" who have no such qualifications as they represent, but are financiers and speculators in the properties they build from the designs of a "ghost" kept on their premises. Firms of drapers and upholsterers advertise their readiness to undertake decoration and constructional architectural work of every description, and do so by similar methods. They have before now caused a model of a house by an eminent architect to be made from published drawings, and used it to bait a trap for customers in their show-room.

Insidious proposals are made that architects should advertise, and the solidarity of the profession thereby be broken down and reduced to the struggling confusion of commercial enterprise, where each is for himself, and the devil is invited to take the hindmost. These proposals emanate from those who would gain by enticing professional men to engage in a game in which their tempters could beat them; and from newspapers and journals which fatten on advertisements, and whose proprietors know that if ten architects could be induced to advertise forty would follow suit and drag in with them a thousand others who would involve every architect in the necessity of making the business of blowing his own trumpet and out-boasting his rivals the chief preoccupation of his waking hours. Not how to achieve reputation by merit, but how to brag meretricious appeals to ignorant taste into notoriety, would become the prime qualification for a successful architect. Assuredly the welfare of architecture and of architects in the future depends upon a firm adherence to professional traditions.

The special danger and difficulty attendant on unification [atrocious word!], already referred to, is obvious. No men will bind themselves to obey rules which may in the future be made by a body in whose counsels they have no share. Thus an unified Institute will of necessity be represented by a majority vote of those who are "not architects," instead of, as now, by a majority vote of those who are. An exact analogy to the position which will arise may be found in the case of a recently-formed trade union of actors, which is already afflicted with the infirmity that has overtaken other trade unions. Since the majority of the members are "bad actors" the edicts of the body tend to favour the interests of the "bad actor" instead of those of the "good actor" and the art of acting. Thus proposals have been considered that no one who is not a member of the body shall be allowed to rank as an actor, and that each actor shall be restricted to one kind of part: that is to say, as I imagine, that if an actor elects to play old men, he must not play "leads"; if "drunks" then he must not appear sober; if the front legs of a horse, then he must not impersonate the hind. This sort of thing is the destruction of an art and the death-knell of the artist, and it is what is likely to happen when a unified Institute directs the destinies of architecture and of architects.

KARSHISH.

The Craftsman and the Commercial Man

Mr. Harold Speed at the Art Workers' Guild

MR. HAROLD SPEED, in the course of his paper read before the Art Workers' Guild, said: By a craftsman I mean a man whose first interest is in the quality of the work he does. In this he takes a pride, and nothing is allowed to stand in the way of his producing the best he possibly can. Such a man is always on the way to become an artist, and has the best of all the rewards of labour—the pleasure in accomplishment. By the commercial man I mean the man whose chief interest in his work is in the wages he will get for it, or the profit he will make out of it. Although considerations of the quality of the work done and the pay we get for it enter into all work, it is of very vital interest to the community which consideration comes first, as the smooth running of a state and the creation of an increasingly happy environment depend on everybody doing the best work of which they are capable. Only when people take a pride in their work can they hope to be contented, and only when they are making the best things of which they are capable can they hope to improve their surroundings. I do not see how, as a community, the making of money if universally adopted is ever going to be a substitute for making good things to buy with it.

When the craftsman spirit is governing our activities, the quality of what we make and do tends to improve and be the best we can make it. But when considerations of wages and profit are allowed to lead, and little care or pride is taken in the quality of what we make to get this profit, the quality of things tends to decrease and our environment to get worse and worse instead of better and better. The gradual deterioration in our environment that modern conditions has tended to bring about, I would contend, is chiefly due to the decline in the influence of the craftsman spirit and the increase in the influence of the commercial spirit. This decline has accompanied the introduction of machinery, and is usually put down to machinery itself, as if a machine was anything without the man behind it, who alone is responsible for what it does.

Machinery is only a new form of tool with which man works; but it is a tool of a different order from the hand-tools formerly used by craftsmen. Formerly, when a new hand-tool was invented, it was taken up gradually, and its capacity for the production of good work soon found. But machinery was of so different an order and came so suddenly that the craftsmen were appalled by it, and would have none of it. Neglected by the craftsman, it was taken up by the commercial man who saw in it great possibilities for cheapening production and widening distribution.

And there was another reason why the craftsman could not adopt machines. They were very costly things, and a great deal of money had to be found to pay the wages of the men who made them before they could be brought into existence, and the money had to be paid for out of the profits made with the machines.

And so it has come about that the control of these new machine tools has passed to the men who found the money to pay for their creation, and the status of the commercial man, whose activities were formerly chiefly confined to banking and the international exchange of commodities, has greatly increased, and the influence of the craftsman who formerly controlled the quality of production has been supplanted.

There is, however, one striking exception to the deterioration of quality in our productions, and that is in engineering. All the craftsmanship for which this country was so justly famous seems to have been turned into this direction, and I believe English fitters are still sought after as the finest in the world.

But although engineering has been dependent upon the commercial man for financial support and has largely served his ends, the quality of its productions has not bee governed by him but by the engineers themselves, who a respected by the commercial man in a way the other craft men are not. And engineers have seen to it that machin have been invented that will produce the best possible worl It would be no use for the commercial man to demand shoddy bridge, because he could make more profit thereb The engineer would refuse to build such a bridge, and h could be sure of the support of the community in refusin to do so.

There is another reason that has contributed to th opinion of the artist craftsman being flouted by the con mercial man who began to control things, while that of th engineer was respected, and that is the difficulty of gettin a standard of taste accepted. "There is no accounting fo taste" is one of those false sayings that are popular in th present state of our ignorance on such matters. Th average man is apt to flatter himself that his opinion o matters of taste is as worthy of respect as that of anybod else. In the case of engineering he does not thus flatte himself, but trusts his engineering experts. But whe something concerning artistic matters comes up for dis cussion the man in authority seldom thinks of consultin an expert in art. What he usually does is to say, "I kno nothing about Art, but I know what I like," and to procee straightway to find somebody who will produce this fo him. When it is pointed out to him that the result is no a work of art, he dismisses the matter, with the comfortin reflection that we are not an artistic nation.

Taste is as amenable to education as engineering. Bu the food it develops on is not intellectual knowledge bu æsthetic experience, and it is not everybody who is capabl of much development. This idea that we are not an artisti nation has to be removed before we can hope for muc improvement. It is popular with the average Englishma because it ministers to his pet vice of mental indolence It is an idea that saves him the bother of troubling abou such matters, and helps him to dismiss it from his mind The lack of any popular recognition of standards of tast has contributed to the fact that commercial men do no respect the expert opinion of the artist as they do that of th engineer. And that while they have allowed the enginee to use machinery for producing the best works of engineering it is capable of producing, and engines and motor-car are among the best things we make, the artist craftsma has not been given this opportunity of using machinery fo producing the best things of which he is capable. The craftsman who refused to help in making a poorly-designed piec of furniture would not be so sure of public support as th engineer who refused to make a shoddy bridge, as nothing so dramatic as the bridge falling down is likely to happen.

Machinery has not been taken up in the craftsman spiri by men anxious to find out what it can do better than anything else. It has been used to make at a cheaper rat imitations of hand-made goods of an inferior quality. Bu has the poor machine been fairly handled ? It is a wonderful servant to man, and in the case of engineering ha marvellously increased our capacities in many ways. Bu has it been given a fair trial as a craft tool ? Has th inventor been asked to invent machines that will increas the craftsman's capacity for the production of good work i the way he has been asked to invent machines that wil increase our capacity for producing other machines ?

I am aware that there is a great difference between a machine and the hand-tools in use before its introduction and that is, the motive power is a mechanical power instea of the hand of the craftsman, and that the play an warmth of expression given by the hand of the craftsman i not within the capacity of a machine. But some such objection might have been made when the potter's wheel ne of the earliest craft machines, was introduced. The echanical symmetry of the machine-turned pots might ave been unfavourably compared with the entirely hand-oulded pots before in use.

There is yet another thing that has contributed to the ienation of the craftsman from machine production. The troduction of machinery roughly coincided with the othic revival. Now Gothic is, of all styles, the one least ted for assimilation with machine production. Gothic ork depends for its vitality above all things on the warmth nd expression of the individual craftsman in its every part. he very irregularities of construction that rustic conditions workmanship necessitate add to its charm. A Gothic uilding built with the accuracy and precision of a fine assic building, like, say, the Parthenon, would be a ilure. The expression of the individual craftsman is erywhere apparent in Gothic work. Look at the variety nd individuality in the capitals of the columns and enrich-ents; even at times in the tracery of the windows. The ocks of stone forming the columns are not absolutely ue, the joints frankly show, and the chisel marks can be en. The variety and warmth that this play on mechanical curacy gives adds greatly to the picturesqueness and terest of the building. Machinery is anathema to all is, and does not lend itself with any hope of usefulness the style. And it has been a misfortune that all the fine aft movements of the nineteenth century were on Gothic nes.

The essential spirit of classic architecture is entirely fferent from that of Gothic. Nothing is left to the discre-on of the individual craftsman. It does not grow like a rest, as does a Gothic cathedral, new growth being added, ithout spoiling the symmetry of the whole. It is conceived a master mind as a whole, and every detail is subor-nated to the unity of conception. The craftsman who rries out the individual parts has to be content that he is rforming a small part of a great whole, and subordinate e exuberance of his own fancy to the very strict instruc-ons he has to follow.

Under modern conditions we are never likely to have aftsmen among our builders' men who could be entrusted design and execute the enrichments. In the times when e Gothic cathedrals were built class distinctions were gorous, and the craftsman class kept their own aristo-acy. A great artist born a craftsman remained a crafts-an, and exercised an influence upon those around him that ised the standard of the ordinary workman to a pitch at we can hardly hope for in these days. Had Turner, the on of a barber in a back street, been born in these times, would have been a journeyman painter, painting public-ouse signs and cathedral altar-pieces at journeyman's ages. But in these days he leaves the back street and ceives the reward that his consummate abilities entitle him . Many of the great artists of modern times come from hat would have been the artizan class in the days when our thedrals were built, and they would have remained there.

The warmth and play on mechanical accuracy that in a othic building arise naturally out of the simple conditions nder which it is produced are in the case of a fine classic uilding like the Parthenon the result of deliberate cal-lation on the part of the designer. The fine sense of the reek architect realized that a mechanically straight line perfectly flat surface were dead things. By slightly rving them they gave an energy and expressiveness to eir buildings that marvellously improved the liveliness the impression. In the Parthenon there are no straight nes or flat surfaces. So slight is the curvature that it is ot realized as such, and is only apparent when accurate easurements are taken. The workmen must have been ven the most explicit mathematical instructions in rrying out such subtlety of design, and it must have quired the most accurate workmanship.

While to the Gothic spirit the machine was something be shunned, I do not think classic principles are so ien to machine conditions. The absolute precision and gh finish of classic art are qualities not beyond the capacity of machines to help in attaining. I am inclined to think that the Greeks would have liked machinery and put it to some fine uses. And who can say what fine styles may not be awaiting us in the future, founded on a fine use of the increase of capacity that properly designed machinery could give.

We want a revival of the classic principles of design—a Morris movement founded on classic instead of Gothic lines. And there are many signs that such is in the air. A determination to get back to simple structural principles in design, and to substitute expressiveness for picturesqueness, is apparent in both painting and the decorative arts. And these principles are classic, not Gothic. One does not mean by classic principles in design a copying of the works of the Greeks and Romans. The same principles applied to modern conditions of mind and material will naturally produce very different results. This awakening interest in the severe classic principles of design among artists leads one to hope that the gap between machine-made productions and the artistic spirit of the time may be bridged.

The desire to get down to a simpler condition of things and start with structural necessities in design, instead of smothering things up with meaningless ornament to hide the poverty of the structure, is one of the hopeful signs of the spirit of the modern art movements.

It is not possible for every worker to have the supreme pleasure the artist has in expressing himself in his work; the economic tree cannot be all flowers, and art is the flower of the crafts. But it is possible for every individual worker to realize that his job is to be of service in helping on the production of good things, and for him to take a pride in doing it to the best of his ability, and to have the satisfaction that pride in good work well done alone gives, however humble the job. And until this spirit is encouraged there will be no settled, comfortable conditions in life, neither will the best work be forthcoming. The commercial spirit is by no means confined to the employers, it has permeated the whole body of industry. The workers do not feel that their work is a service to the Commonwealth, but a hateful necessity only undertaken in order to get a living.

This zest for things finely done which is the essence of the craftsman spirit is by no means dead among us. It is in my mind the explanation of the inordinate interest in sports that is so marked a feature of modern industrial life. What masses of working men will undergo in the way of fatigue and discomfort in order to see a football match, for a long time puzzled me. But surely in this love of watching a skilful performance and following each movement with such keen interest we have the craftsman's spirit which having had no outlet during the week's work boils over on Saturday afternoon and takes a kind of second-hand satisfaction in the skill of others. How much better it would be if this spirit could be tapped and used for the production of finer things during the week—if one firm vied with another as to the quality of its productions and competed, if need be, before competent judges, as to which was the best; and if the workmen took as much pride in a victory as they do when their favourite team wins a football match; for even in running a machine there is some opportunity for skilful handling and the exercise of the craftsman spirit. But the machines that would be invented if the craftsman spirit had more to say in the production would be of a different order from those at present in use. They would be in the direction of increasing the capacity of the workman, and not as at present, taking his capacity out of his hands, as it were, and leaving to him a lessening amount of intellectual effort. I have heard of a lace-making machine in which a pointer controlled by hand followed the design and at the same time the machine made lace in the forms that the pointer followed.

This idea contains the germ of a type of machinery that would enormously increase the capacity of the craftsman, while retaining the freedom that makes the hand-made article so much more interesting than the ordinary machine-made wares. But even if a man only has the control of an ordinary machine, or stokes an engine, this work is made much more interesting if he has a pride in the finished products of his firm, or feels that his job is of use to the community in producing things of increasing beauty and usefulness to it.

But there are hopeful signs. Even from the money-making point of view the cheap and nasty does not pay in the long run. We were the first in the field with the cheapening of production, and the increased power of distribution that machinery gave us. But we are no longer the first in the field; other nations are beating us at the cheap and nasty. If we are to survive as a manufacturing nation it must be by the better quality of what we produce. And the commercial men are beginning to be alive to the fact that if they want to improve the quality of their productions they must get in touch with those who can help them.

So that in the end the commercial man and the craftsman may meet as the partners they should be, even as a commercial necessity.

The craftsman cannot do without the commercial man any more than the commercial man, in the long run, can do without the craftsman. The people who advance out of their savings the money to pay the wages of the men who make the machinery, in the hope of being paid back with a profit from the products of the machines when made, must be considered and their interests watched or they will not be induced to advance the necessary money. The workers can never own the means of production, the machines, so long as they cost so much to produce, as they cannot pay for the labour that makes them, and the labour is not to be had for nothing. Neither can the commercial man do without the artist craftsman any more than he can do without the engineer, or his productions will suffer and their quality deteriorate; and without the spirit of craftsmanship in his employees, or he cannot hope for contented workers and good work.

Before concluding let me go over the argument I ha been endeavouring to put before you. Before the intr duction of machinery, production was governed craftsmen, who, with their tools on their backs, we independent and able to have a say in the quality of t work they did. They took a pride in it, with the resu that fine work was done.

Machinery introduced a new element. The control production has passed by degrees to the men who find t money to pay for the machines, and whose interest natu ally is to get their money back with profit from the sale the things produced. Interest in the profits has becon the all-absorbing concern. The quality of the thin produced has become a secondary matter, with the resu that it has gradually deteriorated.

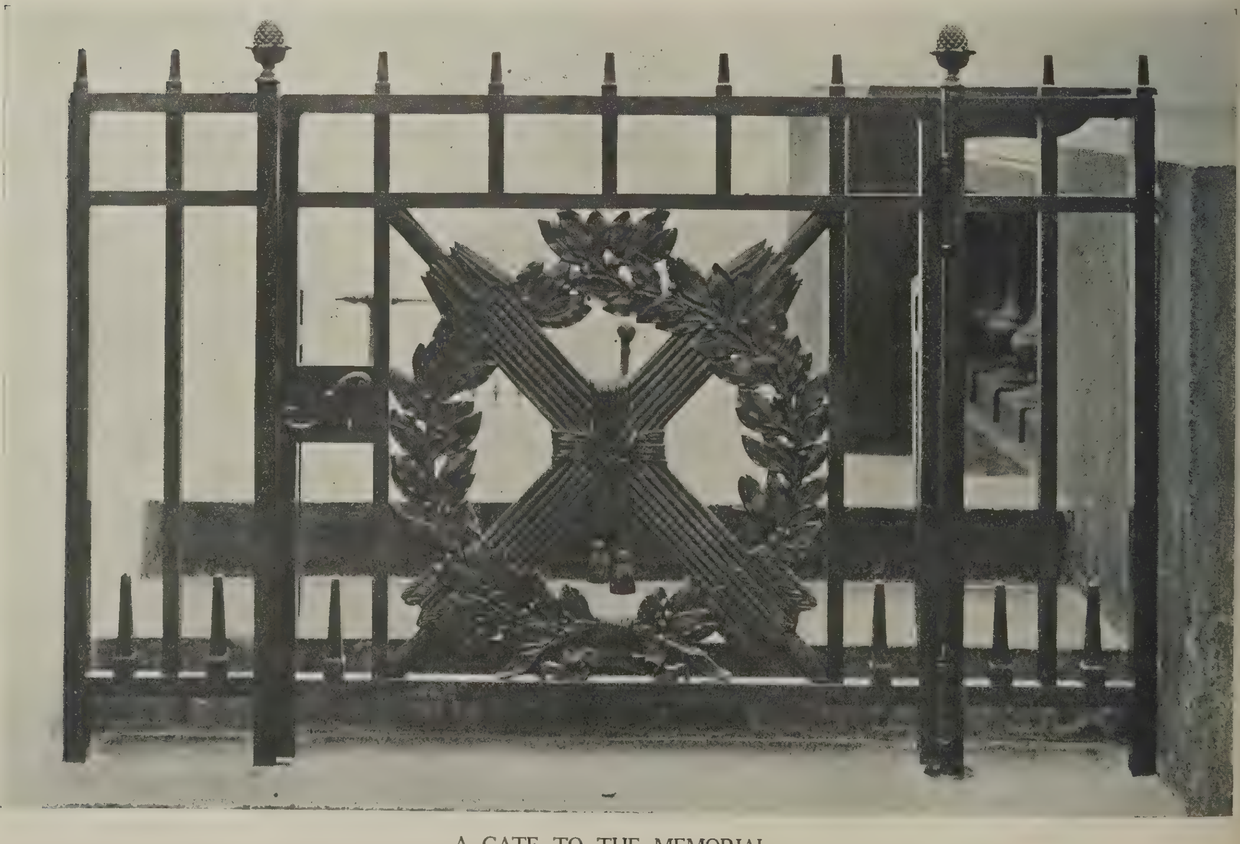
Pride in the quality of work done has largely given pla to pride in the amount of money made or wages earne Interest in the quality of the work done is being gradual alienated from ordinary industry, until the artistic callings ar engineering are about the only places where it still flourishe

In engineering pride in the quality of production still kept up, and machines are among the best made of ou products. But here the engineer is in chief control, and ba work is more universally recognized as worthless; wherea bad quality in the form and make of things, other tha engineering products, is not so universally realized, ar the voice of those who know and have taste is not listene to as no standard of taste is recognized.

Another thing that has contributed to the neglect craftsmanship in machine-made things is the fact tha craftsmen have been seeking inspiration from Gothic idea which are totally incompatible with machine productio It is from the severer principles of classic art that we mu look for inspiration in our endeavour to find fine uses f machinery in our work.

The R.A.F. Memorial

SIR REGINALD BLOMFIELD, R.A., PP.R.I.B.A., Architect



A GATE TO THE MEMORIAL.

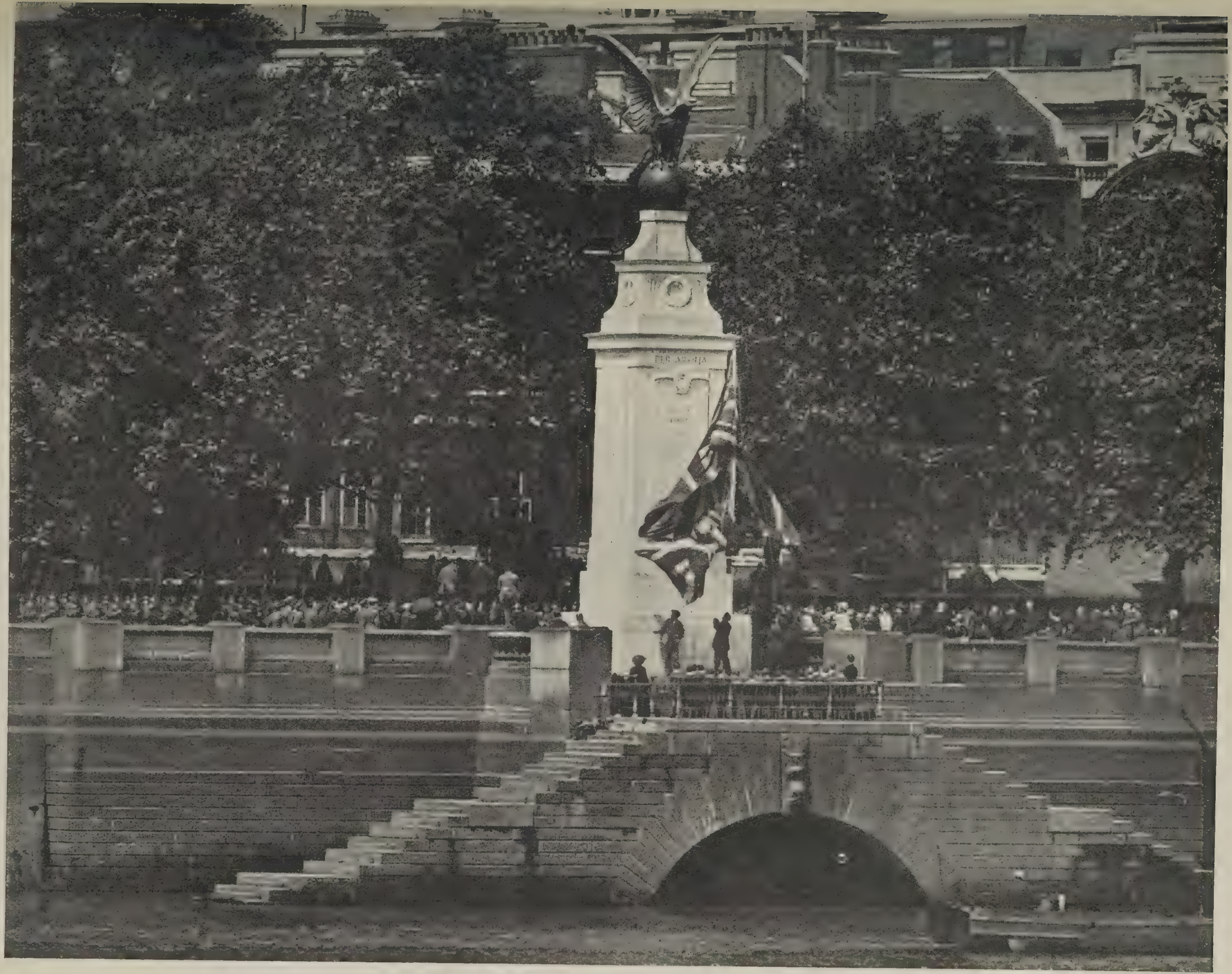
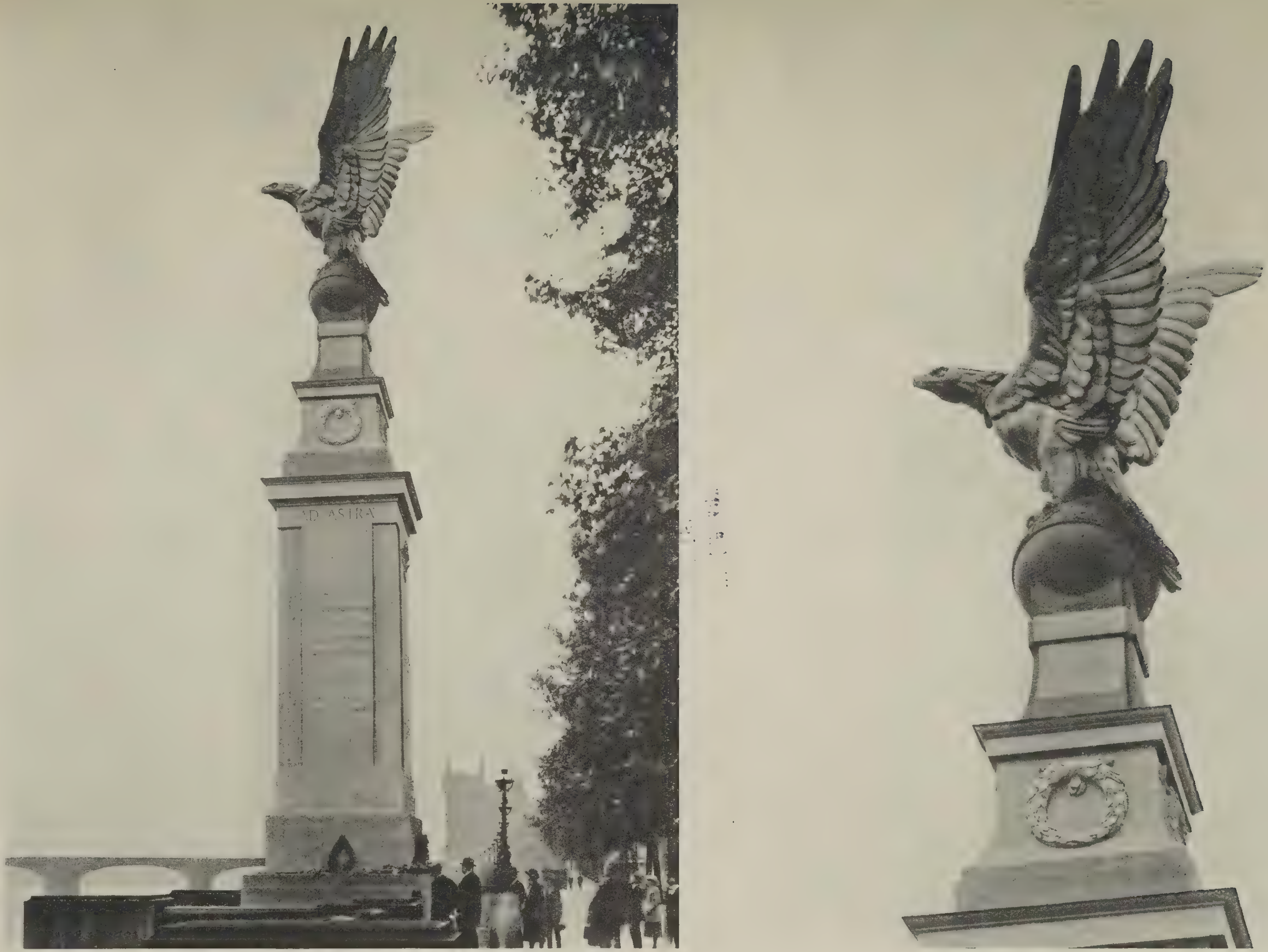


Photo: "The Times."

This memorial to the Royal Air Force was unveiled by the Prince of Wales last week. The site of the memorial is at the head of the river stairs about half-way between Charing Cross and Westminster Bridges, and the design consists of a lofty pylon of Portland stone surmounted by a great bronze eagle standing on a globe belted with the signs of the zodiac. A description of the memorial appears on page 154.

THE LIBRARY
OF THE
UNIVERSITY OF ILLINOIS



VIEW LOOKING TOWARDS WESTMINSTER.

DETAIL OF SURMOUNTING EAGLE.

THE R.A.F. MEMORIAL, VICTORIA EMBANKMENT, LONDON.
SIR REGINALD BLOMFIELD, R.A., PP.R.I.B.A., ARCHITECT.

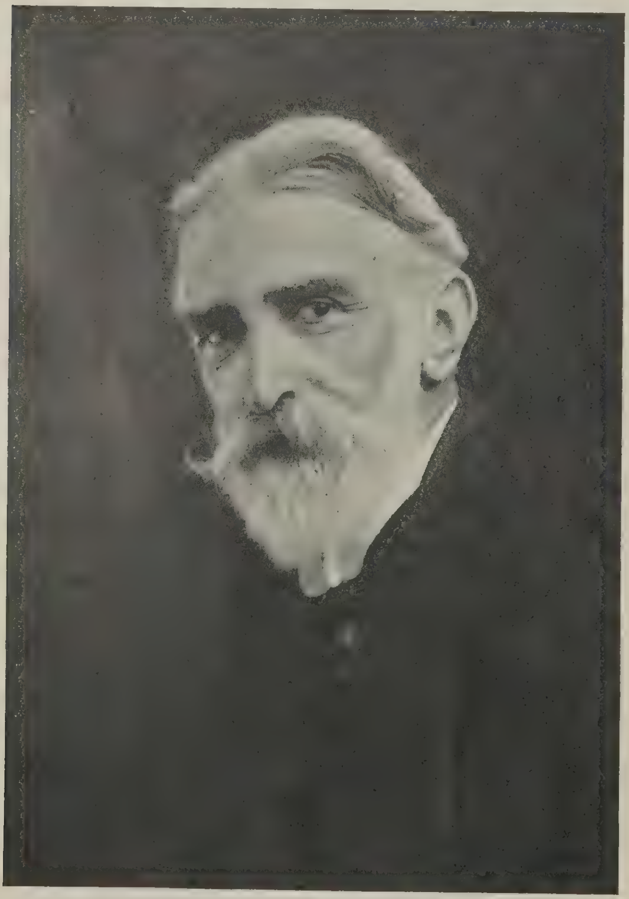
Beresford Pite

By THEODORE FYFE, F.R.I.B.A., Master, University School of Architecture, Cambrid

IT is difficult to write an appreciation of the work of an architect who is in the full stride of his career, and whose output of building is, perhaps, less than his reputation would warrant. In Prof. Pite's case, however, his work as an expert in architectural education (not to mention the very different subject of ancient lights) would account for his comparatively small, if select, achievement in actual building. To most he is known chiefly as the distinguished Professor of Architecture at South Kensington (the post which he now vacates), but only a comparative few were aware of the full significance of his work in this sphere. Still fewer, perhaps, realize the even greater importance to building as a whole of his work in the London County Council School of Building, Brixton.

At South Kensington he seized with both hands and made the fullest use of the power of expression of the material that came to hand; and the world is the richer by the accomplished draughtsmanship of many of his students who were art students, but had no intention of becoming practising architects. At Brixton he is out for the higher education of the working craftsman in the building trades, and he has achieved very great results, quietly, without much fuss, but none the less valuable and, indeed, epoch-making.

All his work shows that he is a diligent seeker after essential truth as he understands it. With those associated with him in the processes of his work he has a faculty of doing a lot of his thinking aloud, with the result that he readily infects them with his own enthusiasm. It is very evident that few who have worked with him have not been impressed by the depth and sincerity of his aims and have not been stimulated in their studies in some direction or another.



PROFESSOR BERESFORD PITE, F.R.I.B.A.

Some analysis of the work of any architect who h achieved distinction is certain to be instructive, if t analysis is based on knowledge, and the present writ ventures to submit the following notes on account of fairly intimate acquaintanceship with some of Prof. Pit work since the closing years of last century. At that tin he was a figure of rather portentous interest to the majori of architects ten or fifteen years younger than himse both in this country and America. The fame of his wonde ful pen drawings and of his remarkable design for a We End Club-house which won the Soane Medallion in 1882- followed by his redoubtable performances as a competiti designer—was still comparatively fresh; and this fame w by no means lessened by a select series of executed wor in some quiet thoroughfares in the neighbourhood of Harl Street. Quite breaking away from these was his design f Christ Church, North Brixton, published in 1896, whi showed a simplicity and freshness in the use of the don that arrested the attention. Knowing the facts, o realizes that a just-accomplished visit to the East (whe he built the Jerusalem Hospital) had strongly influenced t mind of the designer in dealing with the Brixton chur in its first phase.

The works in Marylebone already referred to are follows:—

St. Marylebone General Dispensary, Welbeck Street.- A delightfully fresh building in red brick and Portland ston which shows the beginning of that attention to the scul tural work and mouldings of Michel Angelo which develop in the early phases of Prof. Pite's work. The entrance Marylebone Lane is a clever and largely conceived trea ment of brickwork with stone accessories. The influence Philip Webb can be seen here and also in the treatment the upper part of the front.

No. 80 Mortimer Street, near Regent Street (since r modelled in ground story).—This is a little gem in the fres ness and unity of its treatment. It is an excellent examp of the entirely successful collaboration of an architect and sculptor; the fine supporting figures of the pediment bei the work of the talented sculptor-architect, Mr. J. Atwo Slater. The materials are red brick and Portland ston with coloured tiles in the ground story.

All Souls' Church Home, Great Titchfield Street.—A example of a plain and well-proportioned treatment London stocks, which acquires distinction by its fine doo way in Portland stone with figures in relief.

Belonging to a slightly later phase are two other works the same neighbourhood:—

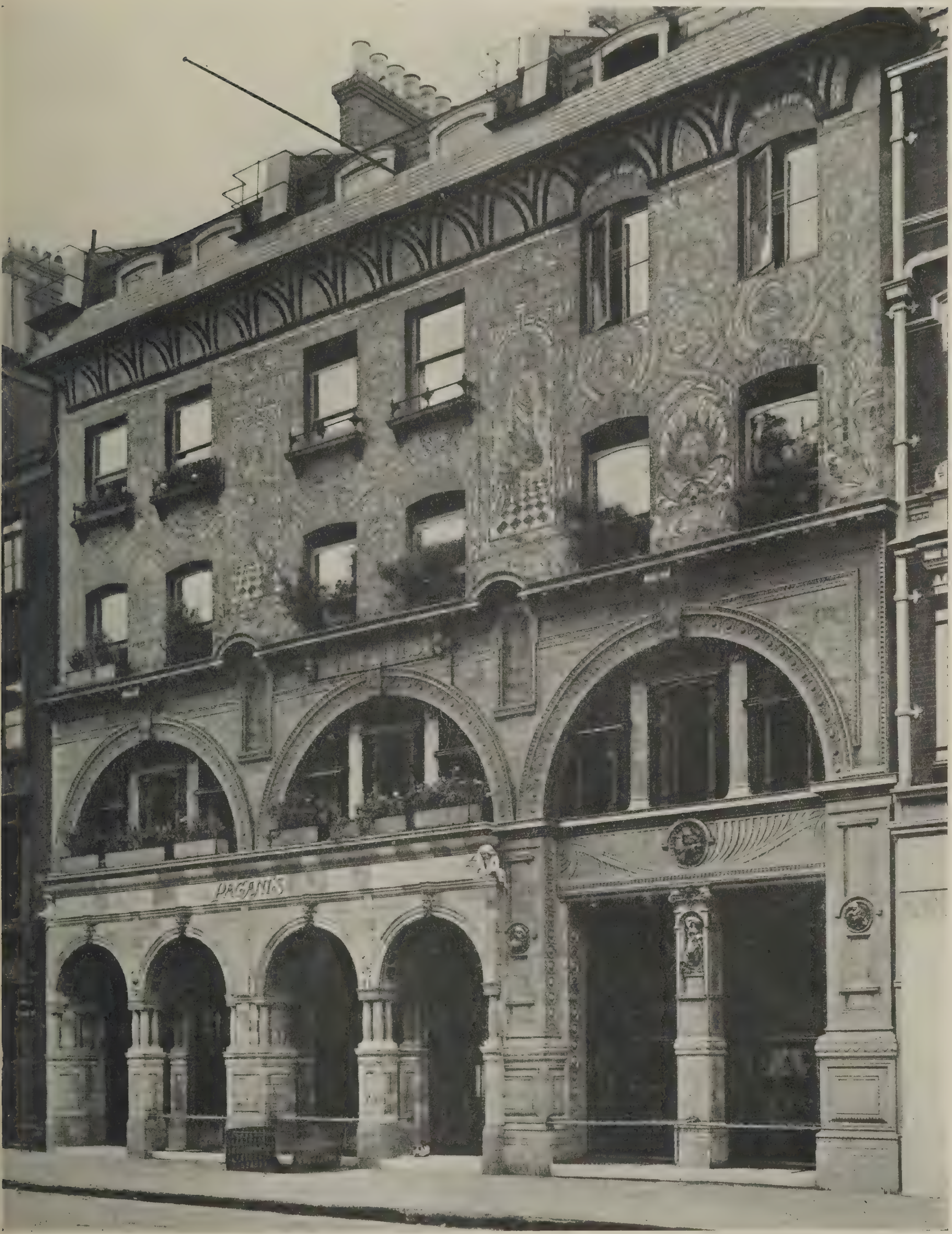
No. 37 Harley Street (and Queen Anne Street), since r numbered.—A corner house of Bath stone with Portla stone dressings and a mansard roof with patterned slat and dormer windows. This house shows the culmination the Michel Angelo phase in Prof. Pite's treatment of deta The design as a whole has unity and grip and a bold imagined oriel is a pleasant variation in corner trea ments. The sculpture work (mostly in delicate relief) by Mr. F. E. E. Schenck.

No. 126 Great Portland Street.—A narrow-front opportunity of a shop with residence over, in red brick an Portland stone, illustrating the thorough and quite succes ful achievement of simple stone forms in the corbell supports of a bay window. The railings are excellen Throughout we are again strongly reminded of Philip Web

Pagani's Restaurant, Great Portland Street.—A ve successful example of re-modelling. The original colour ground story to Great Portland Street was retained, and large arcade made to envelop it and introduce a mezzanin The brickwork of the upper floors was retained, and th whole surface covered with a mosaic of coloured tiles i patterns carefully designed. A covered cornice wit

Pagani's Restaurant, Great Portland Street, London

Remodelled by Professor Beresford Pite, F.R.I.B.A.

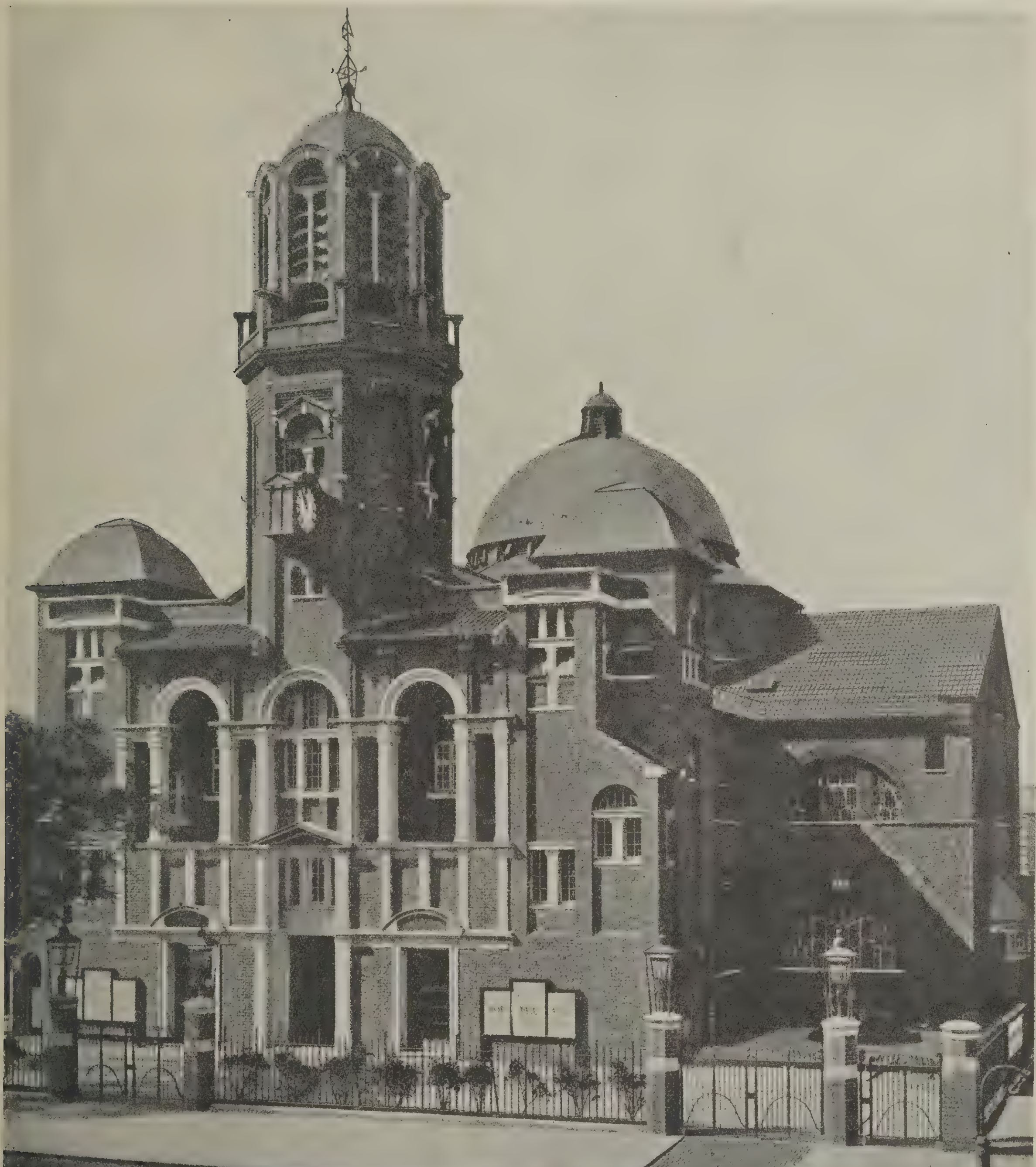


In remodelling this well-known restaurant, Professor Pite retained the original coloured ground story to Great Portland Street, and a large arcade was made to envelop it and introduce a mezzanine. The brickwork of the upper floors was covered with a mosaic of coloured tiles.

THE LIBRARY
OF THE
UNIVERSITY OF ILLINOIS

Christ Church, North Brixton, London

Professor Beresford Pite, F.R.I.B.A., Architect



Christ Church, North Brixton, as completed bears little resemblance to the original design published in 1896. It was kept on the drawing board for years, "and a slight element of the bizarre crept in, perhaps from too much thought."

THE LIBRARY
OF THE
UNIVERSITY OF ILLINOIS

"basket-work" decoration in black and white mosaic completes the whole. The interior was also re-modelled with refinement and restraint.

Y.W.C.A. Offices, Great Titchfield Street and Mortimer Street (Ames House).—This is undoubtedly one of the most successful treatments of common brickwork in the whole of London, or, in fact, anywhere, an amplification of the front in Great Portland Street. Fareham reds and Berkhamsteads have been used in bands and the play of design in arched work is well worthy of study. The stonework, where introduced, is fresh and vigorous.

Apart from these Marylebone works and belonging to the middle phase of them is a narrow front in Old Bond Street in Portland stone, which has since, unfortunately, been pulled about. It has the largeness of motive of the Mortimer Street house, in this case carried to the top of the building and with less arrest, as it is less dependent on sculpture.

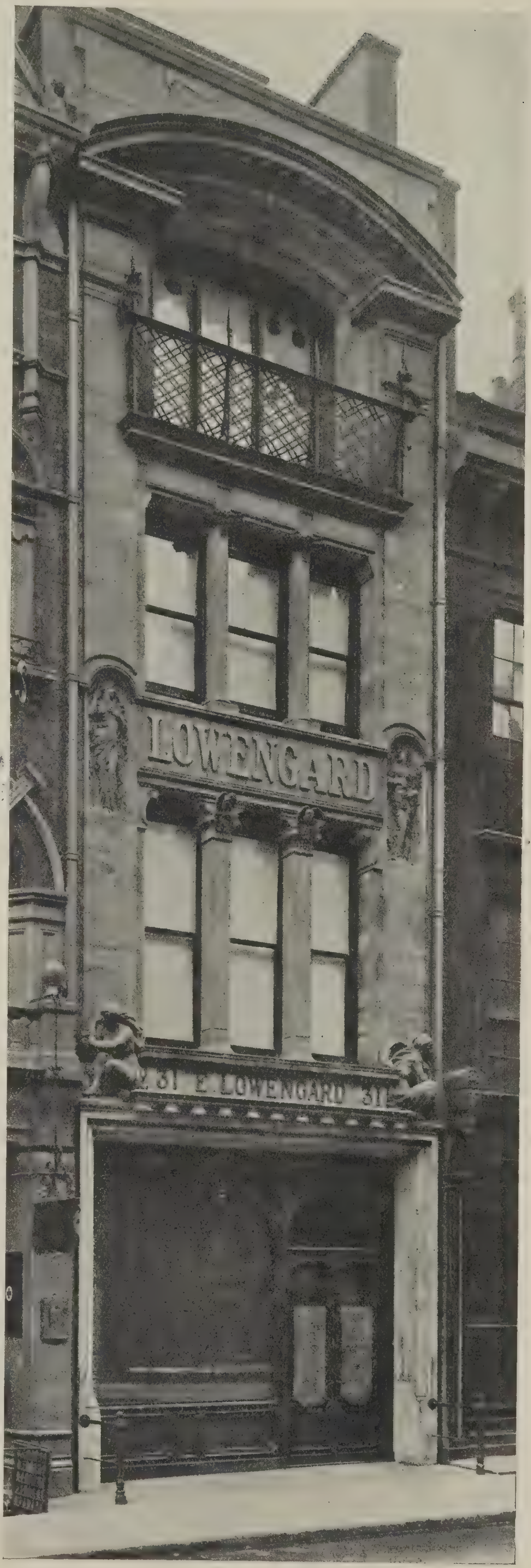
The most important of what may be called the early buildings of Prof. Pite have now been enumerated, and about this time he became Professor of Architecture in the reorganized scheme of South Kensington teaching under Mr. Spencer. He and his colleagues at this time formed a strong group of men: Lanteri for sculpture; Moira for painting; and Lethaby for design. The first building work of this time was the Brixton church, which had been on the architect's drawing-board for years. The church as finally completed has little resemblance to the original design. A light element of the bizarre crept in, perhaps through too much thought. One feels that this building, in common with everything of Prof. Pite's, is the work of an original thinker, and the treatment of the brickwork is as masterly as ever. Externally, there is really a great deal in it that runs parallel to Bentley's line of thought in the treatment of the detail at Westminster Cathedral, but some of the stonework s difficult to follow.

As fully representing his mature period we now come to Prof. Pite's most important work in London: the building f the National Amalgamated Approved Society's Offices in Euston Square. The teaching work at South Kensington nd Brixton and a critical mind working on the immature ttempts in a classical manner that were beginning to show hemselves in London, had encouraged an independent tudy of the Greek orders. There is plenty of erudition at Euston Square, but it is always held securely by thoughtulness in stonecraft. In the hands of a lesser man such n experimental building as this would probably have allen flat. In actual fact, the outstanding quality of the uilding is its essential quietness and the way it falls into ne with the well-understood classic treatments of the quares of an older London. It is never a small thing to ecure this absence of effort in mass, and in addition it is early as rare to find a building which so repays study in etail. It is noteworthy that there is not a bit of sculpture i the building proper—nothing but thoughtful masonry.

A lesser work in London of this middle period is the iccadilly front to the upper part of the Burlington Arcade, difficult problem executed with extreme frankness and reater ingenuity than is perhaps apparent at first sight.

Prof. Pite's most important work in what may be called is present-day manner is the cathedral at Uganda. This lustrates his theories in brickwork just as Euston Square oes in stonework. The church had to be built by native bour, necessitating the preparation of an exceedingly areful set of working drawings to ½ in. scale. The pointed rch is employed with a roomy type of traditional plan and ith stress, as at Brixton, on usage for large congregational urposes. A building like this, with plastered vaults and rick ribs may be made or marred by its lighting. On aper it is certainly impressive, if with a certain gauntness hich may be delusive.*

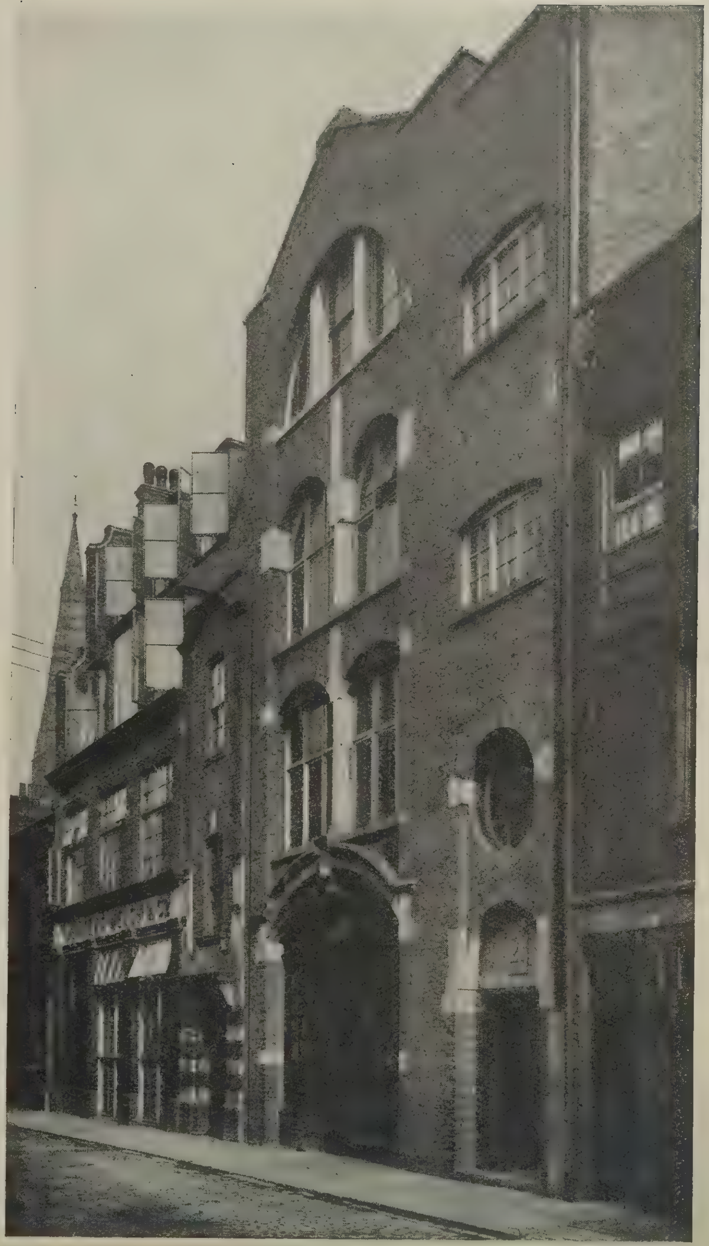
To enumerate these works, and to give some slight escription of their outstanding qualities is one thing; but attempt a real understanding of the progressive stages



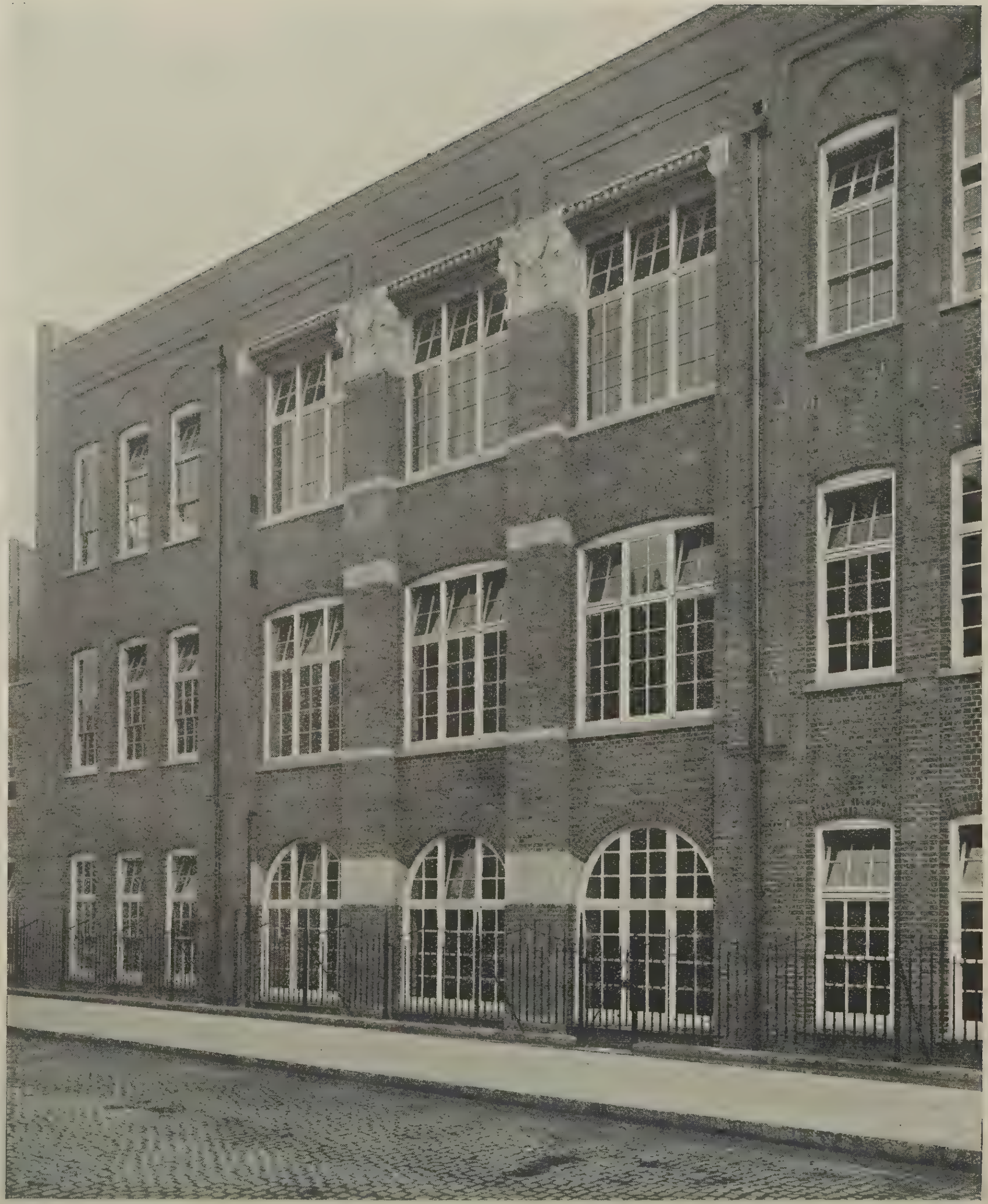
31 OLD BOND STREET, W.

---

* See also the exceedingly interesting and first characteristic continuation of the anda Work in the present R.A. Exhibition—the drawings for the Bishop Tucker morial Hall.



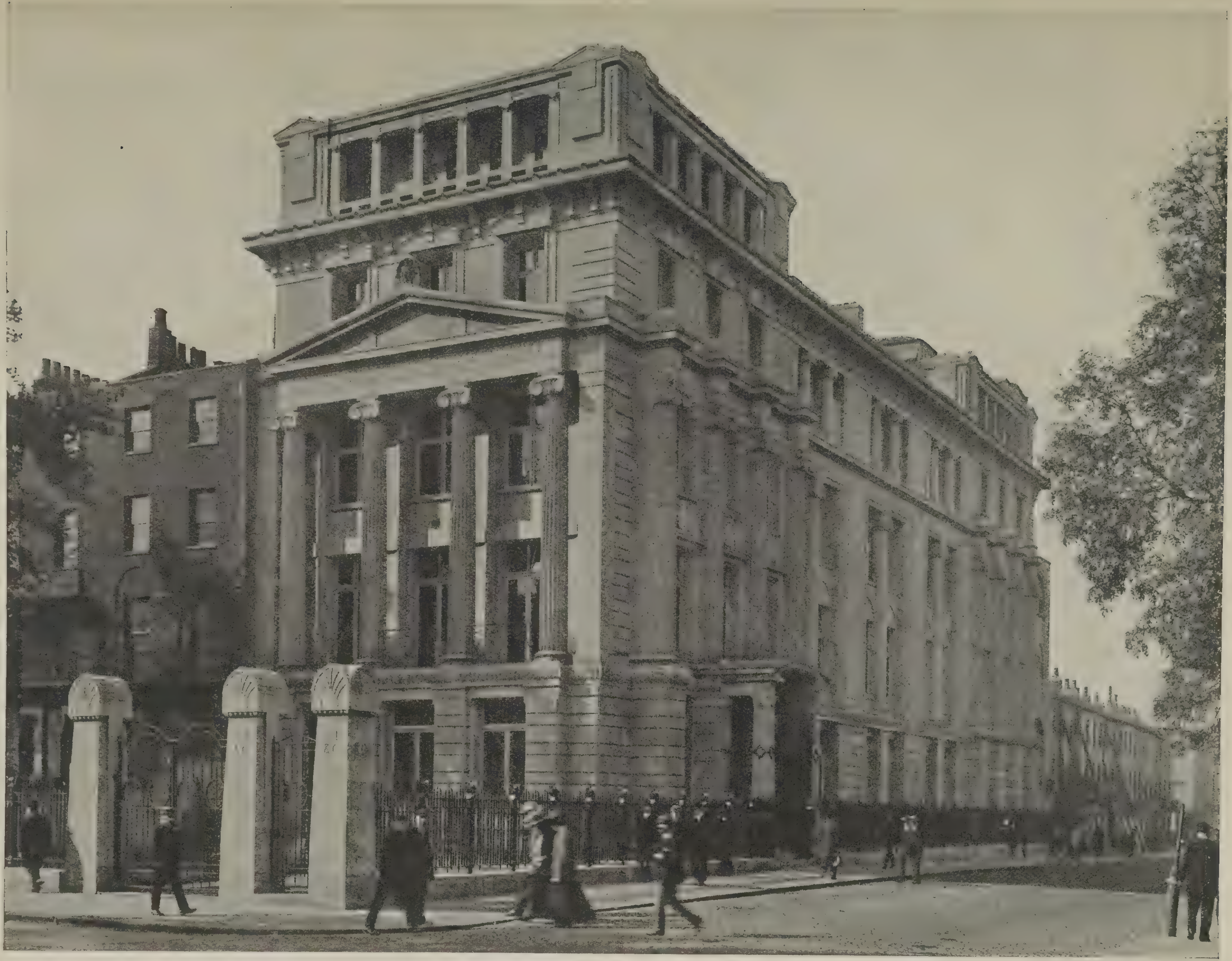
WAREHOUSE, LITTLE PORTLAND STREET, W.



NEW PUBLIC ELEMENTARY SCHOOL, ALL SOULS', ST MARYLEBONE.

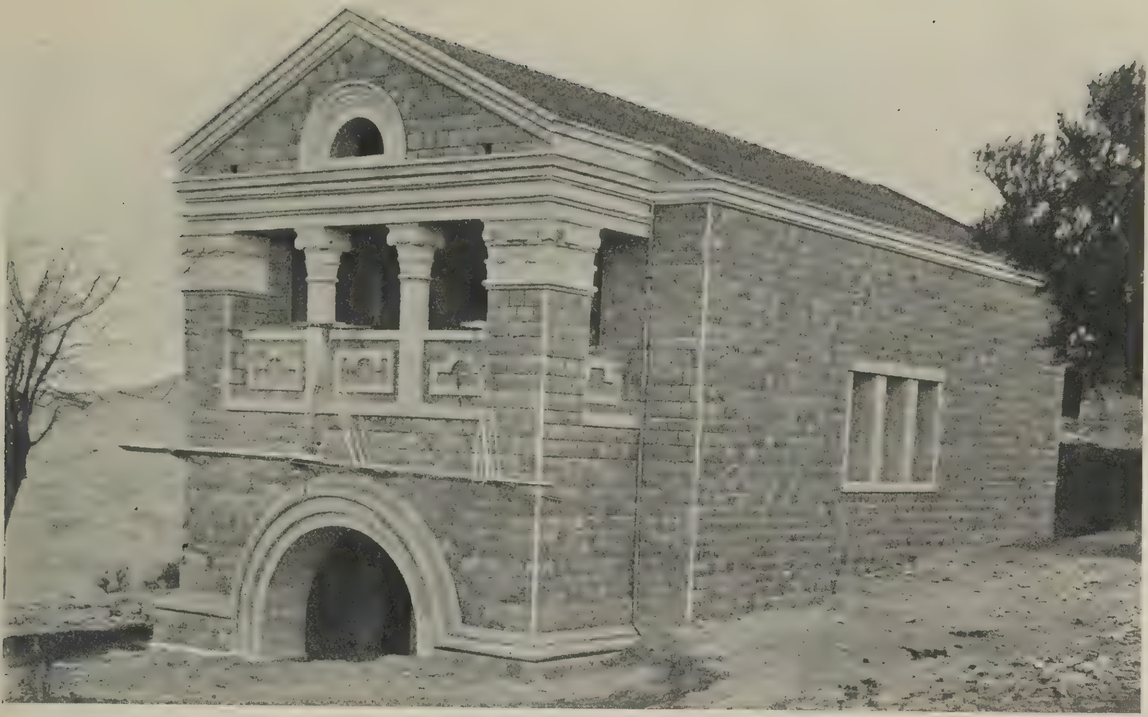
PROFESSOR BERESFORD PITE, F.R.I.B.A., ARCHITECT.

Professor Beresford Pite, F.R.I.B.A., Architect

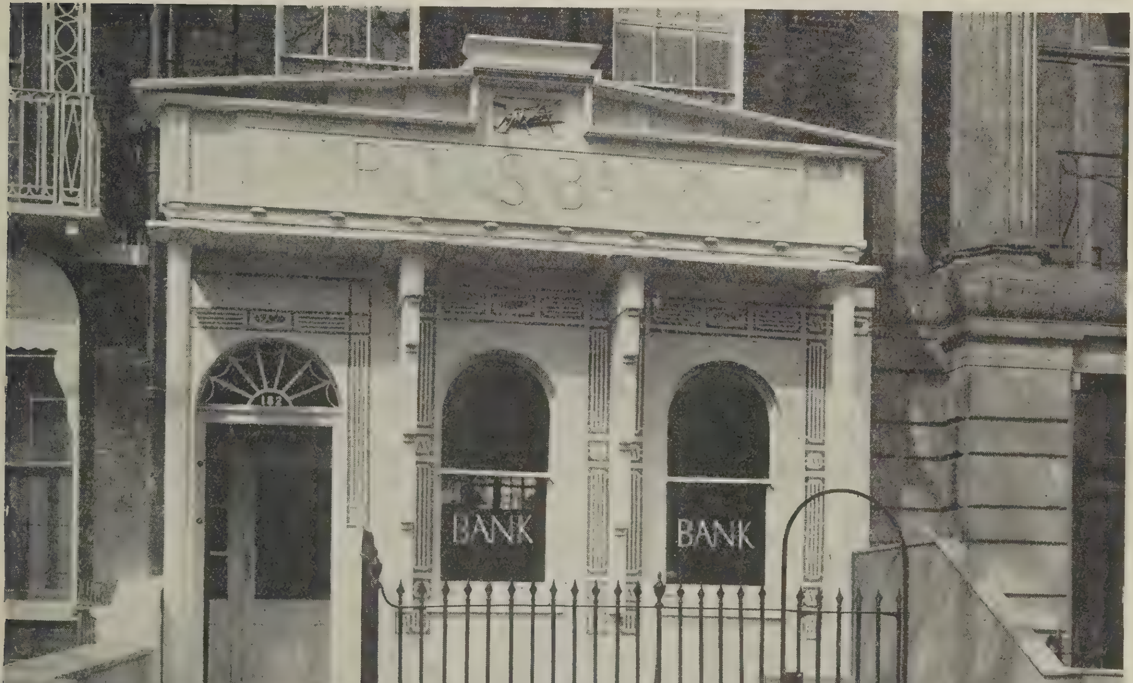


This may be marked as Professor Pite's most important work in London. The outstanding quality of the building is its essential quietness. It was erected in 1907 for the London, Edinburgh and Glasgow Assurance Company, but it now has other tenants.

THE LIBRARY
OF THE
UNIVERSITY OF ILLINOIS



ENGLISH MISSION CHURCH, SAFED, GALILEE.

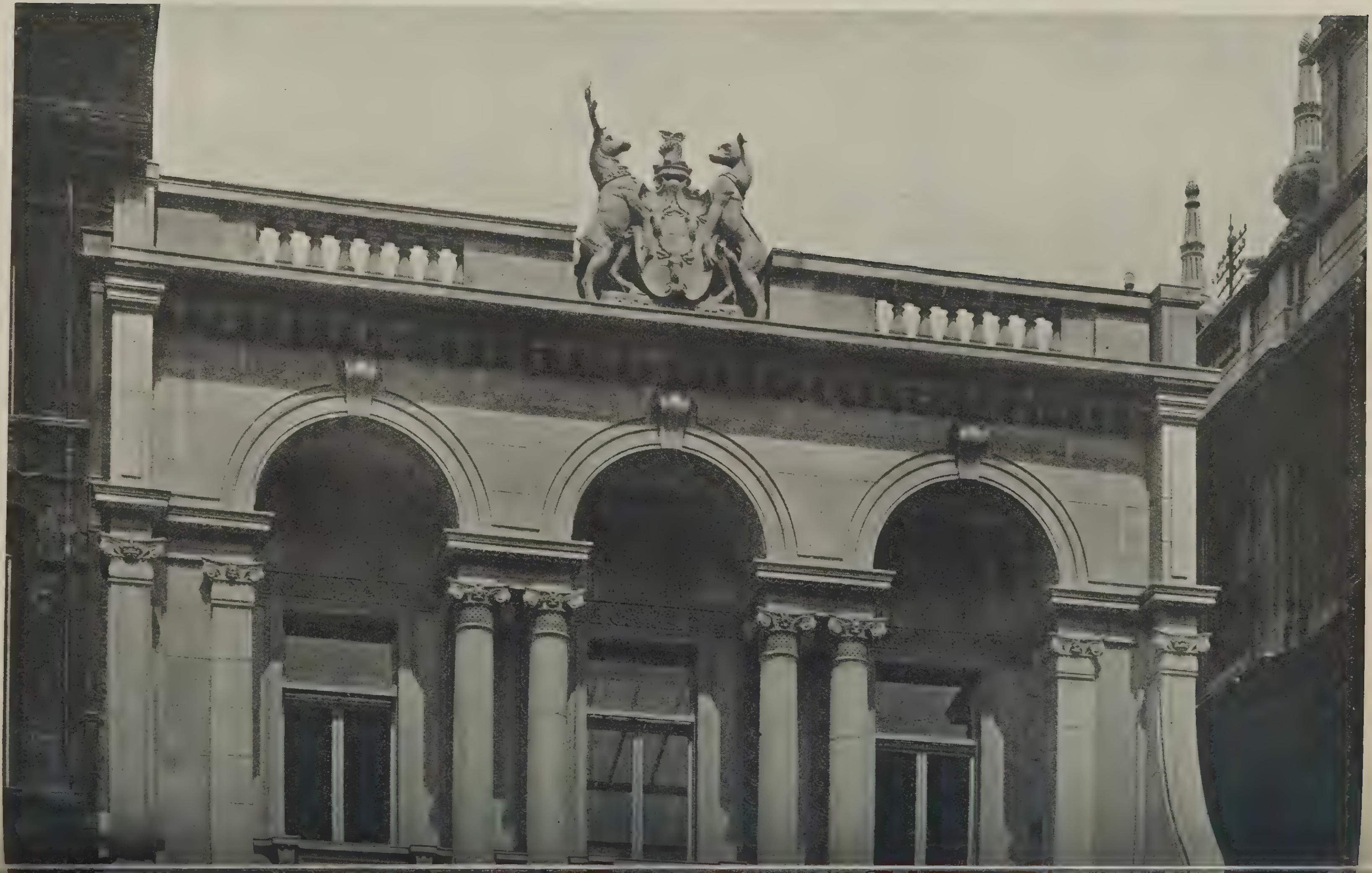


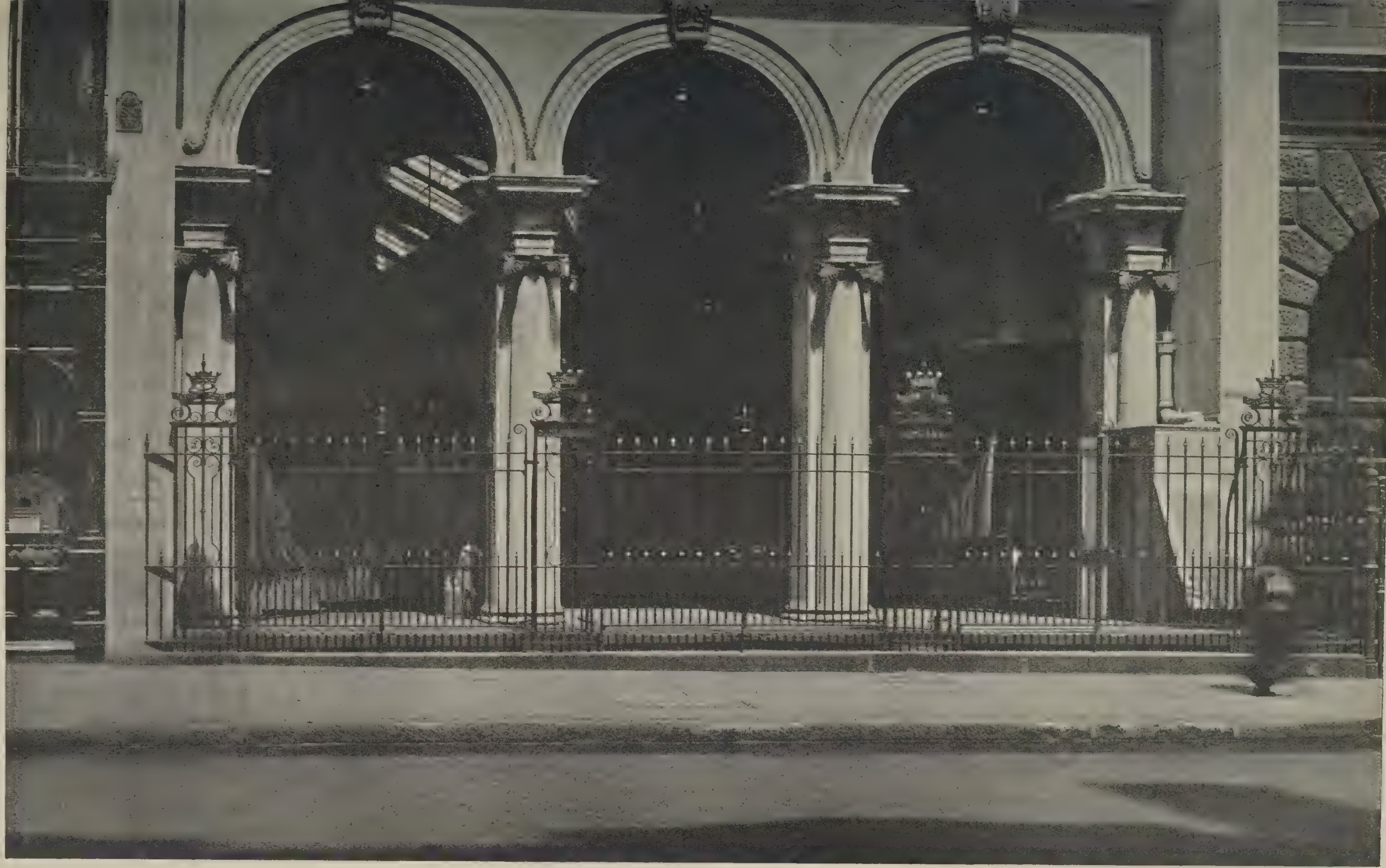
MARTIN'S BANK, EUSTON ROAD, LONDON

PROFESSOR BERESFORD PITE, F.R.I.B.A., ARCHITECT.

Burlington Arcade : The Entrance from Piccadilly

Samuel Ware, Architect. Additions by Professor Beresford Pite, F.R.I.B.A.





Burlington Arcade, one of the most interesting features of Piccadilly, was built in 1818-19 from the designs of Samuel Ware, and up to the latter part of 1911 it remained in practically its original condition. About that time a new story, cleverly conceived so as to harmonize with the existing work, was added at the Piccadilly end from the designs of Professor Beresford Pite, F.R.I.B.A. The addition, which comprises a suite of offices, is reached by a staircase just within the entrance to the Arcade.

of thought in the mind of their designer is quite another and a more difficult thing. There can be no doubt whatever that whether we agree with everything that Prof. Pite has done—and many do not—in him we are face to face with a resolute and very clear-headed thinker. He is probably the first man to appreciate with zest that many of his brother architects do not admire his work. The mindof any man of action is usually a complex until the mainsprings that govern the thought behind it are understood. Prof. Pite knows himself the intention with which he is travelling in building thought, and he has disclosed that intention in stages that are clearly marked if more attention were paid to them. In a sense, like Carlyle's Mirabeau he has "swallowed all formulas." I think he can be interpreted aright if he is viewed as a worker having the utmost respect for tradition who, nevertheless, thinks that we should progress, not retrogress in our use of tradition. To make this more clear, a Georgian house to him is dear as a Georgian house, but he has no use for a modernized *réchauffé* of Georgianism. Rather does he prefer what to many others is almost ugly, provided there is a purposeful modern intention behind it. This may be, probably is, a difficult creed to live up to in its entirety. Prof. Pite has such a wide grasp of all that is really great in architecture and, indeed, in art generally, that he may safely be left alone; but some of us at least cannot resist a pious hope that the fresh and really beautiful experimentalism of some of his earlier work may be recaptured in the onward march.

Space has not permitted any mention of the great gifts of the man as a speaker and lecturer, of his stalwart services on the Board of Architectural Education and the Board of Architectural Studies at Cambridge. These qualities and activities are all part of the man, nay, they form part and parcel of his executed work. A man's best work in building is the work of the whole man, not a part of him. In the work of Prof. Pite we see an outstanding, if complex, personality, having a technical accomplishment that is full of original thought. We may not always fully understand it, but we would do well to respect it and study it.

Honouring Professor Beresford Pite

On Friday last Prof. Beresford Pite, M.A., F.R.I.B.A., Hon. A.R.C.A., was entertained by the Council of the Royal College of Art to a public dinner, held at Pagani's Restaurant, Great Portland Street. Mr. W. R. Davies, C.B., was in the chair, and there was a company of between seventy and eighty present, which included Prof. Rothenstein, M.A., Prof. W. S. Reilly, Mr. Paul Waterhouse, past-president R.I.B.A., Prof. Adshead, Mr. Hubert Worthington, M.A., A.R.I.B.A., Mr. L. M. Austin, A.R.I.B.A. (hon. secretary of the college), Prof. W. R. Lethaby, Prof. Anning Bell, R.A., Sir Frank Short, R.A., Prof. Derwent Wood, R.A., Mr. Halsey Ricardo, F.R.I.B.A., Mr. Maurice Webb, M.A., A.R.I.B.A., Mr. Ralph Knott, F.R.I.B.A., etc. Letters of apology were received from Sir J. Burnet, Sir Banister Fletcher, Mr. John W. Simpson, Mr. A. R. Powis, and Prof. Selwyn Image.

Mr. Paul Waterhouse, in giving the toast "The Profession and Professor Pite," said that for a very long time he had had the pleasure of being acquainted with Prof. Pite and with his works. For many years in his early manhood he lived in Marylebone, and it was a special pleasure to him as a young man to look up to Prof. Pite and to study the things that he did in architecture in that neighbourhood. All around that neighbourhood there were tender and graceful specimens of the building art of Prof. Pite, and one after another he used to find them out and study them. He benefited from them, and in all cases he enjoyed them. Their honoured guest was educated first at King's College, and subsequently at University College. He won the Donaldson medal, and to his great honour and glory, he was one of the winners of the Soane medal for a very remarkable design which had been a by-word among architects ever since. (Laughter.) Many things had come to him since. His great work in education outside his professional work had been crowned by his honorary M.A. of the University of Cambridge—a very coveted distinction. He had watched the character and the creative powers of Prof. Pite, and he could not help realizing that throughout his life had been one of usefulness, of devotion to his art, and abhorrence of putting himself forward by means of his art. That he should have given so many of the best years of his life to teaching others instead of advertising himself was very much to his honour and glory. Architecture was the finest of all the arts, and there was no nobler way of spending one's life than bringing to other persons the pleasure and the knowledge of that great art. As a teacher and collaborator Prof. Pite had always suppressed himself. They were met to do honour to their friend in his translation from one sphere of usefulness to another, and in thinking of a suitable simile it occurred to him that perhaps the finest thing he could say was that Prof. Pite was to be decanted—to be removed from one vessel into another in which his powers would be more clearly seen. On behalf of all his friends he heartily wished their guest every success in the removal into freer spheres of personal architectural practice than he had been able to enjoy during the last few years.

Sir Reginald Blomfield, R.A., speaking in support of the toast, dealing specially with architecture, remarked that it seemed to him that the future of art to a large extent rested with architecture. In the first place the architectural profession had the main advantage of being more or less of a necessity. Painters and sculptors did very beautiful work, but after all if one was extremely short of money one had to do without those things. But architecture was a necessity, and men of intelligence and education, including the business men of the country, were beginning to see that it was a very wise economy to have architects in control of buildings and not leave them to the free fancy of the mere builder. There was another advantage which architects had over their colleagues in art. The poet, the painter, and the sculptor could get away into the free air and do as they pleased. Architects could not. They had got to observe all sorts of practical conditions with regard to business arrangements, but what really controlled them was the laws of statics and dynamics, and that had saved architecture from the serious aberrations which had attacked the other arts. Coming to the particular he made bold to say that the architects of this country were just about the best in the world. They might think that rather a bold assertion, but for a long time their superiority in domestic architecture had been recognized, and he believed the same remark applied to civil and ecclesiastical architecture. He would like to pay his tribute to the grand work which Prof. Pite had done as a teacher. All sorts of students were shovelled into his class-room, the great majority having had no previous training. At the end of a year or two they were turned out in a most extraordinary way. There were a few of real promise who were influenced by Pite's teaching, and those were the men who had become the leaven of the whole lump of the architecture of this country. Prof. Pite was one of those men who had left his mark on his generation, and he was one of those who had served the mistress art faithfully and well.

Prof. Rothenstein, M.A., speaking on behalf of the students and staff of the Royal College of Art, said it was with the deepest possible regret they parted with a man who had been a most excellent and wise colleague and a devoted teacher.

Prof. Pite, in responding to the toast, after thanking the speakers for their kind personal remarks, said that like Mr. Paul Waterhouse he shared some ancestral interest in architecture. He was born, so to speak, and brought up over the shop, and from his earliest recollections he had known what the smell of tracing linen was. (Laughter.) He was sent at a very early age, along with his brother, who was present that evening, to the then School of Art at South Kensington to learn drawing, along with 500 other nts. He soon made the happy discovery that there an inward pleasure in the exercise of architecture. It nothing to boast of—it was something in the nature gift, and it was that gift which bound them together as tects and artists—a bond which was far stronger than bond of professional sympathy. The College of Art the schools connected with it were an expression of est, and the share which the Government and the took in that vital necessity to the intellectual life of nation. One could conceive that it was difficult to iate aright the value of the co-operation of the Govern- in such an abstruse and delicate matter as art. There some who were always resenting the necessary organiza- which the Government had to impose on such a delicate as art itself; but how deplorable it would be if the rnment did not recognize art? How many would be ries for recognition? How urgent would be the appeal ve a Ministry of Fine Art, which would become dic- ial in many respects? Proceeding to speak of the value mportance of the art schools of the country to industry, Pite said that when they remembered that the build- ndustry was the third greatest industry in the country and that fine buildings culminated in the art of architecture, it was quite impossible to conceive of any Government omitting to have proper regard to the teaching of art. Regarding their present ideals, he remarked that if architecture ceased to reflect the age in which it lived and the public thought by which it was surrounded, it ceased to be a living art, and it would become a mere museum exhibit. Architecture must be active and progressive, and the art largely owed its progress and its ideas to those who were active thinkers and courageous designers. He thought they had got their ideal in the evolving art of construction; they had got to develop the idea of planning, and they had got a new and a live movement connected with the re-planning of our towns. Amid all the changing of public taste and fancy he had this solid conviction, that any work thoroughly well done at the sacrifice of self, without regard to reward, as the representation of character, the self-revelation of truth and honest purpose, would eventually acquire æsthetic value.

The remaining toast, "The Chairman and the Board of Education," was proposed by Mr. E. R. D. Maclagan, C.B.E., and suitably acknowledged by the chairman.

Correspondence

Architects and Advertising

To the Editor of THE ARCHITECTS' JOURNAL.

,—At the risk of destroying the reputation you give squirting out hot stuff and burnt-up rubbish without tion and with no other purpose than to relieve internal ure—which is what I understand by "volcanic" and losive"—I write to say that I entirely agree with your that Lord Leverhulme the thinker is as unsuccessful ord Leverhulme the versifier.

oever says, as you report of Lord Leverhulme, that tects "would be wise to fling away modesty and adver- confesses to careless thinking or mischievous inten- The words "wise" and "modesty" do not express is intended. Lord Leverhulme is not appealing to lom," and "modesty" is not involved. The meaning t it would be *expedient* if architects flung away their *spect*, etc. Leaving aside altogether the persuasive- of the claim that architects should fling aside their lesty" because Lord Leverhulme and his friends have e example, it is obvious that advertising will not se the amount of architectural work; will not improve tatus of the architect; and will not raise the quality performance. On the contrary, if architects flung self-respect—which step Lord Leverhulme rightly a necessary preliminary to advertising—architects no longer command the respect of the public; and gh their advertisements would no doubt contain a um of the hypocritical blather about "desiring to serve ublic," which is a common-place of the advertisement , the public would know that architects were no serving them, but serving themselves, and the status profession would fall. Further, as the profession of ecture would become closed to men who were not red to fling aside their self-respect the art of architec- vould decay by getting into the hands of men charac- d, not by sensitive perceptions, but by the coarseness ir moral grain and the thickness of their skins.

KARSHISH.

uilding Heights and Ancient Lights"

To the Editor of THE ARCHITECTS' JOURNAL.

,—In your issue of July 11 you comment on the letter me which you printed in the preceding number, and the following therefrom :—

e actual attitude of the Institute was indicated by the fact that its Building Act Committee is studying the question of higher buildings, while its Ancient Lights Committee is studying the question of ancient lights."

After making this quotation you offer the following observations :—

"May we remind Mr. Joseph that there has recently been an election? Of course, the two committees referred to nominally exist until the new committees get to work, but actually their unfinished and unreported deliberations are 'as dead as mutton.'"

I regret to find that you should adopt the view that the new Council will inaugurate its career by scrapping all the work of the old Council.

Personally, I have a higher view of the men who constitute the new Council, and I cannot conceive that they will refuse to take up the work of the Building Act Committee and the work of the Ancient Lights Committee at the point where it was left by the late Council, or that they will not proceed with the investigations of these two important matters, and eventually report thereon.

Neither the needed amendments in the Building Act nor in the law of Ancient Lights are in any way associated with the question of Registration.

They are both practical questions, which demand prompt investigation, and it would be an injustice to the new Council to suggest that it would be unwilling to devote its mind to important issues such as these.

You are actually suggesting that the feeling created by the issue of Registration *versus* Unification has so embittered the mind of the new Council that it would be unwilling to interest itself in those practical issues which have been left incomplete by the old Council.

Such an attitude would be entirely alien to the best traditions of British public life, which has hitherto permitted the most bitter opponents to meet in a perfectly friendly atmosphere, notwithstanding differences of opinion on political issues.

I am not prepared to think, for a moment, that the new Council will adopt the petty attitude for which you appear to be anxious to give it credit.

Yours obediently,

DELISSA JOSEPH, F.R.I.B.A.

[We did not credit anybody with a "petty attitude"; we merely based our forecast of events upon the fact that the best professional opinion is opposed to higher buildings of the kind advocated by Mr. Joseph, as witness the condemnation of the movement—by 79 votes to 8—during the term of office of the 1922 Council of the R.I.B.A.—ED. A. J.]

Experiments in Cottage Building.—2

By WALTER R. JAGGARD, F.R.I.B.A.

IN the previous article some notes were given with regard to the traditional methods of constructing cob, chalk, and clay-lump walling. The same report * gives some further information upon another form of earth walling, which has been more fully developed in other and less humid countries, and is known as "Pisé-de-terre." These walls consist of earth rammed between boards, no water, beyond that contained in the earth, being added. The report states that to build economically a suitable material must be found on the site, and all apparatus be kept as simple as efficiency will allow, rapidity of erection depending largely upon the ease with which the shuttering can be manipulated. The foundation must be solid and the walls protected from damp, above and below, and from excessive rainwater on the face, and in all earth walls care should be taken to guard against vermin.

Henry Holland, in his report on "Pisé-de-terre" in "Communications to the Board of Agriculture," 1797, quotes a French author, François Cointeraux, who describes the traditional method of the province of Lyons. The choice of material is given at great length, but he gives all earths in general as fit for use "when they have not the lightness of poor lands nor the stiffness of clay." Generally speaking, anything that will bind into a good clean footpath for wet or dry weather shows promise of being a reliable material; it would always, however, seem desirable that before work is commenced a sample of the earth should be rammed and tested.

The "British Clayworker" of November 15, 1920, gave a crushing strength of 280 lb. per sq. in. (18 tons per sq. ft.) as a minimum to work to, and although this at first sight seems high, a sample of Wealden clay, mixed with 25 per cent. of fine clinker, gave a crushing strength of 32 tons per sq. ft.

Mr. A. Alban H. Scott has made many experiments with various types of pisé work, and it was upon the results of these that the chalk pisé work, carried out at Amesbury, was based. Major Clough William Ellis has also carried out experiments with the material available at Newlands Corner, near Guildford, while Mr. T. G. Davidson has successfully employed a composite walling of chalk and cement in a house at Princes Risborough. Many other experiments with various materials have been carried out by the Research Department at their experimental station at Acton, with many interesting results.

The Experimental Work at Amesbury.

The inception and scope, together with the difficulties of the work at Amesbury, are fully detailed in the Report † previously referred to, and it will suffice, for the purpose in view, to state that five detached cottages, subsequently known as Nos. 14, 12, and 10, and Nos. 4 and 5 Ratfyn, were to be the subjects of the experimental work. The plans of the cottages are based upon one "type model," but slight modifications were made in each, with the object of providing special experimental features.

The work fell naturally into three main divisions, viz. :—

1. Walling.
2. Floors and roofs.
3. Fittings and equipment.

1. *Walling.*

Cottage No. 14 was built with ordinary hollow-wall brickwork, and calls for little comment beyond the facts that the inner thickness of the upper floor walls wa duced from the 4½ in. of the lower floor to brick on 3 in. thick, and some consideration was given to external appearance by a careful selection of facing b from the ordinary deliveries, by the use of a brighte brick to form the quoins of the windows, and by focu interest on the main external doorway.

In Cottage No. 12 the external walls are built of concrete, composed of 8 parts of a somewhat chalky gr found at Amesbury, to one part of Portland cement, a little more water than is generally used for ma concrete blocks. It was rammed between shuttering, slightly reinforced with vertical strips of "Exmet" single ¼ in. horizontal rods to prevent temperature angle cracks. The ground-floor walls are 12 in. thick, the upper ones are reduced to 9 in. The cills and li were pre-cast, the latter being slightly reinforced No. 4 ⅜ in. circular rods and ¼ in. stirrups, and ha panelled faces. A plain, flat string course is carried ar the building at the level of the ground-floor window-he while a cement-moulded cornice and low parapet complete the upper floor. The entrance doorway made the focal centre of interest, with panelled pila and cornice cast *in situ*. The walls are covered inter with an absorbent plaster, and very little condensation been manifested; the external surfaces were scrubbed d with stiff brushes and clean water so soon as the shutte was removed, in order to expose a somewhat co texture, and afterwards colour-washed. The ger appearance of the building does not conform with the u idea of a rural cottage, but the intention was to allow material to express itself, and the simple lay-out of front garden adds to the general formality of idea.

Cottage No. 4, Ratfyn.—The Ministry of Agricul had undertaken to build the walls of their No. 9 Cotta chalk in accordance with the traditional or "Wintersl method, which has been previously described. It however, thought that better results could be obtaine slightly varying the water content of the ordinary c mixture, and by ramming it into shuttering, and method was adopted for Cottage No. 4.

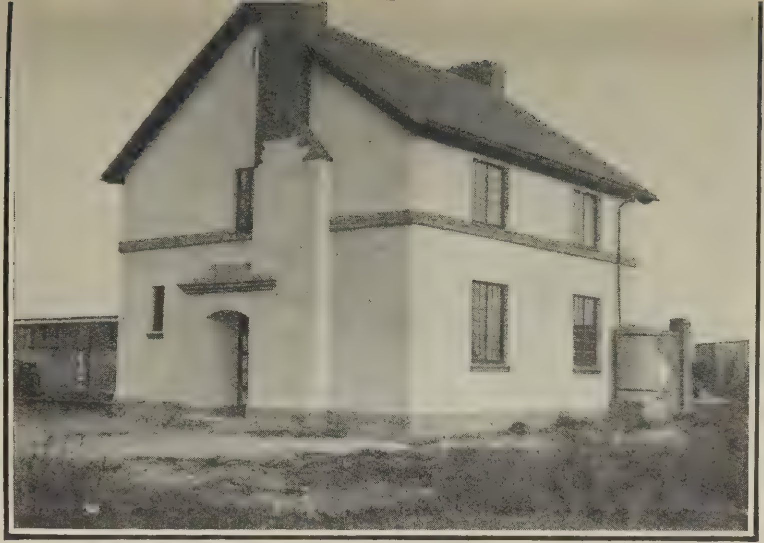
In all types of earth walling, when the material is t rammed between shuttering, it is of the utmost import that this, the shuttering, should be (*a*) of simple const tion, such as could be made by the ordinary village penter and smith; (*b*) it should be easily handled, rea struck and reassembled with the minimum of sk labour; and (*c*) it should be as rigid as possible order to withstand the constant shock of the ramm and preserve as true a face as possible to the finished Considerable attention was given to the design of shuttering and to the type of rammers to be used, but t description is too lengthy to be entered upon here, reference should be made to the two reports, which h already been mentioned, for full details of the various fo of shuttering which have been used for earth walling.

The walls of this cottage are constructed with traditional chalk mixture. The chalk was dug adjacen the site, the larger pieces being broken to a 2-in. ga It was then loaded on to a boarded platform, the st was added with just sufficient water to make the mix plastic when worked by hand. The water content of chalk itself was constantly checked, and sufficient ad so that the average amount of moisture in the mix about 8 per cent. of the weight of the chalk. It thoroughly mixed by hand, and thrown into the shut

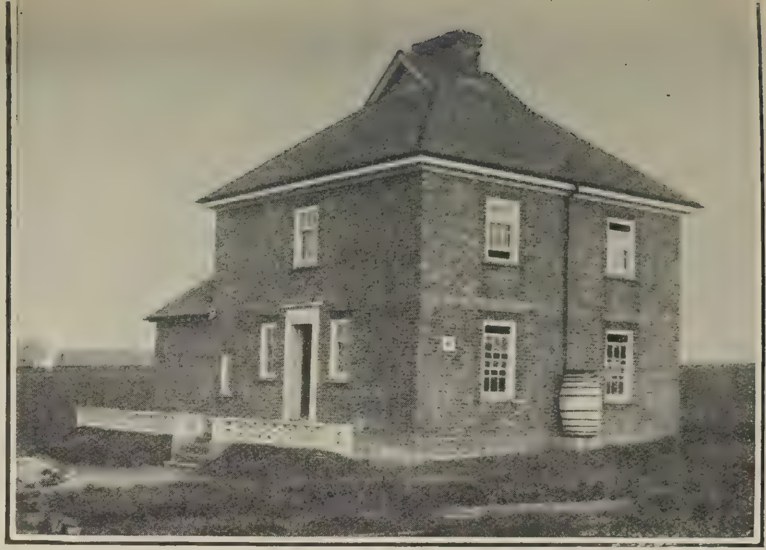
---

* "Building in Cob and Pisé-de-terre." Building Research Board. Special Report No. 5. H.M. Stationery Office. 2s. net.

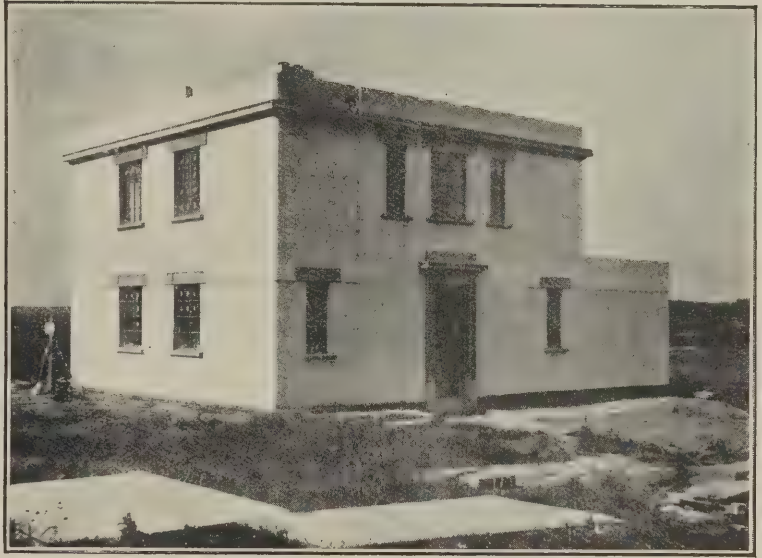
† "Experimental Cottages." A report on the work of the Department of Scientific and Industrial Research at Amesbury, Wiltshire. By W. R. Jaggard, F.R.I.B.A. H.M. Stationery Office. 5s. net.



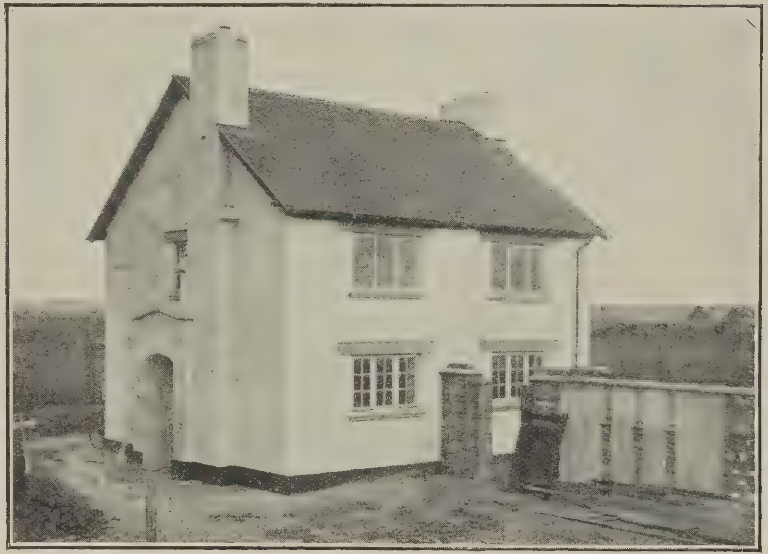
NO. 4. RATFYN (CHALK MIXTURE).



NO. 14. (HOLLOW-WALL, BRICKWORK).



NO. 12. (MASS CONCRETE).



NO. 5. RATFYN (CHALK PISÉ).

EXPERIMENTS IN COTTAGE BUILDING AT AMESBURY, WILTSHIRE.

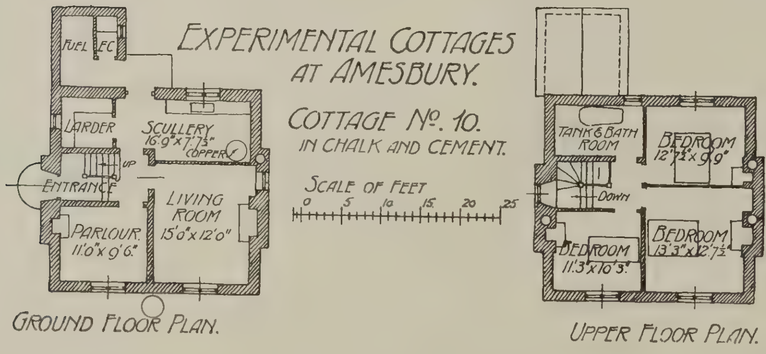
(*From "Experimental Cottages.*")

in layers about 3 in. deep, and was, at first, rammed with flat iron rammers. These, however, tended to "case-harden" the surface, and wedge and heart-shaped tools were subsequently used, the latter giving the best results. Honest and consistent ramming is particularly necessary in order to obtain solid walls with fair faces. The foundations for the wall are built of bricks and flints upon a bed of concrete, are carried to a height of 9 in. above the ground, and finished with a double-course slate damp-proof course. External projecting chimney-stacks were designed, in order to demonstrate the possibility of their erection in chalk, but these entailed much extra labour in the adaptation of the shuttering, and it became very evident that simple walling, without any projections whatever, is best adapted for all forms of earth walling, when rammed into shuttering.

The ground floor walls are 1 ft. 5 in. thick, the upper floor walls being reduced to 1 ft. 2 in., and 6 in. by 3 in. concrete wall-plates are used for the upper floor-joists. The cills are formed with a double course of plain tiles, bedded upon an over-sailing course of header bricks, and the lintels are of precast concrete, of rectangular section, 5 in. deep and the full thickness of the walls, reinforced with ⅜ in. circular steel rods, and have a bearing on the walls of 1 ft. 3 in. The external faces of the walls, including the lintels, are rendered with a thin coat of lime plaster, and the internal faces are plastered, finished from the wood.

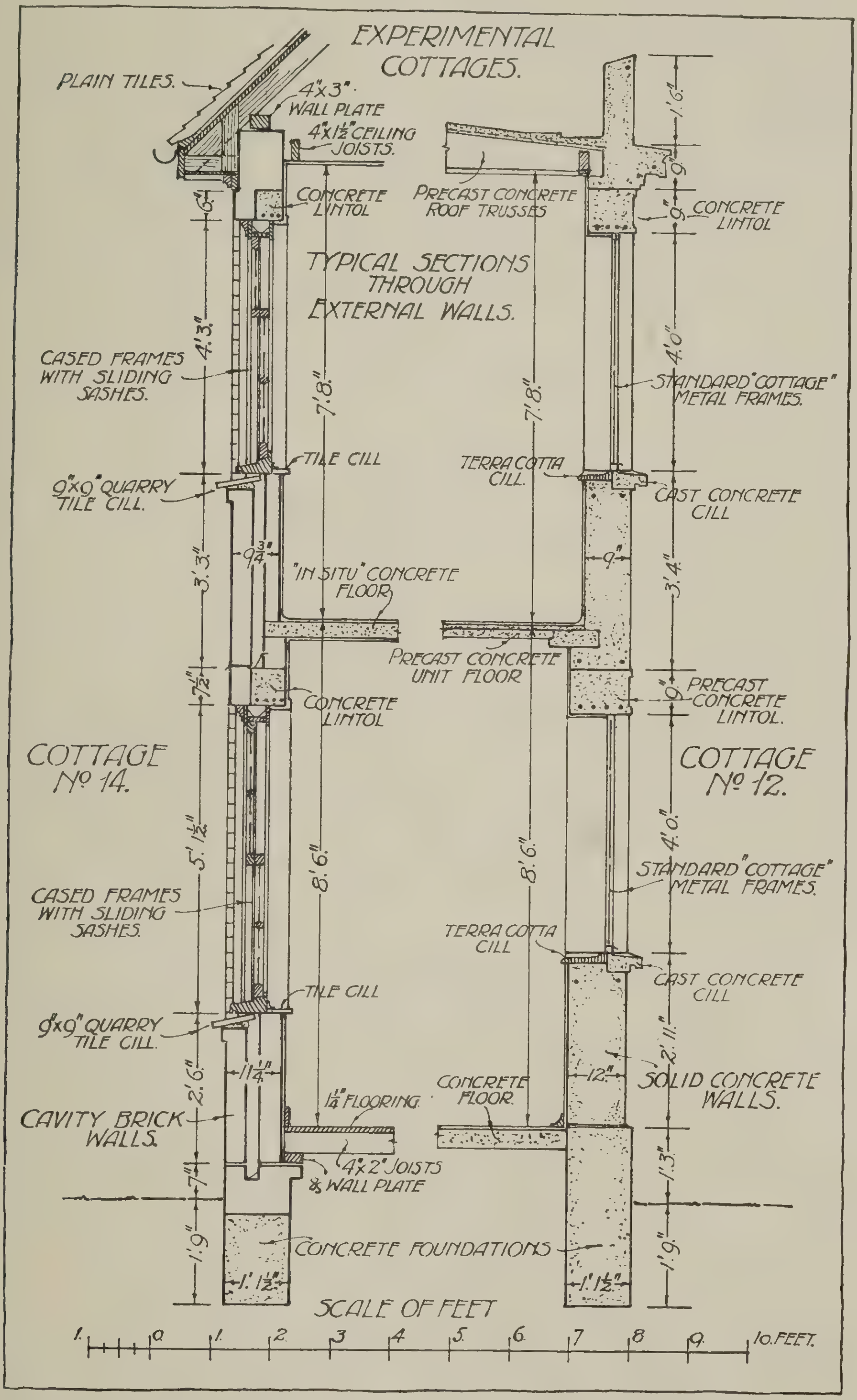
In Cottage No. 10 a variation of the traditional chalk mixture was used for the walls. The result of experiments carried out by Mr. A. Alban H. Scott at Basingstoke, together with further laboratory tests, led to the issue of the following instructions: "The chalk, after digging, will be broken to pass a 1½ in. mesh. It will then be mixed on a boarded platform, with one-twentieth of its weigl Portland cement, by turning over at least three time in concrete mixing, and none of the mixture must be allc to stand for more than thirty minutes before using." added water was necessary as the chalk throughout work contained an average of 20 per cent. of moisture foundation for the walling was formed by building two brick walls with a chalk filling upon an 18 in. bed of crete, and these walls are, in this instance alone, carrie the level of the ground-floor window-cills, about 3 ft. above ground, a double-course slate damp-proof co being used. The walling material was placed in the shut and rammed with heart-shaped rammers. Strips of 1 mesh wire-netting were laid at the bottom of the shut of every alternate course, i.e., at 3 ft. 4 in. intervals in height, and served as a horizontal reinforcement to walls, which are of similar thickness to those of N Ratfyn.

The cills are formed with ordinary splayed bricks se three-to-one cement mortar, while the lintels are ba upon traditional work, and constructed with an inner outer 7 in. by 3 in. deal, connected together at the bott with an 11 in. by 2 in. deal laid flat and well spiked to vertical beams. The channel thus formed was filled w chalk and cement, and a double tile course placed on top of the outer beam. The lintels obtained a 1 ft. 3 bearing upon the walls, and rested upon 7 in. by 2 in. bearing pieces, placed across the thickness of the wa and all the timbers were treated with two coats of creos before being fixed and built in. The walls have b



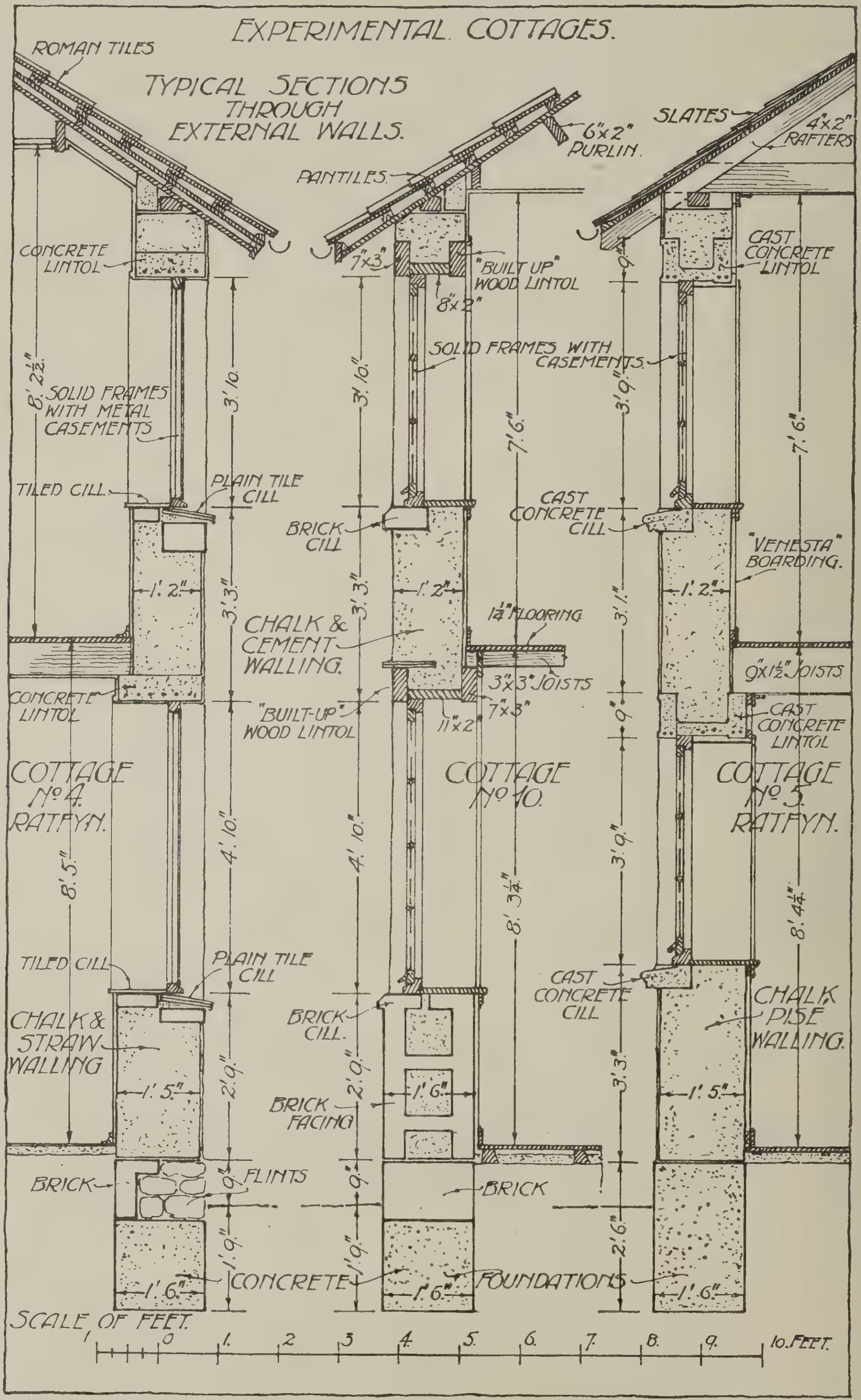
vered with a thin coat of lime plaster and limewash, but was found possible to get so good a face with the material at it is thought that such walls might be left un- vered, and the material is so satisfactory that a reduction the thickness of the walls might also be made. It may so be noted that the Ministry of Agriculture constructed hollow walls of one of their cottages with blocks, made Dricrete machine, of exactly similar material to that i at Cottage No. 10, and these also have proved entirely essful.

ottage No. 5 Ratfyn was built with walls of chalk . This is the name given to a composition of fine soil and the chalky gravel which lies directly underneath it, about 30 per cent. of the former being used with the chalk. No straw or water was added, but the material was thoroughly well mixed by hand, deposited between the shutters, and rammed with the iron rammers. From experience it would appear that there is a minimum water-content of the material, below which the work will be unsatisfactory, and in dry weather the material must be kept appreciably damp, and protected from too rapid drying. Chilmark stone has been used for an entrance porch, and for the chimney-stack offsets, in order to demonstrate the possibility of its use in connection with



SECTIONS THROUGH THE EXTERNAL WALLS OF COTTAGES NOS. 12 AND 14.

chalk walling. In many old cottages, where brick or stone have been used for quoins, they were found to have broken away from the walling, and this was thought to be due to contraction. In this cottage the walling was allowed to dry first, the stonework was added subsequently, and the result appears, so far, to have been quite satisfactory.



SECTIONS THROUGH THE EXTERNAL WALLS OF COTTAGES NOS. 4 RATFYN, 10, AND 5 RATFYN.

The walls are of the same thickness as the other chalk-walled cottages, and rest upon a concrete foundation, with a tarred and sanded damp-proof course. The cills and lintels are of precast concrete, the latter being of channel-shape section with 3½ in. thick sides and 2½ in. bottoms, and are reinforced with ⅜ in. circular steel rods and ¼ in. stirrups, the outer vertical face is sunk-panelled, and top is protected with a 4 lb. lead apron, and they have usual bearing of 1 ft. 3 in. on the walls. The external fa have been covered with a rough lime slurry, while rooms internally, excepting the scullery, are lined w Fiberlic, Venesta, or Beaver boards.

A length of walling has been built between Cotta Nos. 4 and 5 for the purpose of testing a variety of exter wall coverings and treatments, and some interesting resu are expected in course of time.

An analysis of the costs of the walling as carried out Amesbury has produced the following figures, which btained by establishing a unit cost, represented by the gure 10, for the brickwork of Cottage No. 14:—

OMPARATIVE COSTS OF VARIOUS TYPES OF WALLING PER UNIT CUBE.

MATERIALS.	COSTS TAKEN AS.
rickwork in mortar—hollow walls. 11 in. work. Cottage No. 14.	10·0
halk and cement, 20 to 1. Wire netting at every 3 ft. height, rendered 1 coat of lime slurry. Cottage No. 10.	8·1
olid concrete, 8 to 1. 9 in. work. Cottage No. 12.	8·095
halk and cement blocks, 12 to 1. Hollow walls, 10 in. work, rendered 1 coat of lime slurry. Cottage No. 13.	6·19
in. concrete blocks, set in cement and rendered. Cottage No. 11.	6·19
et chalk, "Winterslow" method. 15 in. work. Cottage No. 9.	6.19
halk pisé, rendered, 15 in. work. Cottage No. 5 Ratfyn.	5·95
halk and straw rammed, 15 in. work. Cottage No. 4 Ratfyn.	5·0

Generally speaking, the experiments with earth walling, as carried out at Amesbury, have been very successful. They have proved that such buildings should be as simple as possible in design, with straight lengths of walling, without projections of any sort; they should be provided with good foundations, and efficient lower and upper damp-proof courses.

The roofs should project well over the walls to afford them some protection, and a cheap and efficient outer covering, which will not break away from the walls, appears to be desirable. Earth walling should not be built during the winter months, nor in the dry summer months, the best time being, apparently, during the months of March, April, May, and June, and September and October.

(*To be continued.*)

[The previous article of this series appeared in our issue for June 20.]

Contemporary Art

The Contemporary Art Society.

No amount of adverse criticism can shake the firm founda- on of the idea on which this admirable society is founded. sets out to encourage the best in young English art by ırchase and by exhibition, and by gifts to galleries. There e bound to be mistakes now and then, and there is nothing ore valuable to a policy than an occasional mistake. ow few they may be was clearly demonstrated at the cent exhibition of the great effort of the society exercised er the last few years—difficult years—at Grosvenor ouse. Here, out of 300 works, there was hardly an example at, from some point of view, was not valuable. On the her hand, amongst them were masterpieces. The small llection by P. Wilson Steer was beautiful; the examples Walter Sickert were illuminating; Henry Tonks proved w splendid his influence must be as director of the Slade hool. Some of the works were loans; I wonder if this eans they will one day become the property of the society? hope so, for they included pictures by Glyn Philpot, John, cEvoy, Ginner, Sargent, and Wilson Steer, and of the ming men, some by Henry Lamb, Duncan Grant, Wynd- m Lewis, Stanley Spencer, and William Roberts. All ese among the pictures, but besides these—the loans and e actual property—there was the magnificent collection drawings, the collection of which gives the society a stre it can never lose. The drawings and prints were nderful, including nearly all the men and women, the oduct of the last twenty to thirty years' training in the lendid schools of draughtsmanship of which we in ngland are now happily possessed. The society is weak in e particular only: the young British sculptors are not presented. Haste should be made to give the new plastic t as good a show as the graphic, and it is still possible to quire representative works of some of the older men and men.

The New Society of Artists.

This exhibition strikes a gay note. Here and there are e displays of the colour sense of some of its members, if, the other hand, here and there accomplishment in draw- is somewhat to seek. But it is a competent exhibition, d one without affectation. There are nearly 400 exhibits the Suffolk Street Galleries representing nearly 200 of the ergetic members of the society, now holding its third nual exhibition. Perhaps for real quality John Wheatley's till Life" (No. 47) is the best picture; Bernard Munns a little painting of a girl, with a primitive Italian back- und, called "Enigma," which attracts by its imagina- n and sincerity; A. Jonniaux, in his "Charwoman," passes anything that he has yet exhibited in strength vigour; the Baroness Frideswith de Lynden shows some striking coloured illustrations, and in the water-colour section J. S. C. McEwan Brown's "The Shore," and "The Silent Pool," are admirable. J. S. Aumonier is represented by three attractive landscapes. There are a number of portraits showing good work, and the heads in those of Sir Francis Lowe and Prof. Gishert Kapp, by Bernard Munns, are carefully studied. Una Munns's jewellery is attractive, and one of the best features of the exhibition is the sculpture. There are three pieces, all by Hilda A. Walker, that show real promise: "Sleep," "Dian," and "Wendy." Here and there are some charming pictures with an architectural appeal. I notice in the list of members most of the addresses are in the provinces; judged as a provincial exhibition it is altogether admirable.

The Independent Gallery.

Most of the great painters and sculptors were great draughtsmen, and to assure those who may possibly have some doubt still as to the character of the work of Augustus John there is now an exhibition of his earlier drawings acquired by Mr. John Quinn, of New York. There are sixty-five of them, and following on the show of pictures of the same collector at the same gallery some two or three months ago, and on that at the Alpine Gallery more recently, they are of the utmost value in the study of John's work.

The Cotswold Gallery.

To turn from the figure to the landscape and building is to sense the inexhaustible charm of the pen and pencil, the wash and water-colour drawing. One of Turner's sketch-books, the only one which he allowed to be dismembered, yields treasures of pencil work which he did in Scotland in 1801. There are ten of these leaves here, and others are in the collections of the National Galleries of Britain, and in the Ruskin Drawing School at Oxford.

Walker's Galleries.

In the 150 water-colour drawings forming Mr. Walker's annual show the qualities are well illustrated. There are ten Peter de Wint's, and works by W. Evans, of Eton, James Holland, W. Collingwood, W. R. Beverley, and Thomas Rowlandson.

Brook Street Art Gallery.

Janet Proctor and Sylvia Smee's half hundred sketches in water-colour of the Mediterranean include notes of Morocco, Italy, France, and Spain. They vary in quality, and some of them are quite good. An example of the good ones is the Baroque Church, Siena. They all show a certain power of observation, but the draughtsmanship in some cases could be improved.

KINETON PARKES.

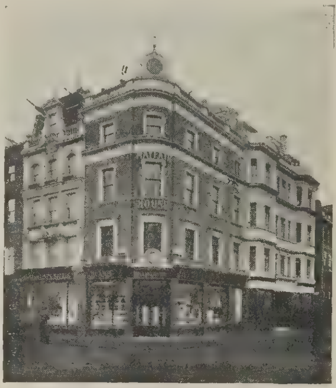
New Premises for Harvey Nichols & Co., Ltd

An Example of Rapid Rebuilding

WILLIAMS AND COX, F.R.I.B.A., Architects

THE new building for Messrs. Harvey Nichols & Co., Ltd., in Sloane Street, has been erected as a steel-frame structure in accordance with the London Building Act, 1909. It is constructed with Portland stone piers, filled in with decorated cast-iron panels in which are steel sashes; the portion above the cornice is built in red brick, and the roof is covered with Westmorland slating. In view of the fact that the demolition of the existing Sloane Street premises for the rebuilding and extension seriously curtailed the selling space, the design and contract were arranged so that the work could be executed in the shortest possible time.

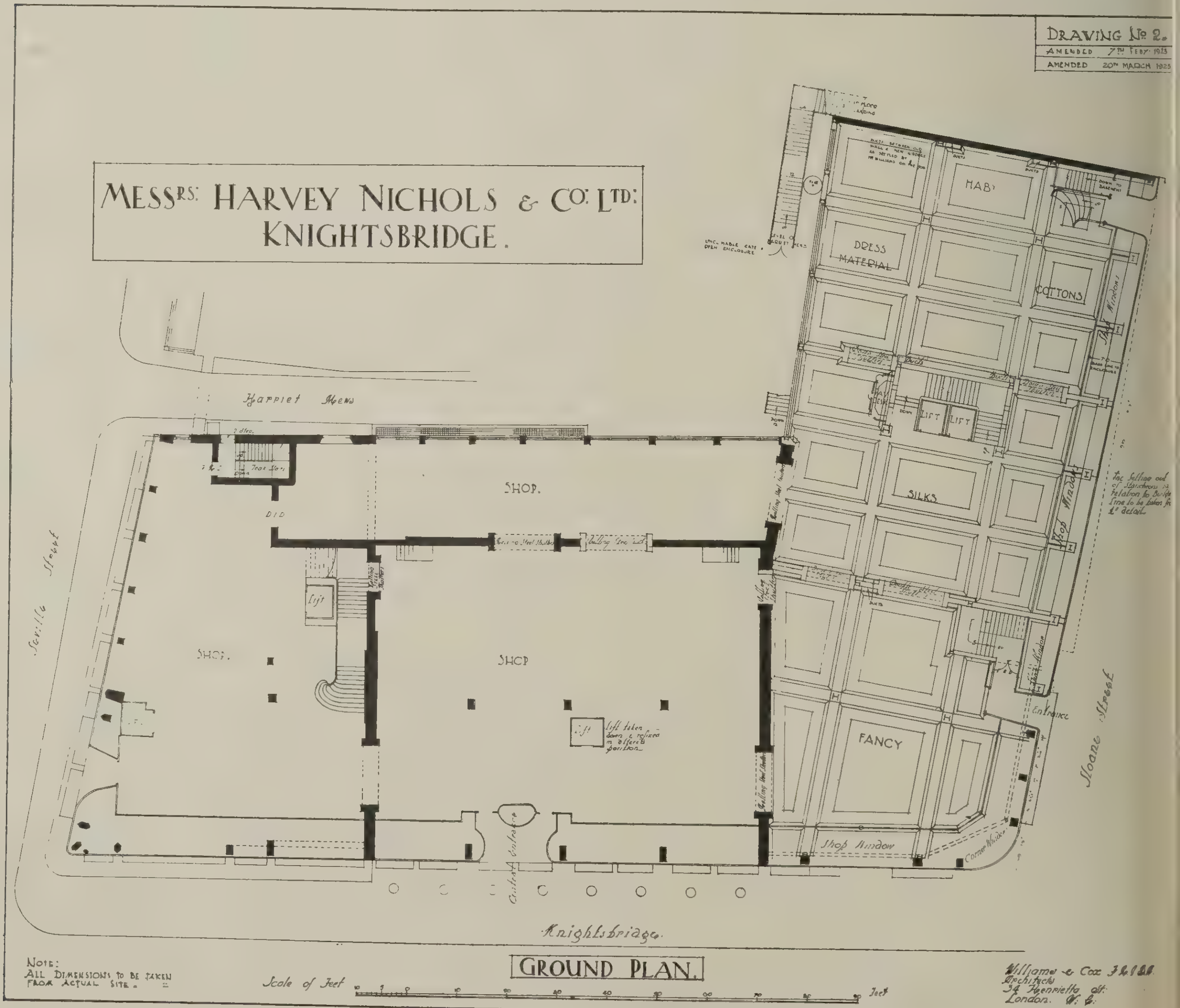
The architects, Messrs. Williams and Cox, in conjunction with the engineer, Mr. Douglas Young, devised a scheme to carry out the whole of the foundation work before the existing buildings were taken down. For this purpose Messrs. Harvey Nichols handed possession of the basement to the contractors on November 1, 1922; and access from the mews at the rear was formed, an electric hoist installed, and foundation work carried out with day and night gar Nothing was visible from Sloane Street, and the custom had no idea of what was going on beneath them. The r foundations were some 12 ft. below old basement, and the old buildings w shored up with timber and steel neec section by section. Altogether sc 8,000 yds. of excavated earth were moved; and 7,000 yds. of ballast, tons of cement, and 230 tons of s were used in the new foundation worl

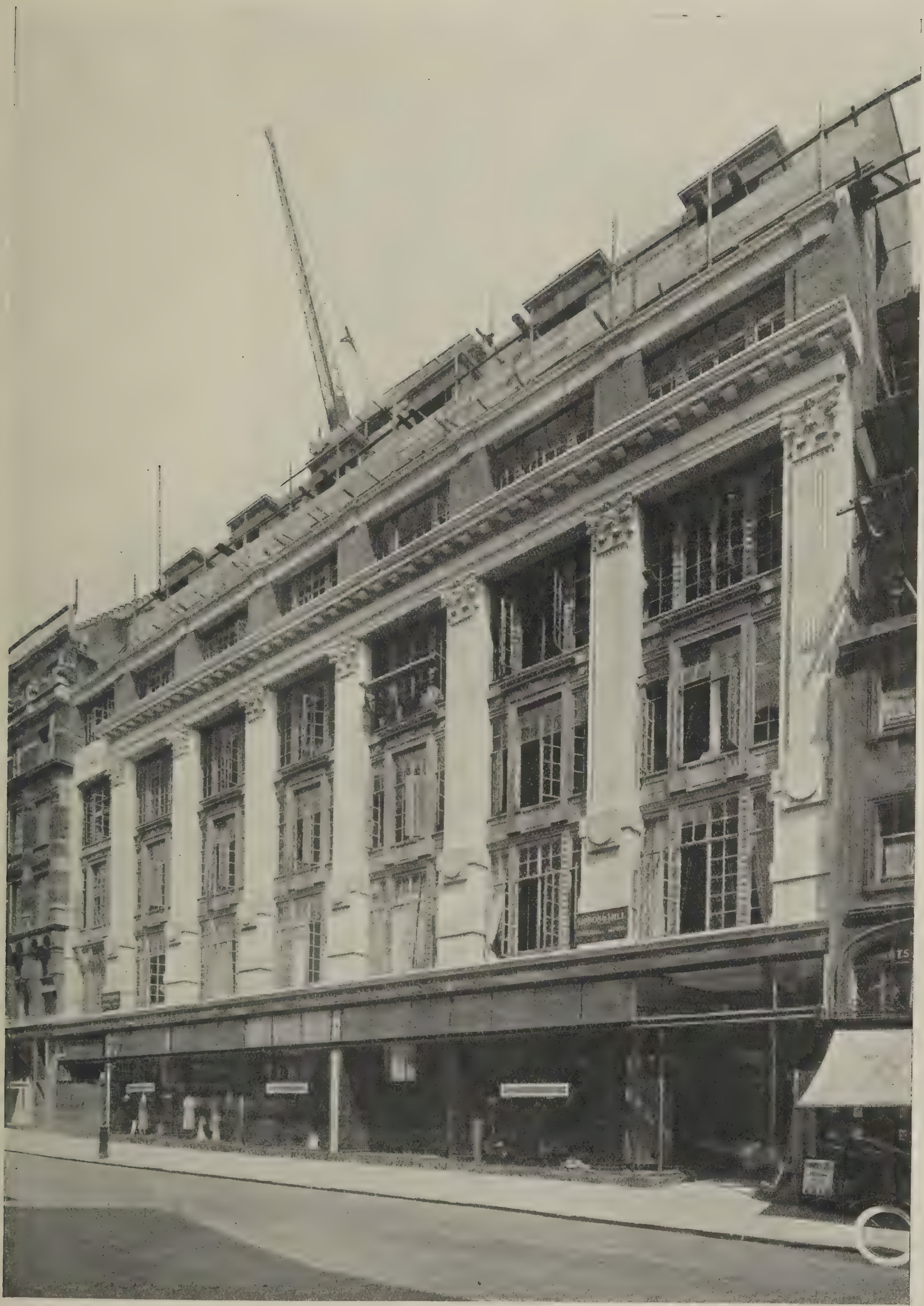


BEFORE REBUILDING.

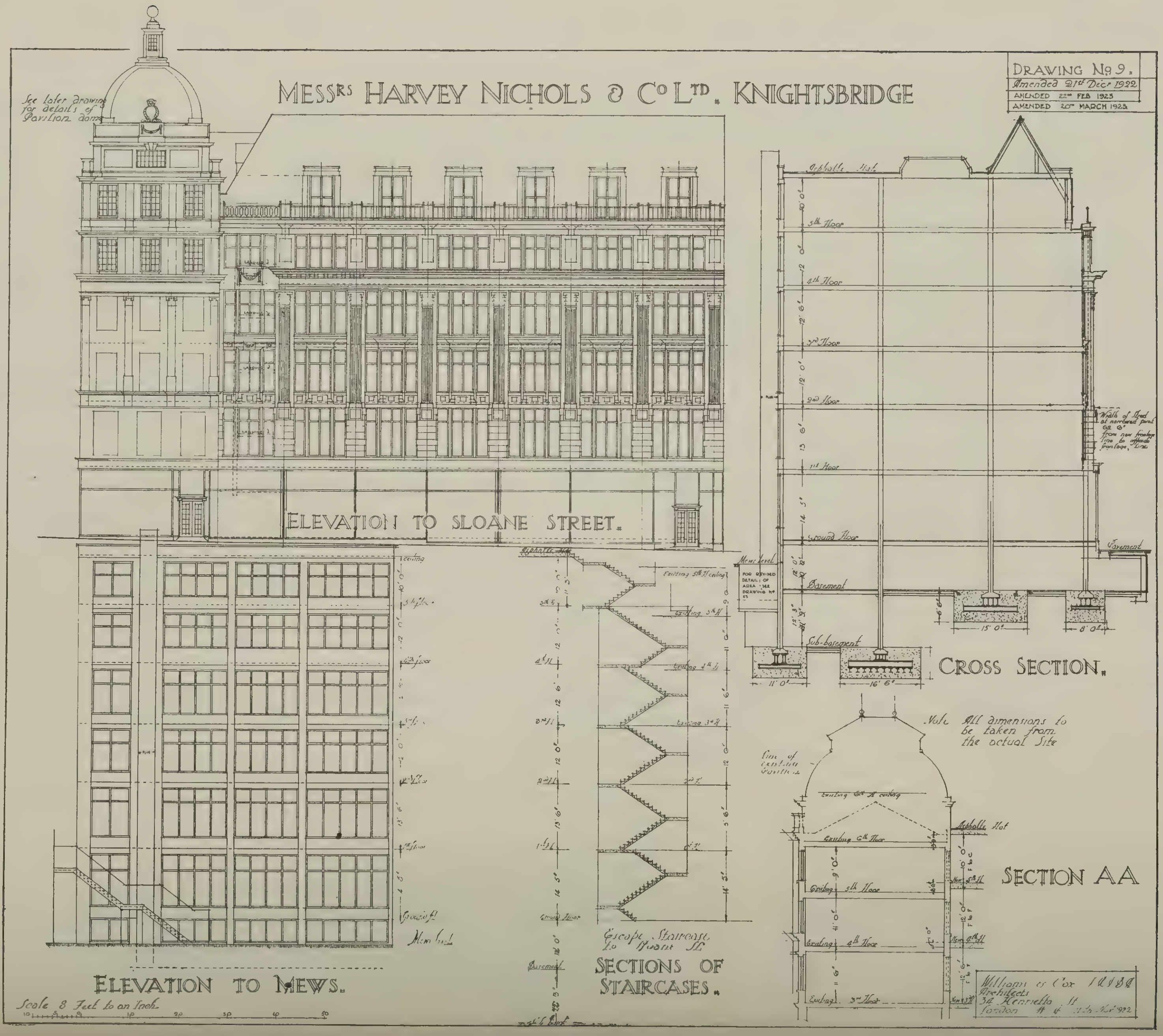
By January, when this work was cc pleted, practically the whole of the buildings were supported on tempor timbers. While the foundations w being proceeded with an electric der crane was erected in the mews, and m of the steel for the superstructure stacked at the rear in readiness.

On February 5 the upper part of building was handed over and demolit was proceeded with, the utmost care being necessary ow to the buildings being temporarily supported. The fl





NEW PREMISES FOR MESSRS. HARVEY NICHOLS AND CO., LTD., LONDON: THE SLOANE STREET FACADE.
WILLIAMS AND COX, F.R.I.B.A., ARCHITECTS.


MESSRS HARVEY NICHOLS & Co LTD. KNIGHTSBRIDGE
DRAWING No 9.
Amended 21st Decr 1922
AMENDED 22nd FEB 1923
AMENDED 20th MARCH 1923
See later drawing for details of Pavilion dome
ELEVATION TO SLOANE STREET.
ELEVATION TO MEWS.
SECTIONS OF STAIRCASES.
Escape Staircase to Mews St.
CROSS SECTION.
SECTION AA
Note All dimensions to be taken from the actual Site
Width of Shed at narrowest point 62' 0" from new frontage line to opposite frontage line
FOR REVISED DETAIL OF AREA SEE DRAWING No 63
Mews Level
Ground Floor
Basement
Sub-basement
Pavement
Asphalte flat
5th Floor
4th Floor
3rd Floor
2nd Floor
1st Floor
11' 0"
16' 6"
15' 0"
8' 0"
Line of existing Pavilion
Existing 6th Fl ceiling
Existing 6th Floor
Existing 5th Floor
Existing 4th Floor
Existing 3rd Floor
Williams & Cox FFRIBA Architects 34 Henrietta St London W C
Scale 8 Feet to an Inch
10 20 30 40 50

NEW PREMISES FOR MESSRS. HARVEY NICHOLS AND CO., LTD., LONDON: ELEVATIONS AND SECTIONS.

ere opened up to enable the erection of the steel super- ructure to proceed before the site was actually ared.

With the co-operation of the sub-contractors, work such the heating and the electric services was commenced uch earlier than is usual on contracts and the con- actors were able to hand over the ground and first floors June 4 (seventeen weeks from the date of commencement superstructure) to the shopfitters, and these floors were en to the public for trade two weeks later, on June 18. e second floor was handed over on July 2, and the third or on July 16. During erection one hundred tons of elwork was delivered and fixed weekly.

Much has been heard of quick American building, but we nture to think that a contract such as this shows that th pre-fabrication of material and good organization this untry can hold its own in respect to speedy construction. is being more and more recognized by the trading community that with good organization speed does not necessarily mean higher costs. Night work must of necessity cost a little more, but with an experienced judgment it is an extra that is far outbalanced by the saving in ground rent, overhead charges, and idle capital effected by the shortened building period.

The contractors were Messrs. Higgs and Hill, Ltd., and the principal sub-contractors as follows :—

The Fram (London) Ltd. (reinforced concrete floors); Young & Co., 6 Queen Anne's Gate (steelwork); Carron Co. (cast-iron panels); Crittall Manufacturing Co. (steel sashes); S. Haskins and Bros., Ltd. (shop windows, enclosures, and fittings); Fenning & Co., Ltd. (marblework to exterior and to staircase); Waygood-Otis, Ltd. (lifts); Thos. Faldo & Co., Ltd. (asphalting); Richard Crittall & Co., Ltd. (heating); Roberts, Adlard & Co. (slating); Higgs and Hill, Ltd. (fibrous plaster decoration). The stone carving was executed by Mr. Henry Poole, A.R.A.

Law Reports

Covenant to Repair

Hewitt v. *Rowlands.*

uly 11. Court of Appeal. Before the Master of the Rolls and Lords Justices Warrington and Scrutton.

This was an appeal by Mr. G. H. Hewitt, of Roselands ttage, Aigburth, against a judgment of Mr. Justice ton, in the King's Bench Division, in favour of Mr. H. E. wlands, of Woodlands Avenue, Aigburth. Mr. Justice ton dismissed the appellant's action for damages for eged breach of a covenant in the plaintiff's lease, to keep outside of the premises in repair. Mr. Hewitt had been ant of Roselands Cottage under various landlords since 76, and Mr. Justice Acton held that in the various changes ownership the original lease had not been "renovated" l that the defendant had never been bound by its terms.

The Master of the Rolls said that in his view Mr. Hewitt l continued to hold the cottage on the terms of the ginal lease and that he was entitled to maintain the ion. The appeal would be allowed and judgment entered Mr. Hewitt for an amount to be ascertained by the trict Registrar in default of agreement.

ords Justices Warrington and Scrutton agreed.

House Construction—Alleged Nuisance

Durrant v. *Thompson.*

July 6–11. Chancery Division. Before Mr. Justice Romer.

This was an action by Mrs. Beatrice Durrant, owner of aplake," 21 Russell Hill, Purley, against Mrs. Lydia ie Thompson, owner of a bungalow, 19 Russell Hill, for injuction restraining an alleged nuisance by smoke and ious fumes from the chimney of the bungalow which said rendered her house "unwholesome and uncom- able to live in.".

Ir. Thompson was added as a defendant.

Ir. T. E. Haydon appeared for the plaintiff, and Mr. liffe, K.C., and Mr. G. D. Johnston for the defendants.

Ir. Haydon stated that plaintiff had resided with her band (and children when they came) at "Staplake" for en years. In May last year Mrs. Thompson acquired an ining plot and built a bungalow. It was so built that as bound to cause a serious nuisance from smoke. The lanation might be that the defendant's husband was a al architect and he certainly had disregarded all the s that governed the designs of land architects. Counsel the wind travelled across the defendants' land towards ntiff's house, and any smoke projected from the de- ants' chimney was bound to penetrate her windows. chimney was only 20 ft. from the plaintiff's windows, the top of the chimney was 10 ft. below the crown of house, and about 4 ft. above the level of the bedroom .

unsel stated that the defendants had gone out of possession since this action was started, and that negotiations were going on for the sale of the bungalow.

Among those who gave evidence were Messrs. J. E. Withers, F.R.I.B.A.; W. Clark, surveyor; Robert Chart, surveyor to the Coulsdon and Purley Urban District Council; Kenneth J. Young, of Messrs. Young and Mackintosh, of Croydon, architects; and E. V. Harris, architect.

His lordship, giving judgment, said the question he had to decide was whether when the writ was issued there was an existing nuisance. Persons must at times expect to have smoke from their own or their neighbours' chimneys. That was one of the minor evils we had to put up with. Were the fumes coming into plaintiff's house in such quantities and so frequently as to interfere sensibly with the ordinary comfortable enjoyment of the house? The evidence satisfied him that this was very unlikely. It had been proved that the prevailing wind was S.W. or S.S.W., and witnesses for the defence had conclusively proved that when the wind was in that direction the fumes would not be carried into the plaintiff's windows. This was confirmed by the plans. It was only when the wind was in the S.E. direction that plaintiff's house would get the smoke. "In my experience of nuisance cases," said his lordship, "I have never known evidence so unconvincing and inconclusive as that given on behalf of the plaintiff."

Continuing, his lordship said that he did not think that certain complaints made by Mr. Durrant were trivial complaints. He might not have suffered any legal wrong from what he complained of at the start, but he was annoyed, and rightly annoyed, at what had been done. Mr. Thompson erected a washhouse immediately in front of plaintiff's bow window. It might be said that there was no other place where the washhouse could be put, but nevertheless, it was calculated to annoy the plaintiff and her husband. Another incident connected with the erection of the bungalow was that some 30 ft. of the plaintiff's garden fence was pulled down. That was a very exasperating thing. There was also a question of boundary. These acts unfortunately engendered in Mr. Durrant's mind the idea that Mr. Thompson had deliberately set out to annoy and injure him and his wife, and he could not read Mr. Durrant's evidence without bearing that in mind. Before the stove had ever been lit Mr. Durrant wrote complaining: "From my bedroom over the study I am able to see his roof and the chimney which gives every promise of giving me the full benefit of the smoke from his kitchen." When he wrote that letter Mr. Durrant had formed the view that it was designed to do himself or his wife an injury, and he readily came to the conclusion that Mr. Thompson had succeeded in his object.

Mrs. Durrant's evidence was also unsatisfactory, because she gave no evidence as to the effect of the fumes on her servants or visitors. The only evidence before the Court of nuisance from smoke or fumes was with regard to January 17, February 21, and March 30. On that evidence his lordship said he could not come to the conclusion that the plaintiff had proved that the fumes came in such quantities and so frequently as to interfere sensibly with the ordinary comfortable enjoyment of her house.

If his conclusion was wrong, then it was entirely the fault of the plaintiff and her advisers that they did not see that sufficient evidence was put before the Court to establish her case.

The action was dismissed with costs.

Alleged Obstruction of View

Erlam v. *Grice.*

July 19. Chancery Division. Before Mr. Justice Eve.

This was an action by Mr. John Douglas Erlam and Miss Geraldine M. Erlam, of Portland Lodge, Worthing, against Mr. W. M. Grice, the owner of the adjoining house, Montague Cottage, to compel him to remove a structure erected by him in his garden, and which it was alleged obstructed the view from certain of the windows of Portland Lodge.

Plaintiffs' case was that an agreement was entered into in 1855 by defendant's predecessor in title undertaking that no building should be erected in the garden of Monta Cottage so as to obstruct the view of the esplanade and from Portland Lodge. Early in 1923 defendant commen extensive alterations and converted the premises into a garden. He also erected a kiosk in his garden, which s out the view from several of plaintiffs' south windows seriously diminished the value of the house.

Defendant denied that he was bound by the alleged ag ment, and also denied that the kiosk caused any obstr tion of view, and asserted that plaintiffs' representa had approved the plans and that the building was erec before any proceedings were threatened.

Mr. Erlam gave evidence, and said the defenda house had practically always been used as a private ho

Mr. Clayton, K.C., for the defendant, cross-examir Witness denied that the real ground of his complaint that he objected to have a tea-garden next to his hous

After hearing defendant's evidence denying any nuisa to plaintiffs, his Lordship found that the kiosk interfe with and obstructed the view from the plaintiffs' windo and he made an order for the removal of so much of i obstructed the plaintiffs' view. Defendant to pay the c of the action.

Parliamentary Notes

[BY OUR SPECIAL REPRESENTATIVE.]

New Town Planning Powers.

In the House of Lords, the Earl of Crawford moved a new clause to the Housing Bill, authorizing the preparation of town-planning schemes in places of special interest architecturally, historically, or artistically. On behalf of the Government the Earl of Onslow accepted the amendment, which was agreed to.

The Appointment of Assistant Architects.

At question time in the House of Commons, Mr. G. W. H. Jones asked the First Commissioner of Works whether his attention had been called to the proposed appointment of four men, named Milne, Goodison, Clouting, and Robb, as assistant architects in the ancient monuments branch of the Office of Works; whether he was aware that neither Milne nor Goodison was an ex-service man; that Milne left the Government service voluntarily in 1919 to take up an appointment with the Anglo-Persian Oil Company, that applications were not invited from the unestablished staff for these posts, and that Milne, if appointed, would receive £500 per annum, and thereby be in a better position than many who were his senior and had given continuous service; whether any of these four men had special qualifications for the posts, and, if so, what they were; whether he was aware of the grave dissatisfaction existing in the department in question about the appointments recently made in the department; and whether he would inquire into the cause of such dissatisfaction and meantime suspend the proposed appointments?

Sir J. Baird said he had already given very careful consideration to this question, and was satisfied that the four officers referred to were the best qualified for the highly specialized work, and that their appointment was in the best interests of the department. Three of the appointments had already been made, and he regretted that he was unable to suspend the appointments as suggested. Of the total professional, administrative, and clerical male staff of the department at the present time, 75 per cent. had served with the Army, Navy, or Air Force.

The £6 Subsidy.

Replying to Mr. T. Thomson and Mr. Emlyn-Jones, Mr. N. Chamberlain said there was no authority for the statement that the State subsidy of £6, given under the Housing Bill, would be dependent on the local authority's making a contribution out of the local rates. Where the local authority, with his approval, itself erected houses com ing with the Bill, the Government grant would in all c be £6 for twenty years. Where the local authority gran assistance to private enterprise the Government grant wo be £6 for twenty years if the total assistance so granted equal to, or greater than, the equivalent of this annual p ment. If the total assistance granted to private enterp was less than the equivalent of £6 for twenty years, Government contribution, in accordance with the la part of the proviso to clause 1 of the Bill, would be equivalent of the total assistance actually granted.

The Price of Bricks.

Mr. Chamberlain informed Mr. D. G. Somerville that question of brick prices was engaging the attention of Committee on Building Materials Prices, who would re further on this subject at an early date. The last publis price for Fletton and best second-hand stock bri delivered in London, was £2 13s. 3d., and £4 2s., £3 17s. per 1,000. It did not appear that there had b any fluctuation in the price of these bricks for some c siderable time.

Average Time for Building Houses.

In answer to Mr. T. Thomson, Mr. Chamberlain said t an analysis of four housing schemes for which continu records had been kept over a long period showed that highest recorded average time for building was 4,664 h per house in respect of houses completed in the qua ending December, 1921, while the lowest comparable fig was 2,711 hours per house for houses completed in quarter ending March, 1923.

The Cost of Houses.

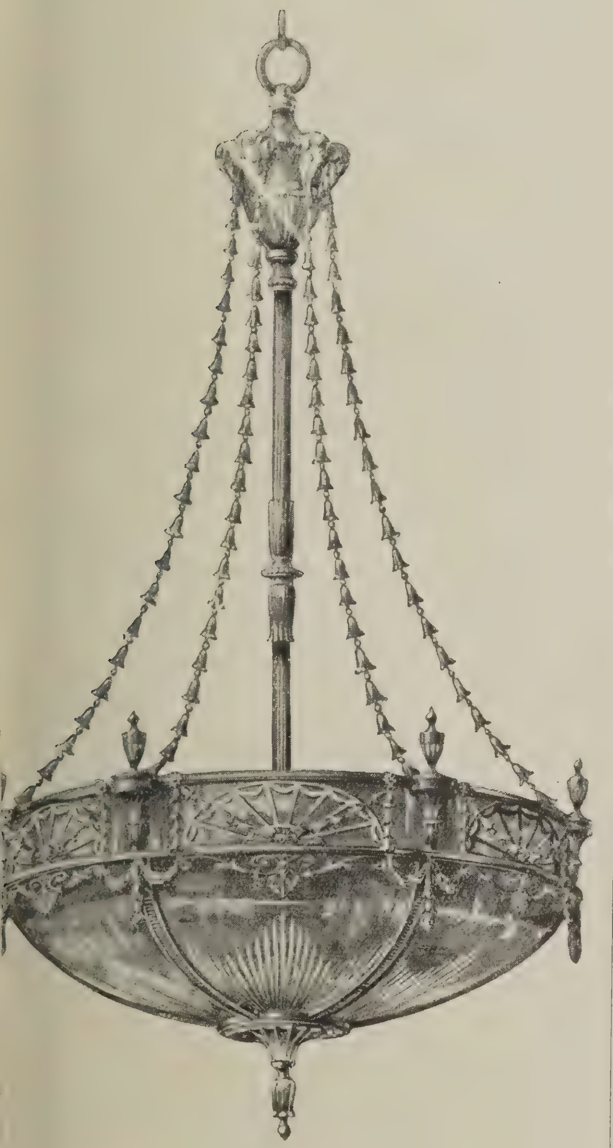
Replying to a further question from Mr. Thomson, Chamberlain said that complete information as to cont prices at the present date was not available, but such ten as had been submitted to him in the months of May June had ranged from £277 to £400 for non-parlour hou and from £329 10s. to £444 for parlour houses. The hig money averages of cost of building per square foot wer follows: non-parlour type for September, 1920, 20s. 8 parlour type for October, 1920, 19s. 3d. Individual fig did not exceed 22s. per square foot save in a few v exceptional cases. During the last six months tenders a about 7s. per square foot for both types of houses had b approved, and these might be taken as representing lowest figures reached.

he Artificial Lighting of a Modern Restaurant

Lighting installations of the most modern character have en adopted for the internal and external illumination of ny of London's new buildings. One of the latest examples Lyons' new Corner House in Coventry Street, which has n decorated and lighted in the most lavish and artistic nner.

The ground floor is decorated in Louis XIV style, and the nty-one electroliers are designed in strict accordance h the traditions of the period. On this floor there are o twenty-two two-light and three-light brackets to tch the electroliers. The first floor is designed in Empire le, and lighted by fifteen specially designed electroliers ried out in this period. Fifteen three-light brackets to tch are also installed.

ne of the electroliers designed in Adam style for the ond floor is shown on the accompanying illustration. ere are fifteen of these fittings, of heavy cast brass ished ormolu and equipped with satin finish and cut-ss ware, and ten two-light brackets to match. The ircases are lighted by twenty-nine two-light brackets in rich French style and twenty-four bowl pendants of similar character suspended from the ceiling. A number of special brackets are mounted over the doorways. These are of various patterns designed in conformity with the styles of their respective floors.



LECTROLIER IN THE ADAM STYLE IN MESSRS. LYONS' NEW CORNER HOUSE, COVENTRY STREET, LONDON.

The exterior illumination is carried out by a number of floodlights from the opposite side of the road. The equipment is arranged in banks on the first floor of the building opposite and focused so as to obtain an approximately even illumination on the face of the Corner House.

All the fittings were specially designed for the building in the fixtures design office of the General Electric Company, Ltd., in collaboration with Messrs. J. Lyons & Co., Ltd.

In addition to supplying the whole of the electric light fittings for the ground, first, and second floors, the G.E.C. supplied, amongst other electrical material, the whole of the wires and cable. This was the company's Alpha cable 2,500 megs. Association grade. Further, all the building is lighted throughout by over 4,000 Osram gas-filled and vacuum lamps.

Book Reviews

A New Book on Italian Renaissance.

This book is a translation from the French. The publishers, in a prefatory note, state that the author, M. Georges Gromort of the Ecoles des Beaux Arts, although approached on several occasions to authorize its translation, refused because of the late W. S. Anderson's well-known book on the same subject. He had devoted himself to the work of writing the volume for the sake of his pupils because a handbook of this sort was indispensable to them, and nothing of the sort was to be found at any French bookseller's. The author is too modest. True, all *facts* of history must be the same, but always there is the opportunity for the expression of fresh views, and the casting of more light. The series of over a hundred photographs and measured drawings, with nearly fifty illustrations in the text, are well reproduced, though sometimes suffering from a too great reduction.

M. Gromort knows well the Italian Renaissance, but his wonder and delight in his subject never flag. "Such a co-operation of propitious circumstances was necessary to give birth to the Renaissance and to favour its expansion, that one is at first amazed that so many diverse conditions could have arisen at an identical epoch in a chosen land."

"The Masters of the Renaissance in their apparently inexhaustible variety have left us with but little to do beyond gleaning after them"—such enthusiasms appear on wellnigh every page.

Nowhere, undoubtedly, writes M. Gromort, has the influence of this great period been so forcibly felt as in France, and it is in France that it has been, especially in our time, the more diversely appreciated. Our author complains that facts of this kind escape precisely every kind of appreciation. "When a style of architecture, imported into a country, holds its own for four centuries by producing beautiful things, there is a certain puerility in pretending that these four centuries have been merely deceived, and that this was not at all the style they should have adopted. A form of art could not be imposed upon a people, in a lasting form, except given a mass of affinities, to be met with in traditions, customs, language, and literature. . . . If the influence of the Renaissance still succeeds with us to inspire, from time to time, a great work, it proves that we have preserved to a certain extent the spirit of that strong race which brought forth in the fifteenth century the Bramantes and the Brunelleschis."

Mr. George F. Waters is responsible for the translation, which appears to us excellent, though—perhaps owing to the printing having been done in France—every page bears its misprints and odd-spellings.

"Italian Renaissance Architecture," by Georges Gromort. Translated from the French by George F. Waters. London: John Tiranti & Co.

Book Reviews—*continued.*

Heating and Ventilating.

The volume before us owes its origin to the necessity, on the part of the author, of providing working examples on the subject for students taking the second and third years in the advanced course in Heating and Ventilating Engineering in the Municipal College of Technology, Manchester. The author found considerable difficulty in finding suitable text books.

The book is one of the most lucid text books we have read, and although seven short chapters have been spent on what may be considered first year applied mechanics, and seven further on theoretical physics, it is the most concise.

The author frankly states that he puts forward no claim for originality, and acknowledges his indebtedness to the standard works.

"Calculations in Heating and Ventilation." By G. S. Coleman, D.Sc., Assoc.M.Inst.C.E. Longmans, Green & Co. Price 15s.

The R.A.F. Memorial

The memorial to the Royal Air Force on the Victoria Embankment, London, was unveiled by the Prince of Wales last week. It was designed by Sir Reginald Blomfield, R.A., PP.R.I.B.A.

The memorial consists of a simple pylon of Portland stone with a bronze globe at the summit surmounted by a golden eagle, which faces out over the river with uplifted wings, as if on the point of flight. The memorial is pleasantly framed in a gap between two plane trees, with a background of open sky. The inscription is a simply-phrased memorial of the men of all the flying services who "gave their lives in winning victory." Below is the fine phrase from the Old Testament: "I bare you on eagles' wings and brought you unto Myself."

Above this is the badge of the Royal Air Force carved in low relief, and on the frieze below the main cornice the motto of the Force, "Per ardua ad astra." On the river side the inscription on the panel is: "1914–1918. In Perpetual Memory." The eagle, facing southwards to symbolize the setting out of our men to the front, is gilt, and the lettering of the inscription is also dark gilt.

It was a condition of the grant of the site that gates should be provided, and these have been formed in bronze with panels of laurel wreaths and arrows in the diagonals. The bronze eagle and globe (weighing some four tons) was modelled by Mr. Reid Dick, A.R.A., and cast by Parlanti, the bronze gates by Keeble & Co., and the whole of the structural work has been executed by Messrs. Dove, of Islington.

London University Site

The question of the future headquarters of the University of London has again been before the Senate. A long discussion took place, and a resolution was passed the effect of which was to show that the matter must be regarded as by no means settled. When Mr. Fisher, President of the Board of Education, in October 1920, urged the Senate of the University to accept a site in Bloomsbury in lieu of their present occupation at South Kensington, the Senate, among other conditions to be fulfilled, made the conclusion of an agreement by King's College to remove from the Strand to the Bloomsbury site a *sine qua non.* Since that date no progress has been made towards the conclusion of any such agreement with King's College, and opinion appears to be divided as to the educational advantages of concentration of university teaching or of endeavouring to establish a new university quarter in Bloomsbury. It is understood that no monetary support for the buildings proposed to be erected at Bloomsbury is at present forthcoming from the Government or the County Council, and the university has no funds for the purpose. The cost is estimated to approximate to two millions sterling at least.

The Professional Classes Aid Council

The second annual report, just issued, of the Professional Classes Aid Council, shows in a convincing manner the very successful efforts of the council to relieve distress among professional and other highly educated classes and their dependents. The council was reconstituted in 1921 to carry on and extend the work arising out of the Professional Classes War Relief Council. As announced in a recent issue of the JOURNAL the Queen recently sent a donation of £50 towards the work. Funds are still required, and subscriptions should be sent to the Secretary of the Council, 251 Brompton Road, London, S.W.3.

Competition News

Wesleyan New Church and Sunday School, Warrington.

The following notice has been issued by the R.I.B.A.: "The Competitions Committee desire to call the attention of Members and Licentiates to the fact that the conditions of the above competition are not in accordance with the regulations of the R.I.B.A. The Competitions Committee are in negotiation with the promoters in the hope of securing an amendment. In the meantime Members and Licentiates are advised to take no part in the Competition."

Members of the Society of Architects are notified that the conditions of this competition are not in accordance with the regulations, and they are requested not to take part in the competition without first ascertaining from the secretary that the conditions have been approved by the Council.

Parsons' Colour Scheme.

Further particulars have been issued in connection with Messrs. Thos. Parsons and Sons' colour scheme competition. First, second, and third prizes of 100 guineas, 50 guineas, and 25 guineas are offered, and five consolation prizes of £10 10s. each. Sir Edwin Lutyens, R.A., F.R.I.B.A., Sir John Lavery, R.A., Sir David Murray, R.A., P.R.I., H.R.S.A., and Messrs. Frank Brangwyn, R.A., and E. Guy Dawber, F.R.I.B.A., have consented to adjudicate. The prizes are offered for the best colouring of a design for the vestibule connecting 315–317 Oxford Street with 17, 19, 21 Dering Street, Messrs. Parsons' new offices and showrooms. A drawing of the vestibule in perspective to a scale of approximately 1½ in. to a foot on the actual pape
tended for competitors' use will be
post free on application to: Compet
Department, Thos. Parsons and S
315–317 Oxford Street, London,
The colour suggestions should be sui
for carrying out in matt, semi-gl
or glossy enamels or in glaze paint
scumbling or graining. Stencillin
pencil work effects may be introduc
desired, but they are not a neces
If gilding is desired it should be i
duced sparingly. The woodwork o
doors, surrounding the small squar
copper-framed clear glass, should
coloured in with the general scheme.
vestibule can be viewed at any
during business hours, viz.: 9.30
to 6 p.m., and 9.30 a.m. to 1 p.m
Saturdays. The competition will
on September 30.

List of Competitions O

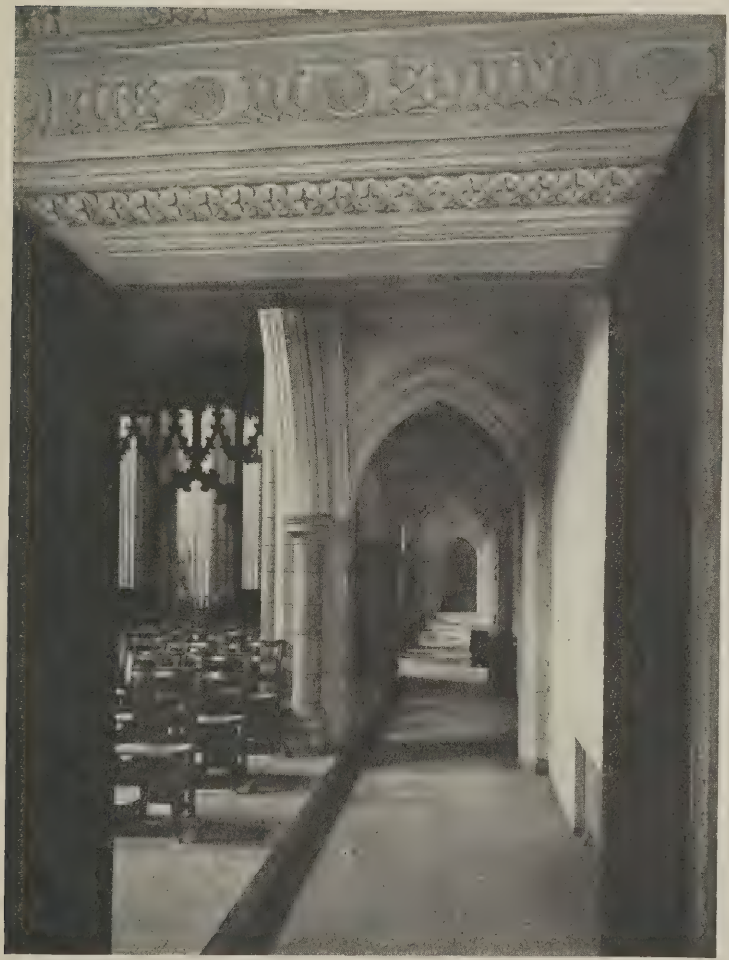
Date of Delivery.	COMPETITION.
July 31	Erection of a Cenotaph on a site in Pa Square, Hull, belonging to the Corpor Conditions of the Competition to with a plan of the site will be suppli the Town Clerk on receipt of a cheq one guinea, which deposit will be ret to competitors on receipt of a bor design. The estimated cost of the amounts to £4,000, and premiums of £75, and £50 are offered for the d placed first, second, and third respec The assessor is Mr. Stanley F.R.I.B.A.
Aug. 8	Church and school for the Wesleyan C Cost between £5,000 and £6,000. Rev. H. Kirby, 2 Palmyra Square, Wa ton.
Aug. 25	Public Swimming Baths and Washh East Greenwich. Assessor, Mr. Her Ashley, F.R.I.B.A. Premiums: £300, £100. Apply Mr. Frederick J. Sin Town Clerk, Town Hall, Greenwich.
Sept. 12	Masonic Temple in Broad Street, Bir ham. Premiums: £500, £300, and Sir Banister Fletcher, F.R.I.B.A., assessor. The competition is restric architects who are masons subscrib Lodges in the Province of Warwick Apply Mr. J. P. P. Dutfield, 65 Temple Birmingham.
Sept. 30	Designs for a series of plaquettes in b illustrative of London as the capital the Empire, or of one or more of her architectural features. Designs shou submitted in the form of models in p The following prizes are offered: prize of 100 guineas, two prizes of 50 gu three prizes of 25 guineas. Apply D Master of the Royal Mint, London, E
Sept. 30	The best colouring of a design for the bule connecting 315–317 Oxford Stree 17–19–21 Dering Street, Messrs. Th Parsons and Sons' new offices and rooms. Prizes: 100 guineas, 50 gu 25 guineas, and five consolation pri 10 guineas each. Assessors—Sir Lutyens, R.A., F.R.I.B.A., Sir Murray, R.A., P.R.I., H.R.S.A., Sir Lavery, R.A., Mr. Frank Brangwyn, and Mr. E. Guy Dawber, F.R. Apply Competition Department, M Thomas Parsons and Sons, 31 Oxford Street, London, W.1. There entrance fee.
Oct. 1	The Student Welfare Committee, Univ of Glasgow, invite Competitive D (limited to Architects having an off and practising within the Municipal daries of the City of Glasgow) Pavilion to be erected on the Univ Athletic Ground at Westerlands, A land, at a cost of £10,000. Assesso Alexander N. Paterson, A.R.S.A. Honorary Secretary, Student W Committee, The University, Glasgow
Oct. 1	Lay-out of the Bull Green Site and p the centre of the Town of Halifax. mium £50. Apply, with deposit of to Mr. Percy Saunders, Town Clerk, Hall, Halifax.
Nov. 5	Art Gallery for Hull. Assessor, Mr. Joh Simpson, PP.R.I.B.A. Apply (with ch for £2 2s.) to Mr. H. A. Learoyd, Clerk, Guildhall, Hull.

dnesday, August 1, 1923.

Vol. LVIII. No. 1491

THE ARCHITECTS' JOURNAL & Architectural Engineer

With which is incorporated "The Builders' Journal."



THE CHURCH OF THE ANNUNCIATION, BRYANSTON STREET, W: VIEW LOOKING DOWN AISLE.

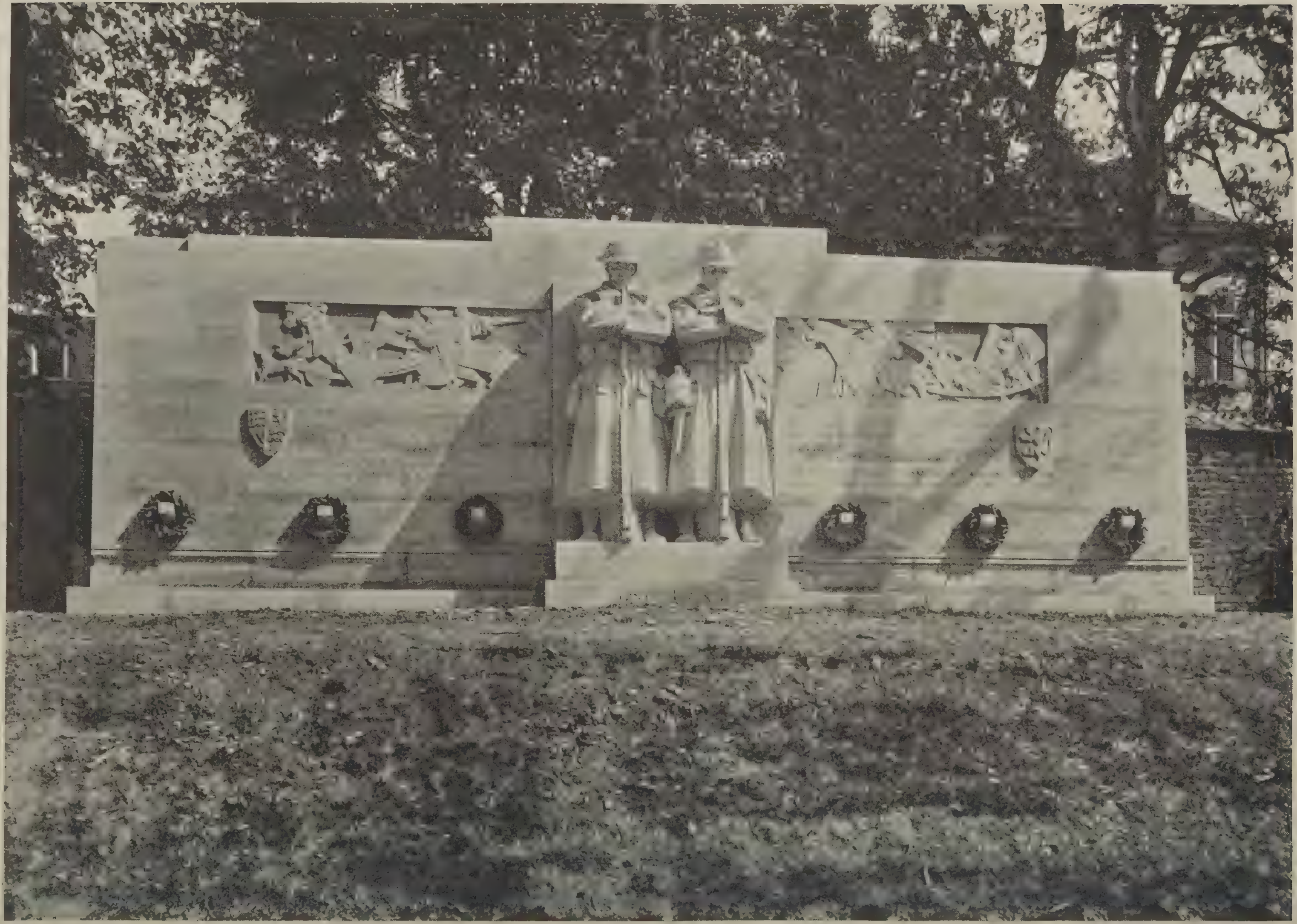
WALTER TAPPER, F.R.I.B.A., ARCHITECT.

(*See also page 164*)

27-29 Tothill Street, Westminster, S.W.1.

War Memorials. 36.—Memorial at Brussels

T. S. Tait, Architect. C. S. Jagger, Sculptor



This monument has been recently completed from the designs of Mr. T. S. Tait, of the firm of Sir John Burnet and Partners. Mr. C. S. Jagger was the sculptor. It has been erected as a symbol of British gratitude to the Belgian people for the succour and aid they gave to the British prisoners of war, who, released from the camps in Germany, poured into Belgium on foot. The bas-reliefs on either side of the two soldiers

THE
ARCHITECTS' JOURNAL
27-29 Tothill Street, Westminster, S.W.1.
dnesday, August 1, 1923 Volume LVIII. No. 1491

The Assessing of Public Competitions

THE revived interest in the manner of assessing architectural competitions occurs opportunely at a time when a number of projects of importance are announced as the subjects for competitive signs. And this interest undoubtedly reflects a greater xiety than would appear on the surface, more particurly among the younger generation of architects, whose int of view is naturally that of possible competitors. hether the more talented among them will be induced to mpete, or whether they will stand aside in the future, pends largely on their opinion of the manner of judging mpetitions.

The recent pronouncements of a number of our foremost chitects, too, are such as will doubtless lead to a reamination of the whole question. The advisability of the loption of the jury system was a subject of discussion in e profession in the immediate pre-war period, but it was rgotten or set aside during the days when so many archicts were absorbed in the national effort through the war. he R.I.B.A. had, indeed, appointed a special committee consider and report on the subject, and it might be well give again the conclusions reached by this committee; ese were :—

(1) That the jury system be adopted for buildings costing er £100,000; three architects to be chosen as assessors, whom the chairman would be nominated by the presint, and the other two by the competitions committee.

(2) That for competitions for works costing between 0,000 and £100,000 there should be one assessor and o assistant assessors, nominated in a similar manner.

(3) That for competitions of less value the present system ould obtain.

(4) That the full fees under the R.I.B.A. scale should divided in equal shares between the three assessors or sistant assessors after the deduction of thirty guineas, hich the chairman would receive in addition to his share.

These recommendations seem to offer a very reasonable sis for the revision of the present system, and the fact at the subject was thoroughly examined should prove a luable help to those who may have to carry out this form.

If one sets aside personal preferences and regards the sults of public competitions for the last twenty years in dispassionate manner, it will scarcely be with any feeling satisfaction. One wonders why there has not been a eater number of brilliant designs among those winning. e comparative poorness of the majority can hardly be plained as resulting from the lack of good work sent in; r in spite of many drawbacks there have been a sufficient mber of able designers in the country, who if given the ance would have produced work that would have comred favourably with that of American or French archicts. The average standard of winning designs has not en that which would have been attained abroad. Many actical types of plan have been produced, yet in the main ey have been lacking in architectural quality and in agination, and have not been clothed with elevations suitable dignity or appropriateness.

This weakness in result must shake one's belief in the system obtaining, and when a brilliant and well-known architect takes to declaring in the daily Press, as has happened recently, that "England is the only country where the single assessor survives. In France and America the jury system is invariable. If we had it here three-quarters at least of the prejudice against architectural competitions would be removed," it is time to enquire seriously why the present arrangements should continue, both from the point of view of the resulting architecture, and of the effect upon the profession.

One of the explanations of the relative mediocrity of the output may be that in spite of the sincerity of the assessors, personal predilection has had an unconscious influence in too large a number of awards. In too large a number of cases the known preferences of the assessor have been catered for to the great disadvantage of everybody. Although his manner has been studied the assessor would probably do much better work in this manner himself, and the competitors have failed to put forward the best of their own ideas.

The total elimination of everything personal in competitions is desirable and imperatively necessary. The fact that it should be possible for a competitor even to suspect a personal element in the award, as it is now, should condemn the present procedure. The problem should be studied and reasoned out in a purely abstract manner with the aim of producing an ideal solution. Competitors should not have the additional difficulty that they know the assessor has certain opinions on architectural matters which they may not share. What they would hope for would be to feel quite confident that the solutions offered will be examined in a logical and impersonal way.

With more than one assessor any personal element will disappear. For before any award can be thought of, before even the drawings are seen, the jury must agree among themselves on the principles involved in the programme; what solutions are reasonably possible; and what expression is appropriate. The competitors have a right to expect this from the assessors. That it takes place in the private thoughts of the single assessor is to be hoped, though it may be hard to believe that it always has been so.

It is hard, too, to believe in these days, when architectural ability is abundant, that any man can persuade himself that his opinion is sufficient, that he would not be willing to hear that of his confrères, and with them would not want to reason out together what is right or is not right under the circumstances of the programme. The appointment of an assessor by the president on behalf of the general body of the profession is a high honour, which entails the responsibility of acting in the manner best calculated to promote architectural art; and it cannot be regarded as a perquisite to be received in turn as their due by the official leaders.

A number of objections have been made from time to time to the idea of architectural juries. One is that a collective judgment may result in a compromise unsatisfactory to all members of a jury. This seems to assume an unreasonable obstinacy among the latter, and an inability to agree on fundamental principles that is scarcely probable, and which is not the experience of those who have served on juries. It might just as well occur in the case of a single assessor, unable to reconcile the giving of the award to certain designs by which he is greatly attracted with some of his strong beliefs.

The argument that the more eminent member of a jury would maintain or dictate his opinion to the others is one which reflects too unkindly on his possible disposition, and at the same time would assume a lack of honesty or uprightness in the other two. That the number of trained or experienced architects is insufficient to provide the juries required need not be feared. There are a large number of younger men with experience of American ways or with French training who would be available, and in a few years' time some of the best men from the A.A. schools or Liverpool University will begin to be sufficiently seasoned to be able to offer a very fair opinion.

Any objection that an architect of the type now drawn on to assess competitions would raise difficulties about the dividing up of the present fees need scarcely be considered. The remuneration would still be sufficient in view of the lessened individual responsibility, and these appointments cannot in any case be sought after for the sake of the fees.

Much progress has been made during the last generation or so in regularizing the conduct of these competitions, and the time has now arrived when this further reform is due in the general interests. It will fit in with a number of other problems that will have to be cleared up in connection with the hoped-for unification of the whole profession, and the adjustment of the relations between the R.I.B.A. and the Society of Architects.

The latter have always been firm advocates of the jury system, and the younger part of the profession represented by such an independent body as the Architectural Association would no doubt greatly welcome its adoption, particularly as it would be one with which they were familiar in their student days. It would seem fitting that these two bodies should be consulted when the revision is effected, as it would affect their members; and perhaps some such arrangement as exists in France might be made, by which on important competitions the jury is increased in number, two representatives being nominated by the older and larger body, one each by the other societies, and one or two chosen by the competitors themselves. V. O. R.

Mr. Waterhouse

The affectionate esteem in which he is held by his brother architects was delightfully shown last Monday week when, in the presence of a distinguished company, which included many of the presidents of the provincial societies, Mr. Paul Waterhouse was presented by his colleagues with an address recording their appreciation of his services as president of the R.I.B.A. Mr. Waterhouse has filled the presidential chair with marked success. To the responsible duties of that office he has brought a rare combination of qualities—wit, eloquence, learning, and a wholly captivating charm of manner. These he has used unstintingly in the service of the Institute, whose interests he has made his own. It would be a task of some magnitude to make a complete record of his good works; but if one thing is to be singled out above any other it would be what may be called his "policy of the provinces." His visits to the different centres throughout the country have established a widespread feeling of goodwill and fellowship and have helped considerably towards the achievement of unity in the profession. Then there was the success of the Wren Bicentenary celebrations, towards which Mr. Waterhouse contributed in great measure. His speech at the banquet will never be forgotten by those who had the privilege of hearing it. When it is remembered that in addition to these extra responsibilities Mr. Waterhouse has discharged all the normal duties of the presidential chair, some idea may be gained of the exacting nature of
his term of office. He retires from the presidency with
knowledge that his work is entirely appreciated and t
he has won the affectionate regard of his fellow architect

The Bank

As trustees of the Soane Museum, Sir Aston Webb,
Reginald Blomfield, Mr. Paul Waterhouse, and Mr. Edv
Freshfield write to the Press to call attention to the dan
that threatens the Bank, as an architectural concepti
as a result of the proposal to increase the width of Prin
Street. This would involve the destruction of the "Tiv
Corner," the rebuilding of the whole Princes Street fro
and the mutilation of the two other fronts by the reduct
of their length. They also protest against the proposal
erect a large portico above the centre of the southern faça
On the first count they are indubitably right; the secon
merely a matter of taste. What to our mind is the m
regrettable feature of the proposed reconstruction is
contemplated demolition of so much of the interior, inch
ing, as it does, some of the best work of Soane and Cocker
We hope sincerely that in view of the just criticism wh
has been aroused the governors of the Bank may reconsi
the whole question. No one denies that additional acco
modation is wanted, but it should surely be possible
provide it without destroying so much work of architectu
and historical value.

Riot in the Roads

The practice of the G.P.O. (lately criticized in the Ho
of Commons by Mr. D. G. Somerville) of taking up Lond
roads for the relaying of trunk lines without any sort
regard for public convenience is one that should be stopp
There is really no excuse for it. Mr. David Isaacs, in a let
to the "Evening News," says that the London boroug
give long notice to the Post Office and other authoriti
such as the gas and electric light companies and the Wa
Board, of their intention to relay the bed of a street a
repave, so that these bodies may have plenty of time
prepare any contemplated scheme for the relaying of mai
A case in point is that of Oxford Street. The stretch
roadway between Oxford Circus and the Marble Arch h
lately been relaid. Due notice of the work was given to t
authorities concerned. No sooner was it completed th
the G.P.O. decided that they would lay some mains, a
the roadway now has to be cut up and re-opened. Su
muddle-headed mismanagement is enough to make t
least emotional give way to despair. Apart from the u
necessary expense of opening up and making good, there
the loss to shopkeepers and, most important of all, the d
location of traffic. There can be hardly a roadway in Lo
don in which the clumsy paraphernalia of the road-break
is not to be found in some part of its length all the ye
round, blocking the fairway and making chaos of the traf
What we require is some authority to co-ordinate the mul
farious activities of the road spoilers, and with power
compel them to do their destructive work simultaneousl

Beresford Pite's Successor

Our congratulations to Mr. J. Hubert Worthington, w
has just been appointed to the Professorship of Architect
at the Royal College of Art, South Kensington, in successi
to Professor Pite. The appointment is an excellent o
for Mr. Worthington has ideal qualities for the post, inclu
ing youth, enthusiasm, scholarship, and a fresh outlo
upon things architectural. He is M.A. (Oxon), A.R.I.B.
and M.T.P.I., besides being a member of the Architectu
Club and of the Union Franco-Britanique des Architect
At the present time he is a lecturer in Civic Design
Manchester University, where, before entering the office
Sir Edwin Lutyens, he obtained his initiation into the a
of architecture. He has carried out a good deal of work
collaboration with his brother, Dr. Percy Worthington (t
firm of Thomas Worthington and Sons), and on his ov
account. A recent example of his work is given in this issu

The Architectural Societies

3.—Leeds and West Yorkshire

THIS society was founded at a public meeting held in the library of the Philosophical Hall, Leeds, on December 14, 1876, under the title of the Leeds Architectural Association. The movement
ıs initiated by some five or six younger members of the
ofession, who, prior to the meeting, drew up a suggested
nstitution, which was put forward by Mr. W. H. Thorp,
ıd afterwards adopted. The first president was Mr.
orge Corson—the well-known Leeds architect—and
om the commencement there were over eighty members.
ıe objects of the Association, as stated in the first report,
ere "to afford facilities for the study of civil architecture,
advance the professional interests of the members, and
serve as a medium
friendly communica-
on between the mem-
rs and others inter-
ed in the progress
the Art." The me-
ods by which it
ight to attain these
jects consisted of
papers and discus-
ns upon subjects of
ofessional interest, by
sses for the study of
ecial subjects, by
arding prizes as an
couragement to archi-
tural studies, and
visits to buildings
d works of impor-
ıce."

The title of the Asso-
tion was soon chang-
to the Leeds Archi-
tural Society. Later,
1882, it was thought
visable to widen the
ıeres of influence, and
itations to become
mbers were sent out
architects in all parts
Yorkshire, the society
n becoming the
eds and Yorkshire
hitectural Society.
teen years after its
ndation, during the
sidency of Mr. W. H.
orp, application was
le for alliance with
R.I.B.A. This was
nted, and the pre-
nt elected a member of the Council of the R.I.B.A.
913, upon the Institute desiring a redistribution of the
ıs and boundaries of the allied societies, arrangements
e made with the York and Sheffield societies, and
society received its present title of the Leeds and
t Yorkshire Architectural Society.

he society's members are divided into the following
ses :—

embers.—Architects who have been in practice for not
than two years.

onorary Members.—Those who have an indirect
est in architecture or in some collateral art or science.

ssociates.—Students, assistants to architects, and others
are not eligible as members.

ıtterly a new class of "Life Members" has been instituted (upon the retirement from practice of Mr. William H. Thorp, F.R.I.B.A.), to be awarded as a mark of honour for special services rendered to the profession and to the society.

At present there are eighty-seven members, twenty-nine hon. members, sixty-four associates, and one life member.

Following is a list of the executive for this session :—

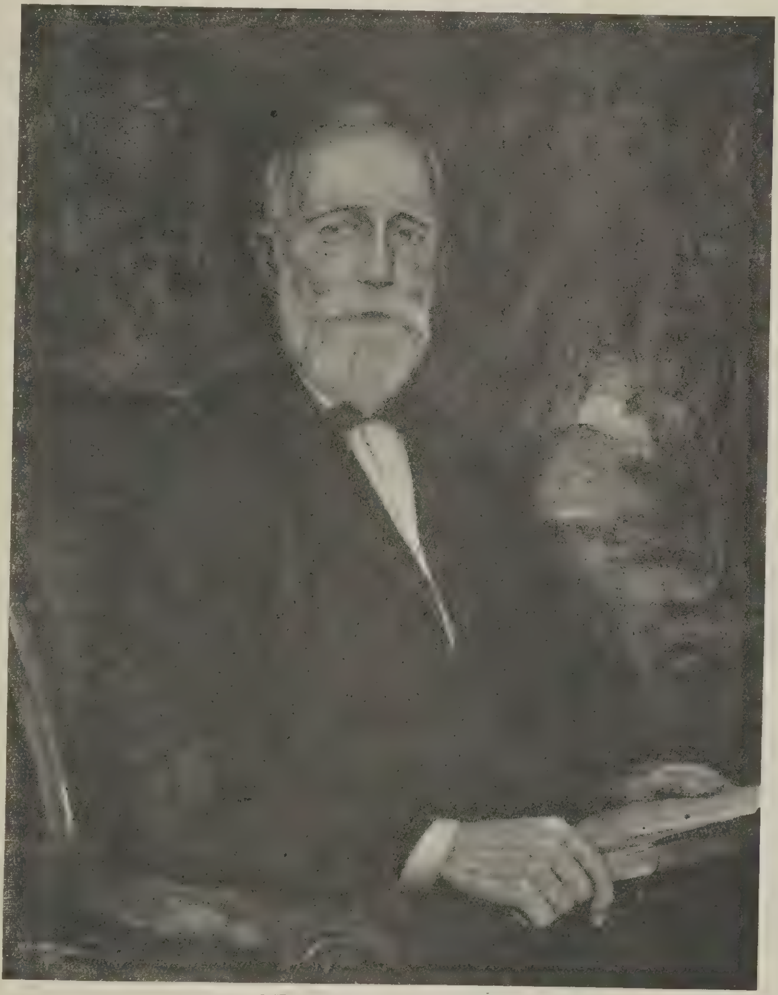
President.—Mr. Eric Morley, F.R.I.B.A. (the twenty-first to hold this office).

Vice-presidents.—Messrs. G. H. Foggitt, A.R.I.B.A., and W. Alban Jones.

Hon. Secretary.—Mr. F. L. Charlton, A.R.I.B.A.

Hon. Librarian.—Mr. J. Addison, A.R.I.B.A.

Hon. Treasurer. — Mr. Wm. Whitehead, A.R.I.B.A.; and a council composed of fourteen members and two associates.



MR. GEORGE CORSON,
First President, Leeds and West Yorkshire Architectural Society.

From its foundation the society has done much to foster the progress of architectural education in Leeds, and to encourage its younger members to submit themselves to the R.I.B.A. for examination. In 1882 the society protested to the R.I.B.A., upon the inauguration of the compulsory examinations for its Associateship, against the title of Fellow being bestowed upon all architects of over seven years in practice, and suggested that all should first pass the Associateship test before being raised to the degree of Fellow. As a matter of history it is interesting to note, that although no practical results accrued from this suggestion at that time, it is the identical procedure the Institute follows to-day.

The society conducted classes and held lectures at its own headquarters from the first session, while certain courses of study were available at the Leeds Institute. Through the efforts of the president, Mr. T. Butler-Wilson, F.R.I.B.A., and the council, a Department of Architecture, with properly organized courses of study, was included in 1902 as an integral part of the Leeds Education Authorities new School of Art. During the headmastership of Mr. Geo. J. Coombs, A.R.C.A., the school was "officially recognized" by the R.I.B.A. and latterly, with Mr. J. Addison, A.R.I.B.A., as head of the department, the scope of the school has been greatly enlarged, and certificate and diploma courses of three and five years' duration are now available. Arrangements are on foot whereby students may read for degrees at the Leeds University. A course of public lectures on architecture conducted by Mr. Addison at the School of Art last session did much to popularize the subject locally.

The society awards annually a silver medal and prizes for students' competitions, and this year has instituted a travelling scholarship. The junior members of the society have a sketch club for summer excursions. On numerous occasions the society has conducted examinations for the R.I.B.A., and this year is doing so again.

A glance through the lecture lists of past sessions reveals the names of many prominent architects and specialists of their day. The wide range of subjects may be gathered from a few selected at random from various years: "House Building," by Ernest Newton; "Reinforced Concrete," by M. Mouchel; "Garden Design," by T. Mawson; "Sanatoria," by H. Percy Adams; "Mediæval Architecture," by Arnold Mitchell; "Saracenic Architecture," by Martin Shaw Briggs, an old associate of the society. Latterly the subject of town planning has been to the fore, and Leeds is fortunate in possessing a civic society in addition to the architectural society. Following a public lecture by Mr. Raymond Unwin in 1919, a course of six lectures by Professor Patrick Abercrombie was conducted under the joint auspices of the Education Authority, the Leeds Civic Society, and the Leeds and West Yorkshire Architectural Society.

The relations of the society with the civic and municipal authorities have always been most cordial, and its advice has been sought on many occasions. The present amenities of City Square as a public centre are largely due to the influence of the society and the then president, Mr. Butler-Wilson, who prepared plans and models of what should be done, at a time when the authorities were not fully aware of the possibilities of the site. Thus on questions of street improvements, public monuments and public buildings, and new by-laws, the society has done much good work. Latterly the Leeds architects, in collaboration, have carried out the municipal housing schemes, and a special sub-committee of the society has watched their interests.

From its first session the society laid the foundations of its present extensive loan collection of architectural wor
By arrangement these are housed in the reference libra
of the Municipal Buildings. They are thus under skil
administration and are easily accessible at all times.

MR. F. L. CHARLTON, A.R.I.B.A.,
Hon. Secretary, Leeds and West Yorks Architectural Society.

MR. ERIC MORLEY, F.R.I.B.A.,
President, Leeds and West Yorks Architectural Society.

On the question of the Statutory Registration of Arc
tects, members of the Leeds Society have done much go
work in the past. It is not perhaps generally known th
a former president, Mr. J. W. Connon, wrote the only bo
that has ever been published on the subject, in the ea
days of the movement. When the inner history of regist
tion comes to be written it will be found that the first act
steps that the R.I.B.A. took as a body to consider the qu
tion seriously, dated from a meeting held in January, 19
The Leeds president, Mr. T. Butler-Wilson, F.R.I.B.A.,
the principal speaker, and his motion, accepted as an ame
ment to an original motion, was carried, that: "A Co
mittee consisting of the Council of the R.I.B.A. and rep
sentatives of the Allied Societies be appointed to consi
the principle of Registration and to report thereon t
special general meeting." Mr. T. Butler-Wilson afterwa
served upon the R.I.B.A. Registration Committee of t
time. On his own initiative he had a draft Bill prepa
embodying his ideas on registration. This was printed al
with Mr. Seth Smith's Bill for comparison and as a grou
work for a future Bill.

During Mr. Butler-Wilson's presidency the "Green Bo
—the annual publication of the society—was first institu
Since 1902 the society has thus a permanent record o
the principal events, the presidential addresses, and its
of members.

The records of the society show that there has always b
a sufficiency of enthusiastic workers to keep it runn
upon smooth lines, and thus one sees the students and pr
winners of one decade the officials and presidents of
next. Thus it is to the younger men that the societ
looking to carry on the traditions that the older mem
have founded, to promote continually the common v
and to serve faithfully the "Mistress Art." H.

The president. Mr. Eric Morley, F.R.I.B.A., is partner th his father in the firm of Messrs. W. J. Morley and Son .R.I.B.A., of Bradford. He is a prizeman and medallist the Surveyors' Institution, and a member of Council the R.I.B.A. During the war he served with the Royal gineers, retiring with the rank of Captain. He was unded at Ypres. His recent works include the National ildren's Home and Orphanage, Bramhope; a housing eme of 600 houses at Bradford Moor, and a new building Bradford for the Anglo-South American Bank, Ltd.

Mr. W. H. Thorp, F.R.I.B.A., has always been closely nnected with the society since he assisted with its foundan in 1876. He was its honorary secretary for seven years, d has been vice-president, and twice the president. His rk in Leeds includes the Art Gallery, the Medical School, d the Y.M.C.A. building. He is well known as a scholar d critic, being the author of various architectural works, h as "An Architect's Sketch Book at Home and Abroad," illas and Gardens of Italy," "An Old Court Quarter of ris."

Mr. T. Butler-Wilson, F.R.I.B.A., was president of the iety from 1901–4. During his presidency he instied the "Green Book," and the president's badge of ce, and was largely instrumental in founding the School Architecture. A vice-president of the R.I.B.A., 1905–6, was a member of Council from 1901–5, and served upon Board of Examiners for seven years. His work includes nestic architecture such as Grove House, Harrogate; eatfield and Castle Grove, Leeds. He is the author of odern House Interiors," "Life and Work of Cuthbert derick," "The Arts in England at the Close of the enteenth Century."

Mr. H. S. Chorley, M.A., F.R.I.B.A., was the president the Leeds and West Yorkshire Architectural Society, 1906–8, and a past member of the R.I.B.A. Council. He has been surveyor for the Diocese of Ripon since 1895, and for the Bradford Diocese since 1920. He is at present advisory architect to the Leeds Corporation in connection with the City of Leeds housing schemes. Included in his works are several churches, vicarages, school buildings, commercial buildings, banks, institutions, and a varied amount of domestic works.

Mr. Sidney D. Kitson, M.A., F.R.I.B.A., F.S.A., was president of the society during the period 1910–12, when he was a member of Council of the R.I.B.A. He was lately the architect for the Princess Mary Infants' Ward at the Leeds Infirmary, and for the extensions to Goldsborough Hall, Yorks, for Viscount Lascelles. He has been the architect of many public buildings, banks, institutions, and has designed much domestic work of distinct character.

Mr. W. Carby Hall, president 1899–1901, 1919–20, is well known in town planning circles. He is chairman of the Midland Branch of the Town Planning Institute, and is a representative of the division on the Institute Council.

Mr. F. L. Charlton, A.R.I.B.A., honorary secretary of the Leeds and West Yorkshire Architectural Society was educated at Sedbergh School, Yorkshire, afterwards articled to the late Mr. Herbert Davis, F.R.I.B.A., Leeds and Scarborough, and studied architecture at the Leeds School of Art and in London. During the war he saw considerable active service—in the early stages of the war in the R.A.M.C., and later in the R.F.A. From June to December, 1918, he was an instructor at the Army School of Camouflage, in Kensington Gardens, London, and retired with the rank of Captain. He is now in practice in Leeds, at Gordon Chambers, 21 Bond Street.

[*The previous articles of this series appeared in our issues for May 2 and 30.*]

The A.A. Prize Distribution

AT the annual prize-giving of the Architectural Association, held last Friday at 35 Bedford Square, the prizes were distributed by Mr. Harvey W. Corbett, F.A.I.A., president of the Architectural League of v York, and architect of the Bush building in Kingsway.

Ir. Stanley Hall, F.R.I.B.A., the new president of the ociation, in his opening speech, remarked on the fact t by a happy accident of dates, it was his first public y to take the chair for the annual prize-giving. He gratulated the students on their good work, their keen liness, and their individuality. "We prefer," he said, r students to be 'buses rather than trams. We like them teer round obstacles on their own." Individuality, he t on, might occasionally lead to explosiveness, but he ght it a very good thing that they should explode sionally. Let them keep their individuality and laugh hemselves sometimes for fear of becoming prigs. He congratulated Mr. Robertson and all his associates, r director of education, Mr. Robert Atkinson, and their etary, Mr. Yerbury. He regretted the fact that Mr. g was leaving the school. In calling on Mr. Corbett to k, he said they architects sometimes looked with envy he wonderful buildings carried out on the other side he Atlantic. Many of them wanted to go and see them, not all were able to. Mr. Corbett, however, had given n an example in this country—the building at the end ingsway.

r. Corbett began his speech by explaining that he was honoured at being asked to give away the prizes, but quite unworthy. He felt, he said in illustration, like an he once met at a big function who was so covered medals that he (the speaker) was obliged to ask him he got them. "Well," said the man in reply, "you his one in the middle—it was given me by mistake; and t all the others because I had this one!" In the greater of his speech Mr. Corbett dealt with the subject of ation, to which he thought it was the work of every architect to give some of his thought and time. He had decided one thing as regards education—one test that could be applied to any architectural school. That test was, were the students interested, enthusiastic, excited about their work, or were they simply being driven along? He thought that they (the A.A.) had passed that test with a 100 per cent. Dealing with their educational work in the States, he said pressure was being brought to bear upon them to make education more practical—to train their young men in construction. But there was one period in an architect's life when he should have a free course. That was the short period in his life when he could develop his imaginative faculty, and if at that time they could develop their imaginative ability they would have the power to meet the situations that would arise. The practical conditions of our cities, said the speaker, were going to require the greatest imaginative ability. He would like to see a big system of architectural education spread all over this country. Describing the sort of system they had in the States, he said that in New York they had assemblies once a month, when drawings from all over the States were sent in to be judged. All their leading universities joined in, so that the student was in competition with the entire country, and it was a great inspiration to the successful prize-winner.

Mr. Robert Atkinson, in proposing a vote of thanks to Mr. Corbett, said that we had no idea of the quality of the architecture in America. He was interested to see that the advance in architecture was due to their schools, which in America had been so well organized that an architect was incapable of doing bad work. He believed that in the future the cities they were building would be the centres of pilgrimage just as much as Florence and Italy were to-day.

The vote of thanks was seconded by Mr. J. A. Gotch, F.S.A., president of the R.I.B.A.

The Association are holding an exhibition of the work of the students which will last until August 17. A list of the prizes and winners appears on page 190.

The Business of an Architect

9.—The Preparation of Drawings

By C. MURRAY HENNELL, F.S.I.

THE care of drawings was dealt with in the last article, and it was necessary there to mention certain matters, such as the size of the drawings and form of title, attention to which facilitates filing and reference. The first thing to consider in the preparation of any drawing is the purpose for which it is required, as this influences its nature and the amount of work that should be put into it. When a client has so far committed himself as to instruct an architect to undertake the design of a building, the first drawings required are sketch plans and elevations. These are not only the preliminary designs on which the working drawings will probably be based, but they should also be of such a nature as can be understood by the average layman, so far as the layman can ever understand a plan. They should be as attractive as possible, so that they will catch the client's eye, but they must not be confusing to him in any way. For example, they should not show, or be labelled with, technical details, such as sizes of timbers, mention of "templates," "oversailing," "fascias," etc., but they ought, on the other hand, to give all the particulars which the building owner is likely to want to know, such as the dimensions of the rooms, including their height, the positions of the doors, windows, fireplaces, and of probable fittings, the various kinds of floorings proposed, and such other items as he will regard as important.

Sketch Elevations and Perspectives.

The elevations in these sketches are not drawn for working purposes. They should be regarded as pictures of what the place will probably look like. These, of course, are of as much use to the architect as of interest to the client. It is very useful to have shadows cast on the elevations, and sketch perspectives are of so much help as to be practically necessities in most work, for the position or proportion of some feature, which may look quite all right in elevation, is shown to be wrong when viewed in perspective. The sketch designs are those on which all one's brains and inventive powers have to be brought to bear, for they are the basis of the job, and when finished, provided they have been properly thought out, and accepted, the architect can feel that he has gone a long way in his work.

Working Drawings.

The preparation of working drawings is another matter. These are purely diagrams for the use of the builder, and indicate by a recognized method what form the building is to take in its entirety and in detail. Working drawings should, therefore, be as clear and concise as possible and ought not to be complicated by any unnecessary or meaningless lines, which may possibly assist the layman in appreciating how the building will appear, but are more of a hindrance than a help to the builder in showing him how it is required to be built. These remarks apply also to the requirements of the quantity surveyor, who wants just the same information as the builder.

To illustrate my meaning more clearly the front elevation of a block of four cottages has been drawn in two ways (see opposite page). In Fig. 1 the draughtsman has been allowed to go his own way, and has produced something which is but little, if any, exaggeration of the kind of drawing that is turned out in many offices. Without disrespect I think I may say that our quick-moving friends, the Americans, many of whom produce the most perfect drawings, are as great offenders as any in wasting time on this sort of work. This drawing took considerably more th
a day to trace, and the draughtsman must have felt qu
dizzy when he had completed all those pantiles. E
chimney stack is fully drawn to $\frac{1}{8}$ in. scale, although th
is a $\frac{1}{2}$ in. detail of them on the same sheet. However, th
is no figured dimension denoting the height of the stac
so that scaling has to be relied on. Then look at the en
mous amount of work there is in drawing every wind
fully. This is totally unnecessary, for all the windows b
a reference to detail drawings. The same remark app
to the two front doors and doorways, alike and yet b
drawn as thoroughly as possible to so small a scale, and t
on top of all that one finds that the doors and doorways
of a standard type for which there are also detail drawi

This drawing looks very well, especially to the n
technical eye, but on close examination there will be fo
heaps of unnecessary drawing, far more than in the few po
I have mentioned, and yet it does not contain really all
information that the builder requires. Many draughts
will only drop too readily into the habit of drawing need
lines, and mental laziness, unconscious no doubt, is lar
the cause of it. Ruling many courses of brickwork
sketching thousands of pantiles require but little me
effort—in fact, one can be thinking of other things all
time—and yet an attractive result is produced.

Fig. 2 shows the same elevation, on which more br
than ink have been spent. This drawing gives far n
useful information to the builder, and there are not m
unnecessary lines used. The tracing of this took the s
draughtsman just over one hour to complete. This
of course, be still further reduced, as half the eleva
would be sufficient in a case like this, where each half i
exact repetition of the other.

Plans and Details.

Plans can be treated in precisely the same way, so as
simple and perfectly clear, and not confused with co
lines (often shown where they do not exist), and atte
to draw joinery or other details to $\frac{1}{8}$ in. scale. Half-
details are far more accurate than $\frac{1}{8}$ in. scale drawings,
if the former are supplied let the latter be as diagramma
as possible and refer to the details. Only too often on
find a foreman or some other man on the building
deavouring to measure from a print of an $\frac{1}{8}$ in. scale dra
with a two-foot rule. If dimensions are clearly figure
all drawings there will be less inclination on the workn
part to do this, and less mistakes will occur in consequ
In order to produce all working drawings in the wa
dicated, to show all that is essential and to eliminat
necessary lines, a man must know quite well what
about. He must be up in his detail drawings, and k
not only his building construction, but also how muc
builder requires to be shown.

The Ideal Draughtsman.

The draughtsman who produces an elevation like I
is of far greater value to the architect than the fellow
takes so much time and pains, but little brains, in tu
out a drawing of the kind of Fig. 1. He is, or soon wi
of much more value to himself, for he has to be thinki
the time of what he is doing, is sharpening his wits in
of his pencil, is constantly learning, and is doing far
useful work than the other man, who is following the
to life-long hack draughtsmanship and little else.

Until a few years ago most working drawings

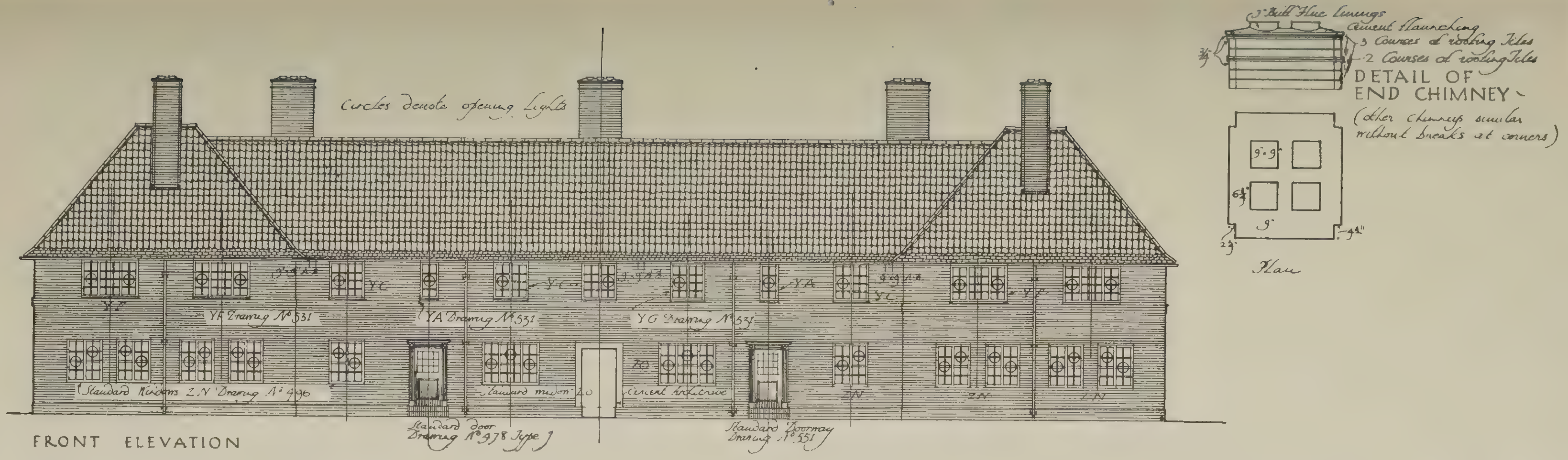

Circles denote opening lights
YF Drawing No 531
YA Drawing No 531
YG Drawing No 531
YC
YA
Standard Windows Z.N Drawing No 496
Standard window ZO
Cement Architrave
Standard door Drawing No 378 Type J
Standard Doorway Drawing No 551
ZN
FRONT ELEVATION
3" Bull Flue Linings
Cement Flaunching
3 Courses of roofing Tiles
2 Courses of roofing Tiles
DETAIL OF END CHIMNEY
(other chimneys similar without breaks at corners)
9"x9"
6¾"
9"
4½"
2¼"
Plan

FIG. 1.

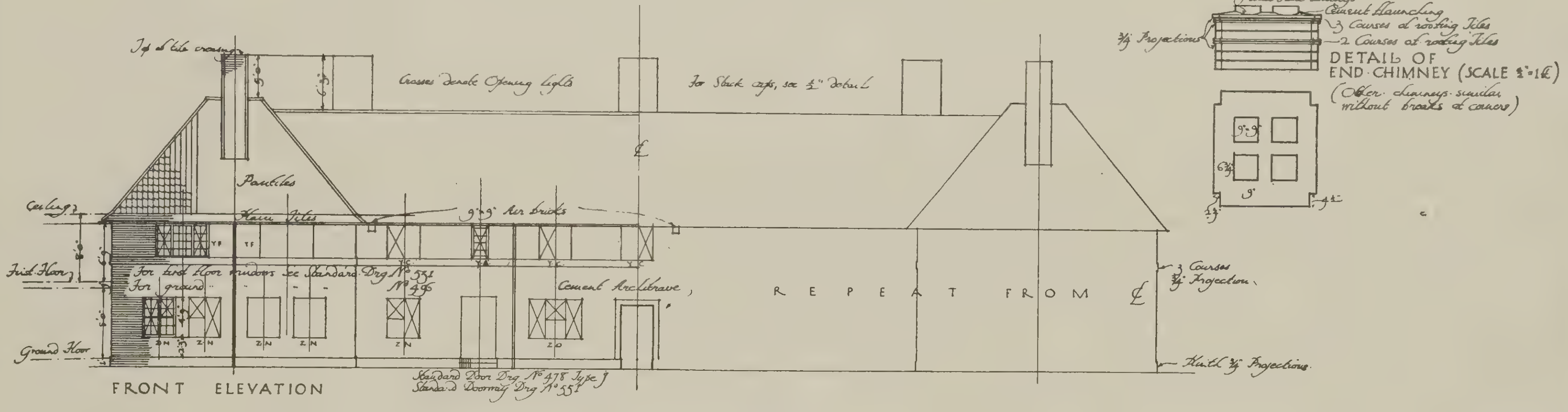

Top of tile creasing
Crosses denote Opening Lights
For Stack caps, see ⅛" Detail
Pantiles
Hanging Tiles
9"x9" Air bricks
Ceiling
First Floor
Ground Floor
For first floor windows see Standard Drg No 531
For ground " " " No 496
Cement Architrave
REPEAT FROM ℄
℄
3 Courses ¾" Projection
Kerb ¾" Projection
Standard Door Drg No 478 Type J
Standard Doorway Drg No 551
YF
TF
ZN
ZO
FRONT ELEVATION
3" Bull Flue Linings
Cement Flaunching
3 Courses of roofing Tiles
2 Courses of roofing Tiles
¾" Projections
DETAIL OF END CHIMNEY (SCALE ½"=1ft)
(Other chimneys similar without breaks at corners)
9"x9"
6¾"
9"
4½"

FIG. 2.

THE FRONT ELEVATION OF A BLOCK OF FOUR COTTAGES.

Much unnecessary detail is often found on working drawings. When the two drawings shown above are compared it will be found that the bottom one gives the most information.

(*See article "The Business of an Architect" on opposite page.*)

coloured, but this is really unnecessary, and the colour does not stay there long when they get into the hands of building operatives. If walls are drawn in solid black in plan and section, and details are hatched, it is all that is required, and much saving of time is effected. Let the paints and brushes be preserved for the sketch plans and exhibition work.

Tracings from which many and frequent reproductions may have to be made and which are likely tc receive a good deal of handling should be in ink on tracing linen, but for details good blue prints, and even black and white prints, can be obtained from a hard pencil line on tracing paper. The amount of linen used in the office should be studie for this material is very expensive nowadays.

The ordinary points on the preparation of drawings a taught in most schools and given in many text-books, a would be out of place here. Let a draughtsman first lea how to draw well and with technical correctness, and th use his wits as to what to leave out of his drawings, showi at the same time everything that is essential.

(*To be continued.*)

[*The previous articles in this series appeared in our iss for April* 4, 11, 25, *May* 9 and 30, *June* 27, *and July* 18.]

A New London Church

WALTER TAPPER, F.R.I.B.A., Architect

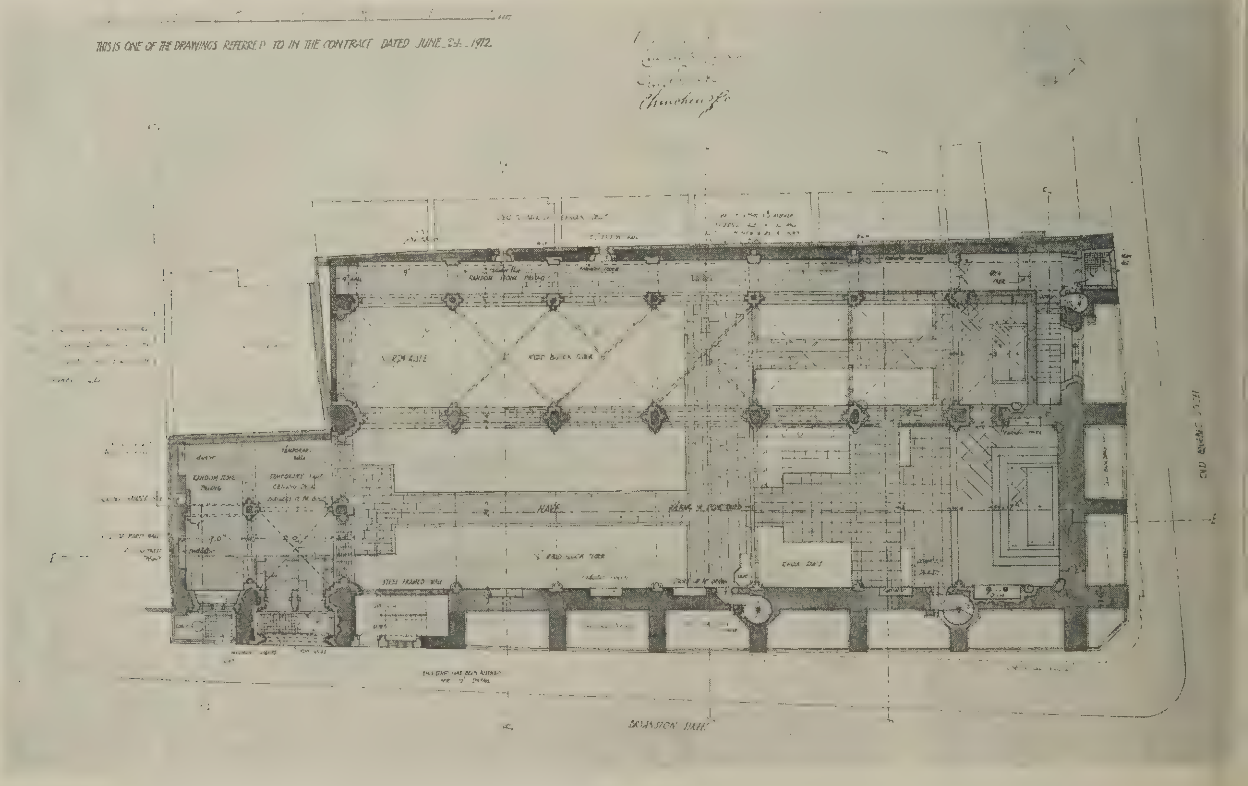
THERE is a local tradition that this church stands on the site of a riding-school used by the Horse Guards, who certainly long occupied barracks near by in Granville Place. A horse's skeleton found when the foundations of the present building were excavated was, of course, accepted as conclusive evidence that the tradition was right.

What is more certain is that the "Old Quebec Street Proprietary Chapel" was built here in 1788. It is described as "a big room with sash windows," so probably had less architectural pretensions even than some of its many contemporary proprietary chapels in Mayfair, of which the Grosvenor Chapel alone survives.

The old chapel, however, was a famous "preaching-place" in Victorian days, and a succession of able and eloquent incumbents filled it with devoted and generous congregations. Alford, afterwards Dean of Canterbury, Magee, afterwards Archbishop of York, Goulburn, afterwards Dean of Norwich, Francis Holland, Canon of Canterbury, and H. Bickersteth-Ottley, Canon of Rochester, succeeded one another during the last fifty years of the nineteenth century.

In 1867 Canon Holland did his best with the chapel. The walls were covered with stucco, and a r window, of a more or less romanesque pattern, was serted in the east wall. Canon Ottley cleared out wine vaults which occupied the basement, and got chapel consecrated as a parish church, with its pres dedication, in 1894. At the same time Sir A. Blomf carried out some internal improvements. Canon Ot also began to collect funds for the rebuilding. Prebend Boyd was not at the church long enough to begin work, but his successor, the Rev. Bernard D. Sh before his death last year, saw the present edifice p tically completed.

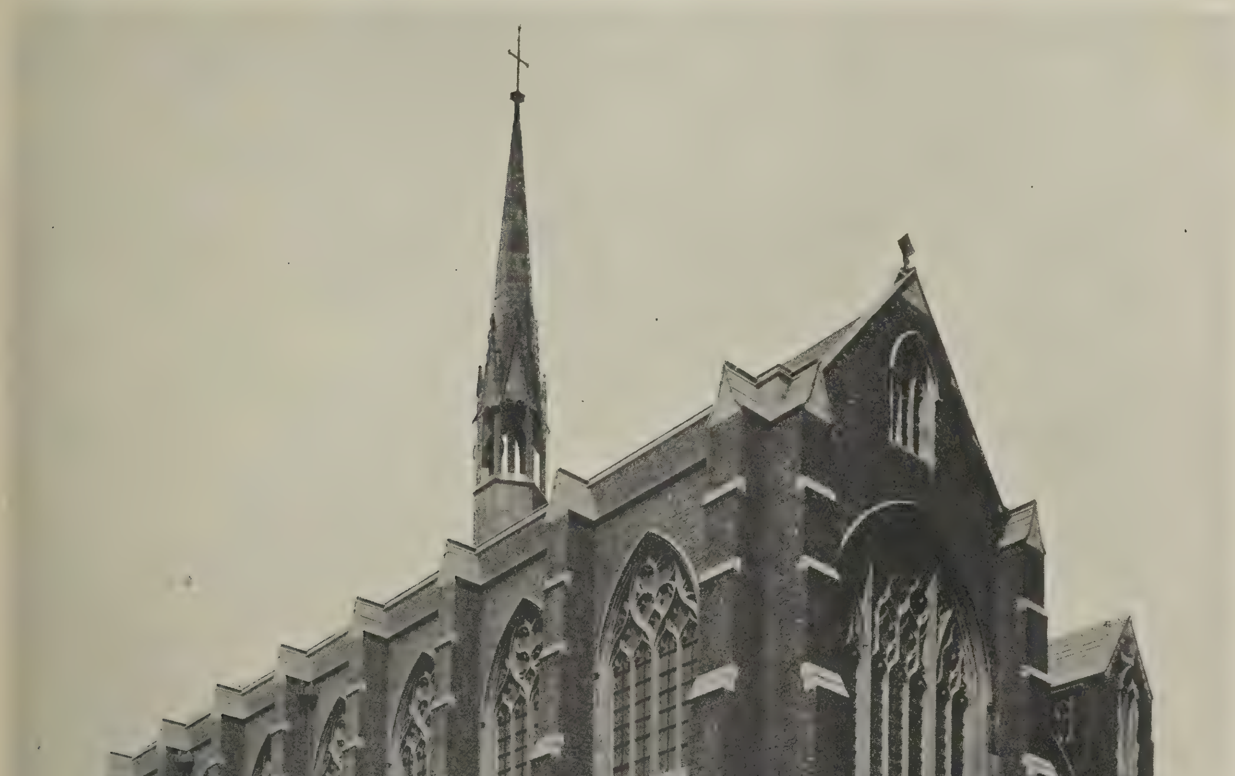
The plan consists of a nave with west gall sanctuary, and one aisle with side chapel. Lawren 2 in. bricks were used in the walls, and the work carried out by Messrs. Chinchen & Co., of Ke Green. The internal woodwork was executed and ca by Messrs. Bridgeman and Sons, of Lichfield, and decoration was done by Mr. Bewsey, of Abbey R N.W. The marble work was executed by Messrs. Fa and Brindley.


THIS IS ONE OF THE DRAWINGS REFERRED TO IN THE CONTRACT DATED JUNE 5th 1912.
Chinchen & Co
RANDOM STONE PAVING
NAVE
BRYANSTON STREET
OLD QUEBEC STREET

PLAN OF THE CHURCH OF THE ANNUNCIATION, BRYANSTON STREET, LONDON, W.

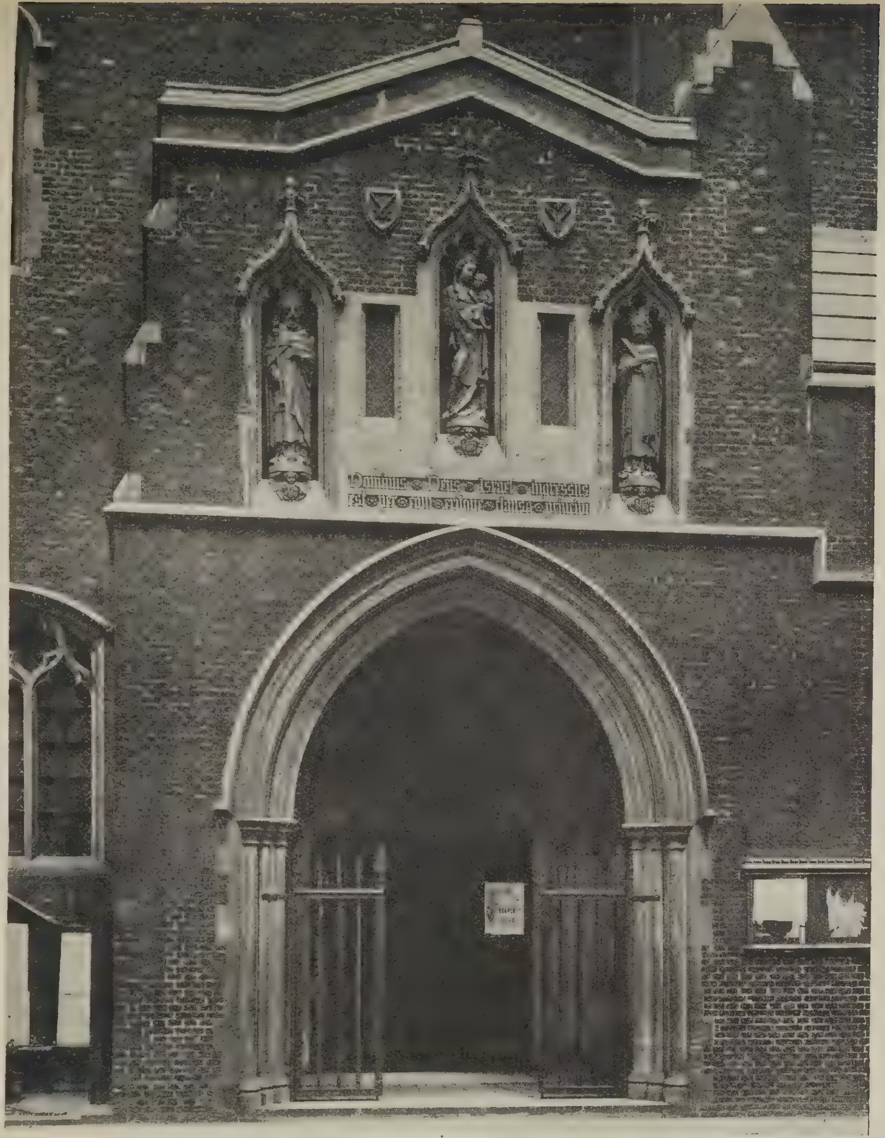
Modern Ecclesiastical Architecture. 22.—The Church of the Annunciation, Bryanston Street, London, W.

Walter Tapper, F.R.I.B.A., Architect

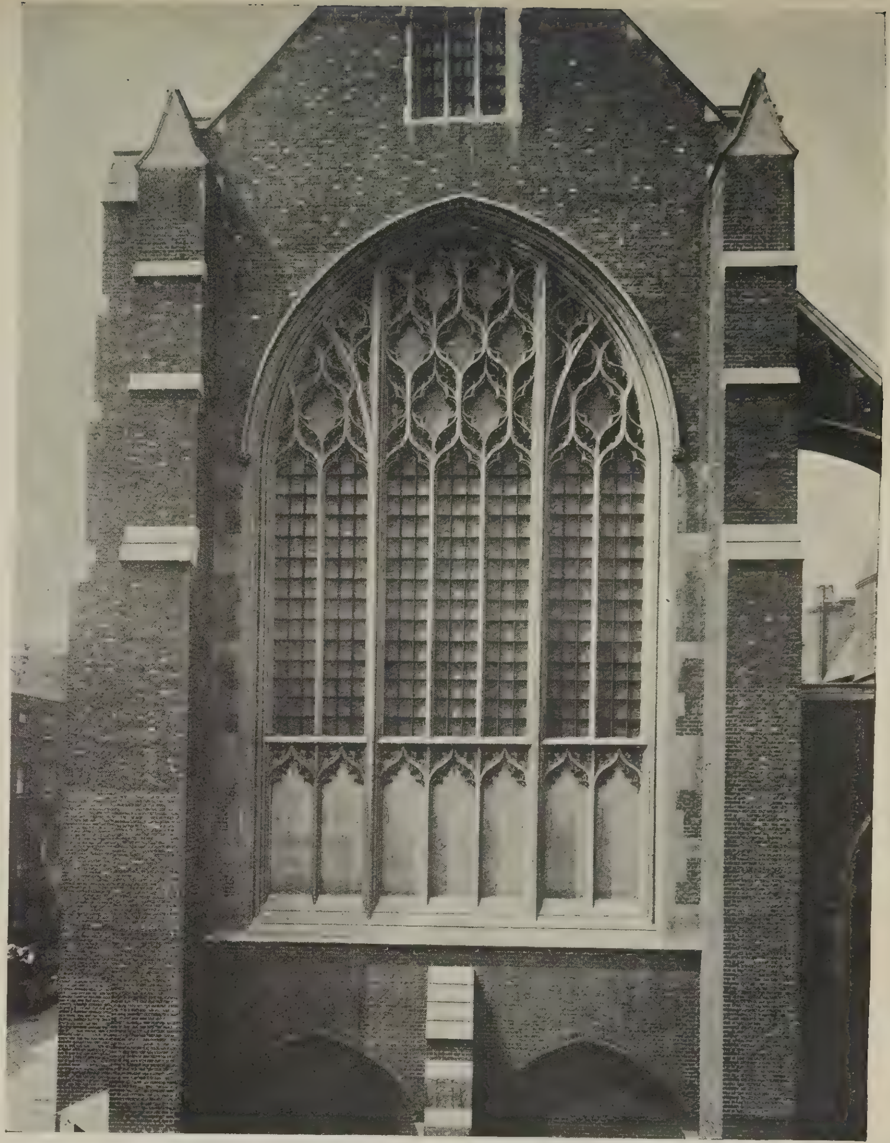


Among modern churches of distinction, Mr. Tapper's building in Bryanston Street, on the north side of Oxford Street, is all too little known, though the old chapel, which stood on the site of the present church, was a famous preaching place in Victorian days. Our view shows the church as one approaches from Old Quebec Street.

THE LIBRARY
OF THE
UNIVERSITY OF ILLINOIS

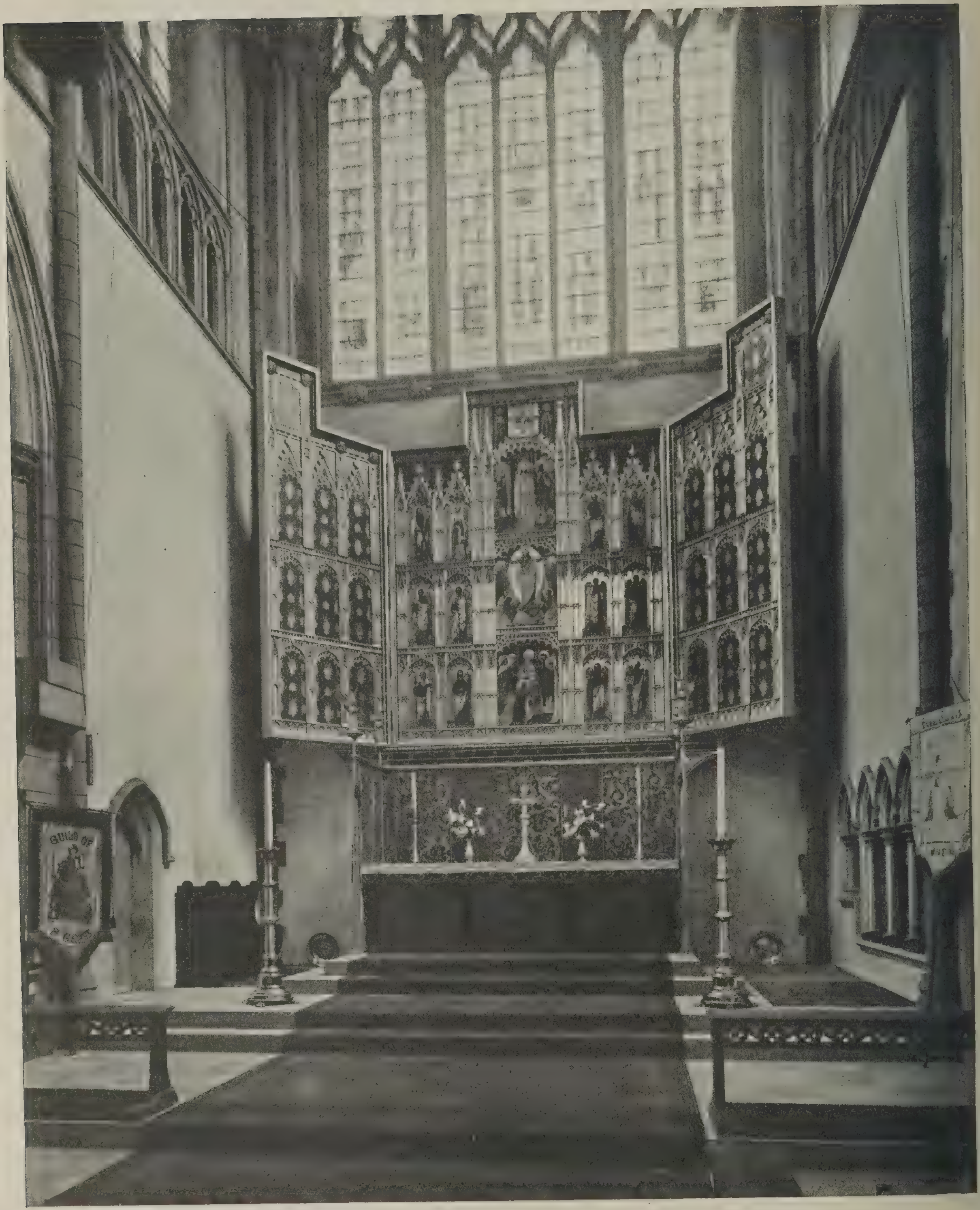


THE ENTRANCE PORCH.



THE EAST WINDOW.

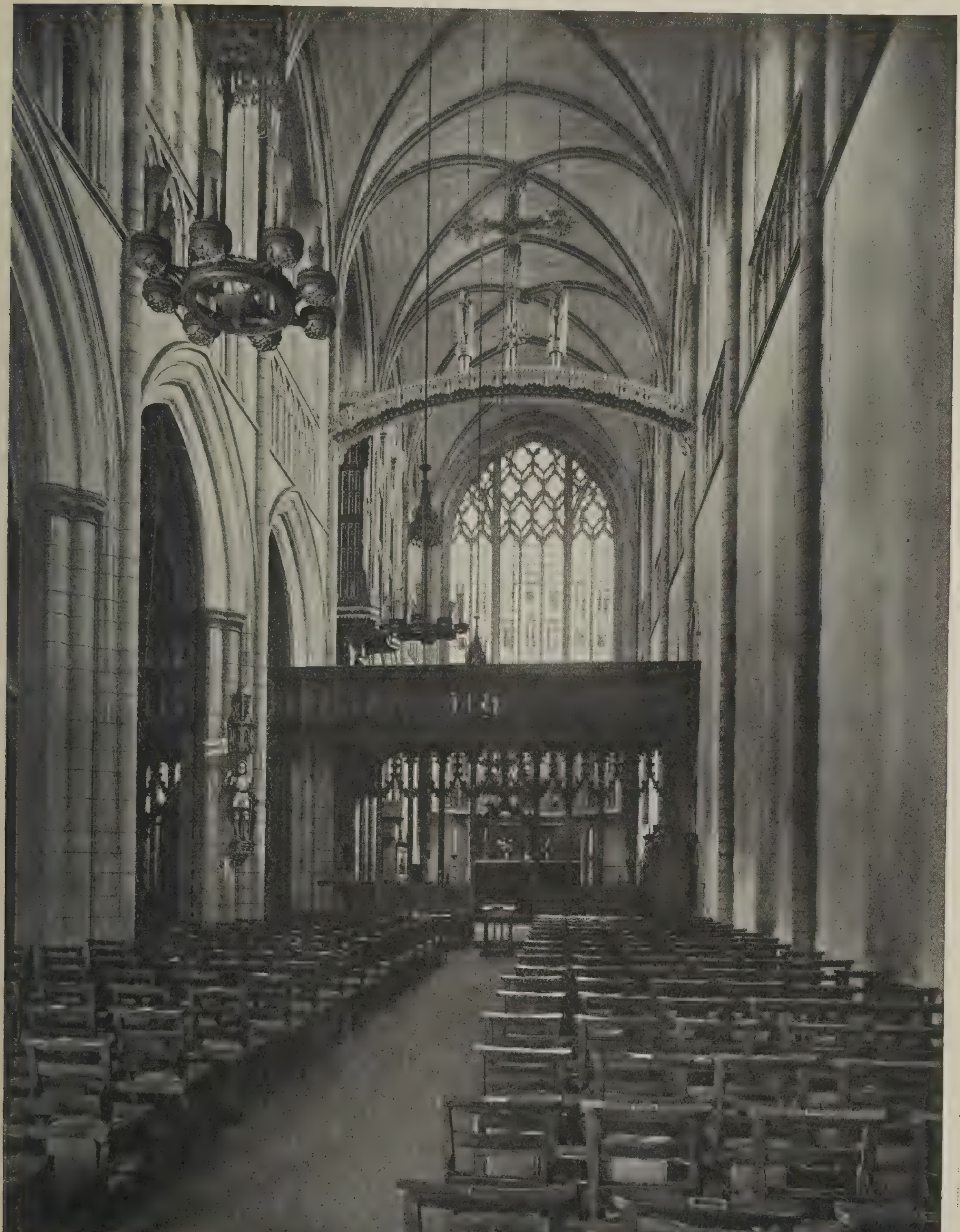
THE CHURCH OF THE ANNUNCIATION, BRYANSTON STREET, LONDON, W WALTER TAPPER, F.R.I.B.A., ARCHITECT.



THE CHURCH OF THE ANNUNCIATION, BRYANSTON STREET, W.: THE ALTAR, WITH TRIPTYCH.
WALTER TAPPER, F.R.I.B.A., ARCHITECT.

Modern Ecclesiastical Architecture. 23.—The Church of the Annunciation, Bryanston Street, London, W.

Walter Tapper, F.R.I.B.A., Architect

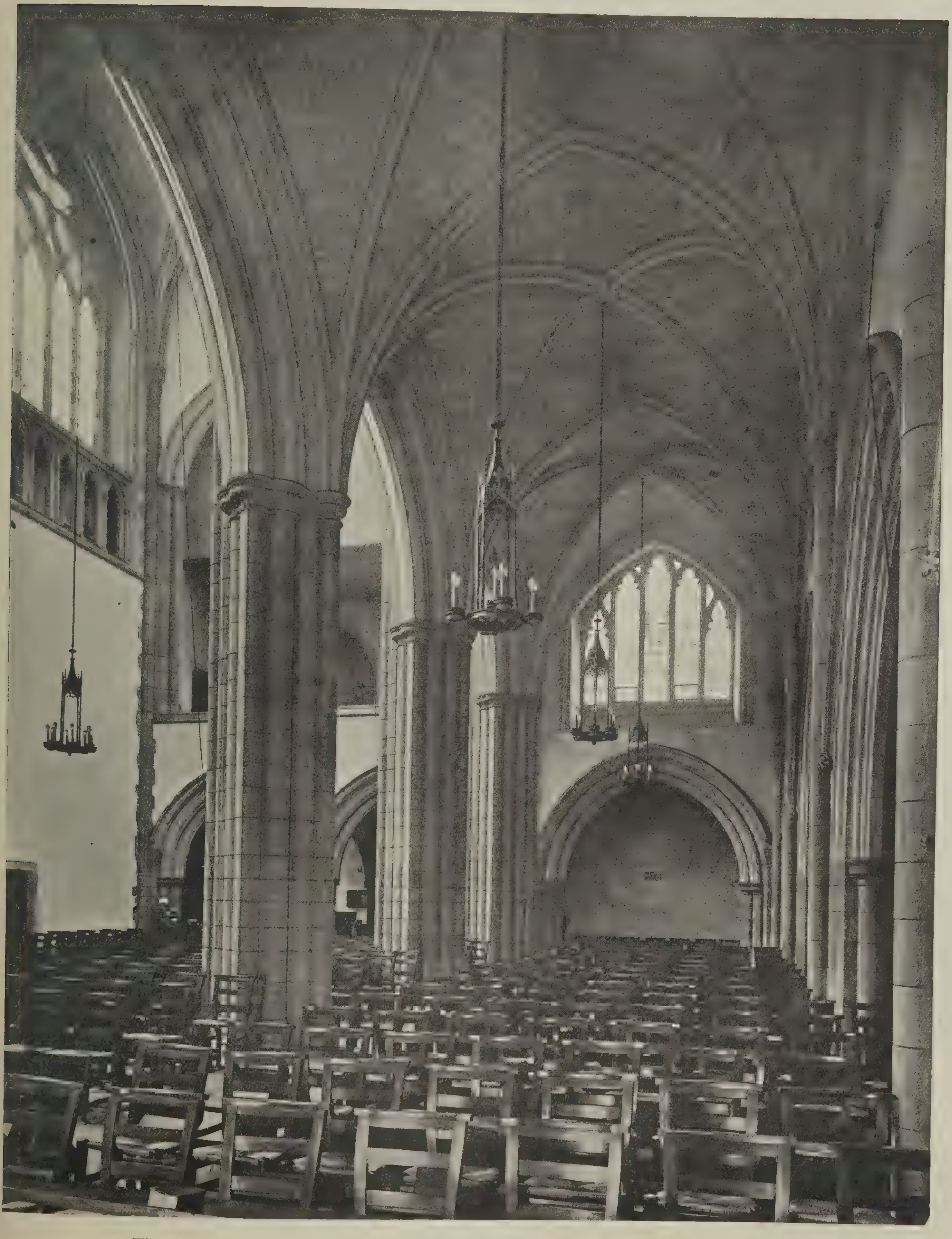


This illustration—of the interior looking towards the altar—shows the beauty of proportion and detail characteristic of all Mr. Tapper's work. The great east window filling the end of the nave is particularly striking.

THE LIBRARY
OF THE
UNIVERSITY OF ILLINOIS

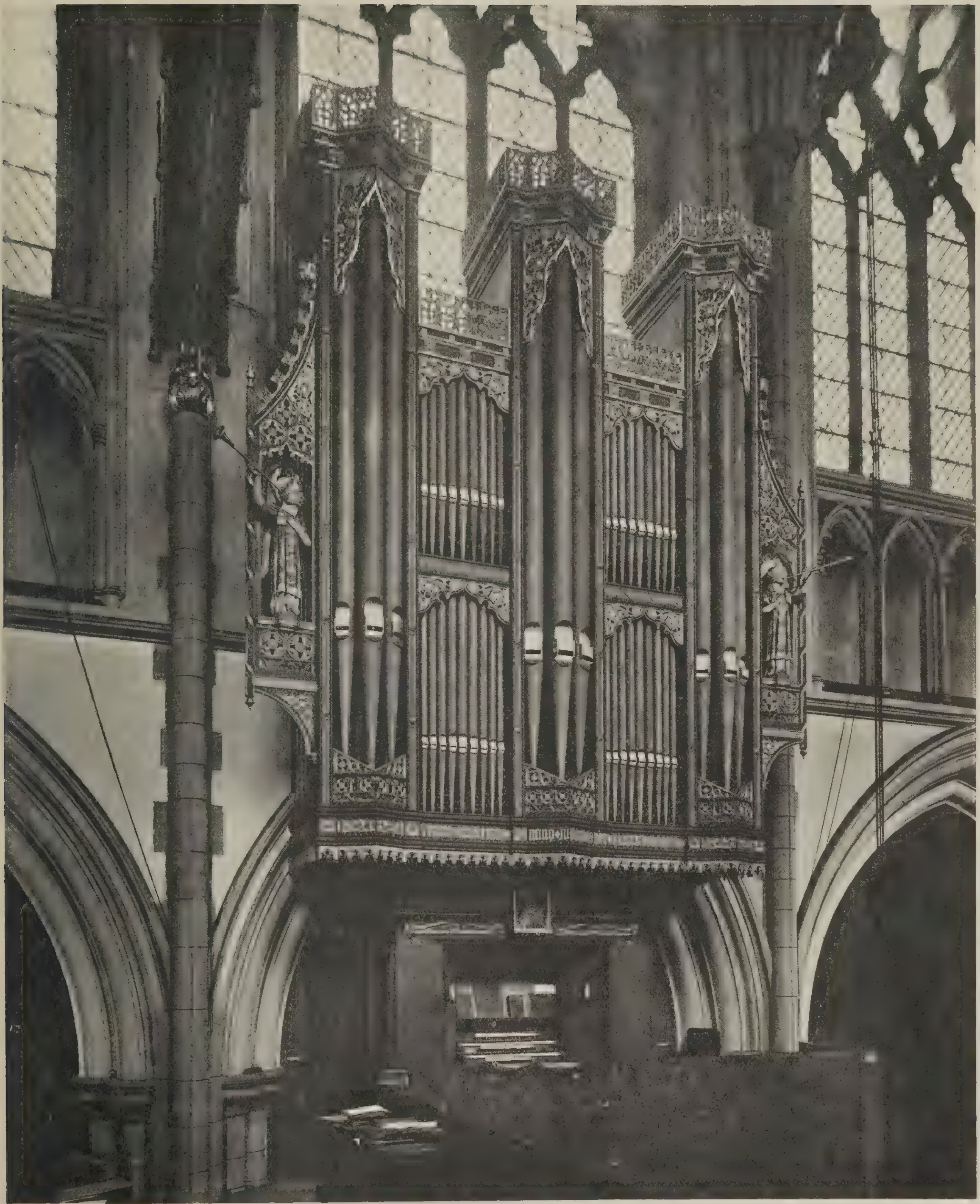
Modern Ecclesiastical Architecture. 24.—The Church of the Annunciation, Bryanston Street, London, W.

Walter Tapper, F.R.I.B.A., Architect



The above interior shows a western view of the north aisle with the nave on the left hand.

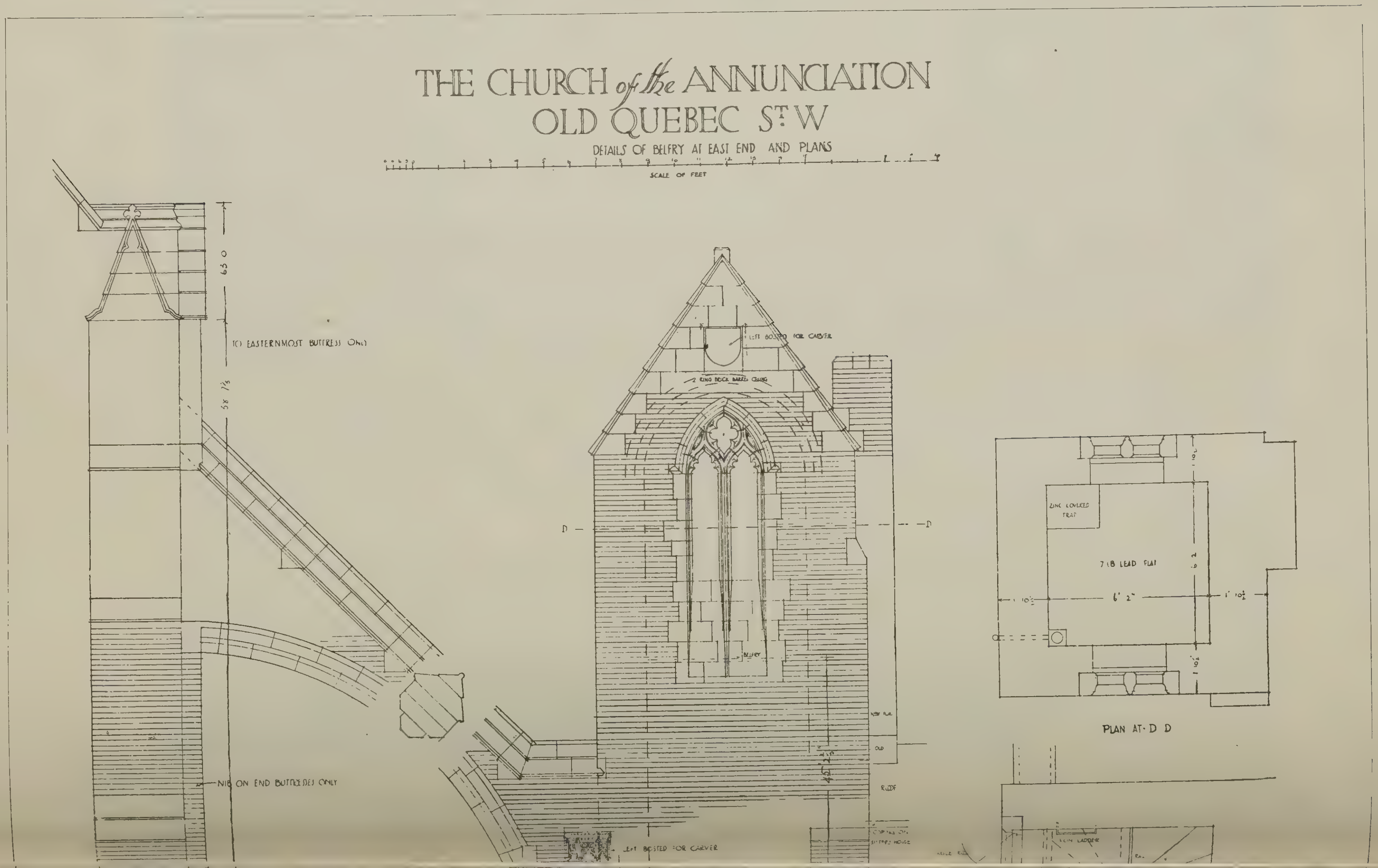
THE LIBRARY
OF THE
UNIVERSITY OF ILLINOIS

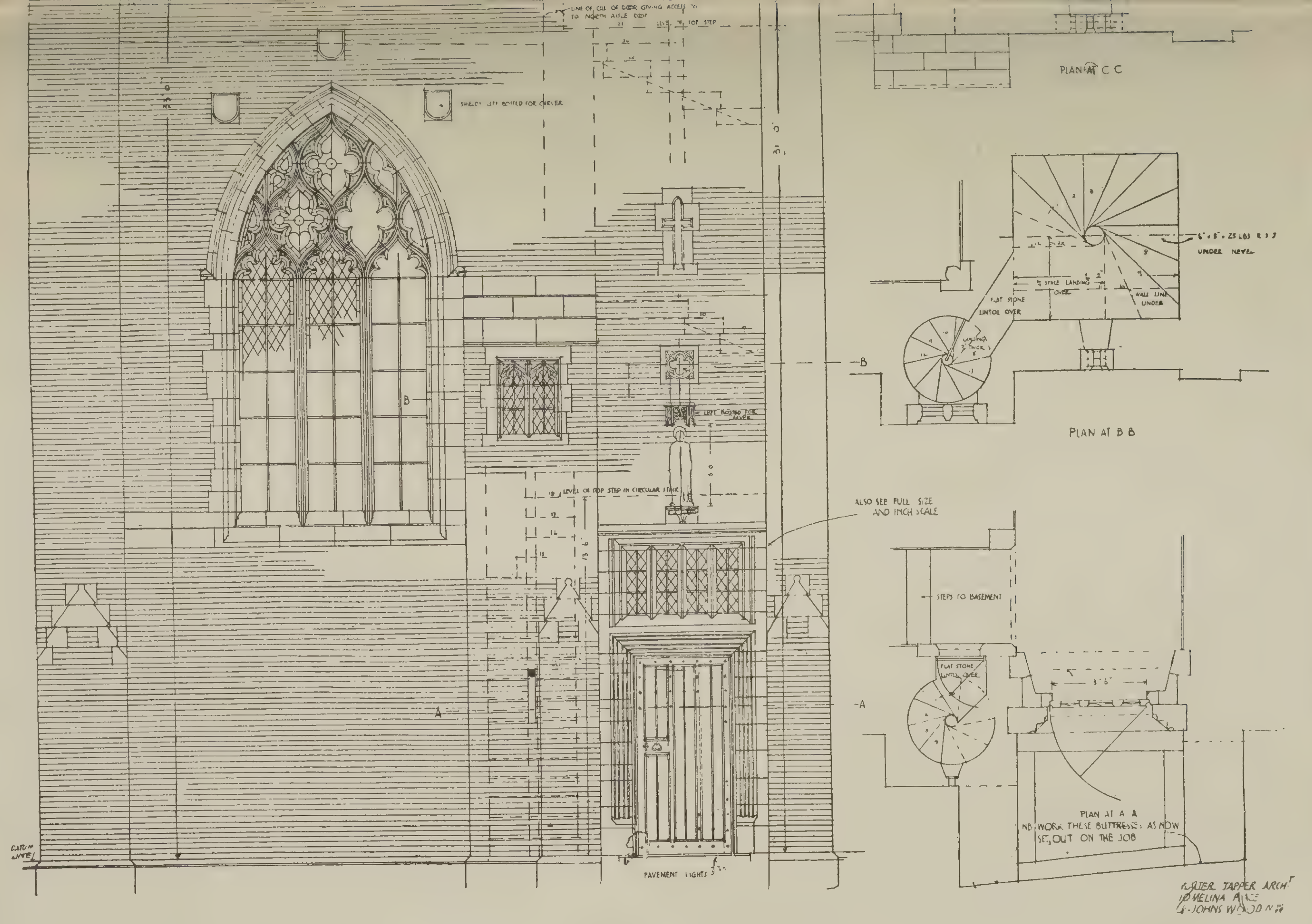


THE CHURCH OF THE ANNUNCIATION, BRYANSTON STREET, LONDON, W.: THE ORGAN.
WALTER TAPPER, F.R.I.B.A., ARCHITECT.

Architects' Working Drawings. 64.—The Church of the Annunciation, Bryanston Street, London, W.

Walter Tapper, F.R.I.B.A., Architect





The above are details and plans of the belfry and the three-light window at the east end of the aisle. The belfry is shown on the right-hand side of the illustration on page 165.

The Liverpool School of Architecture Exhibition

THE twentieth annual exhibition of work of the students of the School of Architecture, University of Liverpool, which is being held in the Walker Art Gallery, was opened by Lord Leverhulme. By way of arousing some measure of public interest in things architectural, several public exhibitions have recently been held, notably the "Twenty Years of British Architecture," promoted by the Architecture Club, and the exhibition of American work held under the auspices of the R.I.B.A. Those responsible for these exhibitions, however, wisely confined themselves to photographs of works actually executed—a decision which was fully justified. The public still fights very shy of architectural drawings, regarding them as something quite incomprehensible, and therefore makes small effort to understand them—they resemble doctors' prescriptions, made out in language of their own, whose effect is to be judged only by the final result.

On this occasion the exhibition is one entirely of students' work; there are, therefore, no photographs to show, and the drawings are left to tell their own tale. The number of the general public, however, which does appreciate drawings is certainly on the increase, and these exhibitions are not held in vain. It might be possible in the future to include some photographs of the actual work of past students of the school, of whom there must now be a considerable number in practice. This would have the result of establishing a connection with realities.

For the architect, however, the exhibition has a different aspect. The imagination, a quality often sadly lacking in executed work, shown in many of the designs is very stimulating. The problems generally are extremely well set, and are of so interesting a character that they do not fail to gain a response worthy of them, and it is to this careful preparation of the subjects that a great measure of the success of the students is due. A concise, well-set subject calls forth clear and well-defined solutions. Sloppy work, of which, by the way, there is none to be seen, is the result of carelessly drawn-up programmes.

The exhibition is well arranged, and one can readily follow the entire course which the student undergoes. The first and second years' work is illustrated by compositions of the Orders and other exercises intended to familiarize the student with the technique of his subject. The third year, that which in time past was the final stage—after which the student was sentenced to imprisonment in an office—is the year in which he really begins to expand. The remarkable development noticeable at this stage may be taken as proof that the five years' course is not, as has been so frequently stated, of too long duration.

Prominent among the work is a finely rendered detail of a monumental staircase for a town hall by Mr. H. Thearle; a college dining-hall by Mr. F. N. Astbury shows that the student has a grasp of the underlying principles of the Georgian manner. Measured work makes its appearance in this year; less stress is apparently laid on this subject than was formerly the case, and this is rather to be regretted as measuring is an extremely useful way of getting the student into touch with actual buildings which can never be gained by mere study of photographs of them. The Pavillon de Choiseul of the Musée Carnavalet, Paris, is delightfully drawn and rendered. It is a composite building begun by Pierre Lescot and Jean Goujon in 1554, and altered by François Mansart about 1655. Another careful piece of measured work is the organ case in the Royal Naval College, Greenwich, drawn by Miss Thelma Silcock. The detail is particularly well drawn, but the shadows are rather unconvincing.

The subject set for the Lever prize in this year was a façade for a departmental store facing Oxford Circus. It is somewhat difficult to see why the dull French Renaissance arrangement of pilasters was placed first, as no effort has been made to give a satisfactory solution to the problem of a modern shop front, whereas in the design placed second the plate-glass windows are set in a decorative metal frame planted on the front of the building in a highly satisfactory manner.

The character of the work in the fourth year is much the same as in the preceding year. The pace is apparently not forced, but there is a steady development shown in such problems as a post office for a small country town. The design by Mr. F. Y. Vellarde, after the strongly-rusticated manner of San Michele, suggests itself as most appropriate in these days of frequent post-office raids. The remaining designs exhibited for small public libraries are in the colonial style, which seems to be, on occasion, handled by all the students with equal felicity.

The small scale models, which were made in the school in connection with this subject, are tentative efforts which one would like to see carried further. It is evident from those in the exhibition that the realistic in model making is not to be sought, and the simpler the model can be kept the better the final result.

In the fifth year one looks for more ambitious subjects. "A legislative and administrative building for the League of Nations" is a problem which calls for some dexterity in planning. The only design exhibited shows that the problem was boldly tackled. The plan is simple and straightforward, and the elevation dignified.

A subject of similar type, viz.: "A Parliament House," has not been so skilfully handled. The plan is overcrowded, but possibly this is due to a mistake in drawing up the programme. A comparison of this plan and the one submitted for the League of Nations building shows the advantage of clear internal courts as against a ground floor completely built over. The Parliament House is crowned by a very happy adaptation of the St. Peter's Dome.

In lighter vein there is a series of "esquisses." The production of such sketches in a short time is an excellent means of training the student to a rapid setting down of his ideas, which is essential before he enters such a competition as that for the Rome prize. Considerable skill in the arrangement of colour is shown in many of the sketches—one particularly, by Mr. Maxwell Fry, is very pleasing.

After five years of such study the student arrives at the supreme test—the Rome prize, which, as has been pointed out, is probably the finest students' prize awarded in any profession. The bridge designs submitted in the qualifying round are most interesting attempts to solve architecturally the problem of spanning a gorge. One fails, however, to see why the essentially modern solution in reinforced concrete should have been so summarily ruled out.

The final design for a seaside recreation centre is illustrated by three sets of drawings. The solution of this problem lies almost entirely in the plan, and the winner of the second prize, Mr. Edwin Williams, is to be congratulated on the production of a most carefully studied arrangement. His buildings would make an effective group viewed from any direction.

In the design submitted by Mr. Maxwell Fry one would have, on approaching from the land side, the feeling of coming across the scheme from the wrong direction, striking as one does the convex end of the grandstand. Apart from this the design throughout is of a very high degree of excellence. The design by Mr. S. L. Owen is a clever adaptation of a typical Beaux-Arts scheme. One rather ls that it is a style too complicated in plan and too rich ernally to find much favour in this country.

section of the exhibition is devoted to working draw- s, and a great air of reality is given by the fact that they all "blue prints" from the originals. One set of twenty wings for a repertory theatre calls for special mention. author was awarded the Holland and Hannen and itt prize for working drawings. They are models for roughness and clearness. One is reminded here of the nition that "an engineer is a person who can do for pence what anyone else could do for a shilling," and care st be taken, when students embark on the engineering blems, that due regard is had to the economy of construc- n as well as to safety.

final matter calls for comment. Architecture is, after an affair of building, and one is tempted to ask whether student is given sufficient opportunity for becoming uainted with the appearance, in point of colour and ture, of the actual building materials he must employ gain the effects he desires. Without such knowledge the t of designs in translation into actuality is likely to fer very great loss.

he section of the exhibition devoted to town planning tains many interesting drawings which, although not y numerous, amply repay close study.

H. A. DOD.

Contemporary Art

Victoria and Albert Museum.

delightful atmosphere is rendered by the series of wings of old colonial architecture in New South Wales Tasmania by Hardy Wilson. It is less sophisticated n that of the houses and the terraces found at home of rgian work, but it has a charm of its own which is quite leniable, and its taste is no less elegant. It is indicative he first half-century of Australian work, for the buildings date between 1790 and 1840, and comprise homesteads, cial halls, and churches. These are all laid out on a cious plan, even if they, in themselves, seem a little it as represented in the artist's drawings. In this lay ir charm; there was no necessity for great erections, but her for a house for the settler or official, and around it a eading of gardens and of buildings for the exercise of domestic crafts, with, perhaps, a little wider scope for more intimate agricultural avocations. It is a urely life that these houses represent, with time for con- plation and the consideration of such restricted culture reached out so far from Europe. Broad eaves, wide ches, colonnades, verandas, and within panelled doors ix, and paned windows of twelve, and hanging staircases: tyle of the severity of wide spaces white painted or shed, with wide-paved terraces and walks in the gardens, all around the native flowers, plumbago and hydrangea, for both use and beauty, vines and olives. There is hing scholarly shown in Mr. Wilson's drawings, no fine ving in wood or stone, nor mouldings, but only that ch workman's wit could supply without, by great good une, recourse to books, for there were no books there. result justifies the native taste. Only one architect is ied in connection with this work, one Howard Greenway, bankrupt of Bristol, transported for concealing his sures! What was his misfortune was all to the advan- of Australasia, for some of the most important of the er buildings are due to him, employed, supported, and ouraged as he was by Lachlan Macquarie, the Governor New South Wales, whose name is now attached to the od building sometimes—the Macquarie style. The wings in themselves, done in a curious and very un- al way, are very interesting.

passionate desire for the continuation of life after itable death has inspired many great works of art, of ch Dante's "Purgatorio" is, in most ways, the greatest. ptian art runs it close, however, for most of the ancient nting and sculpture was largely concerned with this ession. The love of life itself is depicted in scenes of everyday avocations, in social acts, and in religious observances, which, placed in the tombs and on the walls of the passages leading to them, indicate the desire of those remaining alive that the dead will continue these acts in the nether world, eating and drinking and loving contemporaneously with the similar acts continued above by surviving relatives. Further there are the indications that a re-union is the natural thing to look forward to. It follows then that the wall-paintings of the Theban tombs made by Nina de Garis Davies throughout many years, and now lent to South Kensington by Dr. Alan H. Gardiner, are a complete illustration of the ways of life of the times they represent. They have been copied in facsimile from the known tombs of Theban nobles, and date in the eighteenth dynasty (1580–1350 B.C.) for the most part, and the later new kingdom (1350–1205 B.C.), or nineteenth dynasty, although the earlier middle kingdom (2000–1700 B.C.) is also represented. The paintings were done on the walls of the tombs in flat colour on the surface of the original rock out of which the tombs were hewn, or reliefs were carved thereon and these painted. The method was of body-colour on gouache applied to the dry surfaces, the colours ground and mixed with gum and water. If the surfaces were friable they were plastered over and sometimes built up with brick with a plaster surface, and so far as relief work is concerned, plaster modelling was applied to the native surface in order to obtain reliefs, which were then coloured. The whole process is interesting and should be studied in view of the effort now being made to embody the principles of colour-decoration in modern architecture and architectural sculpture. The indebtedness of all lovers of architecture, painting, and sculpture to the director of the Department of Engraving, Illustration, and Design—Mr. Martin Hardie—is again instanced by this exhibition, as well as to the artist—Mrs. Davies—and Dr. Gardiner, the honorary secretary of the Egypt Exploration Fund.

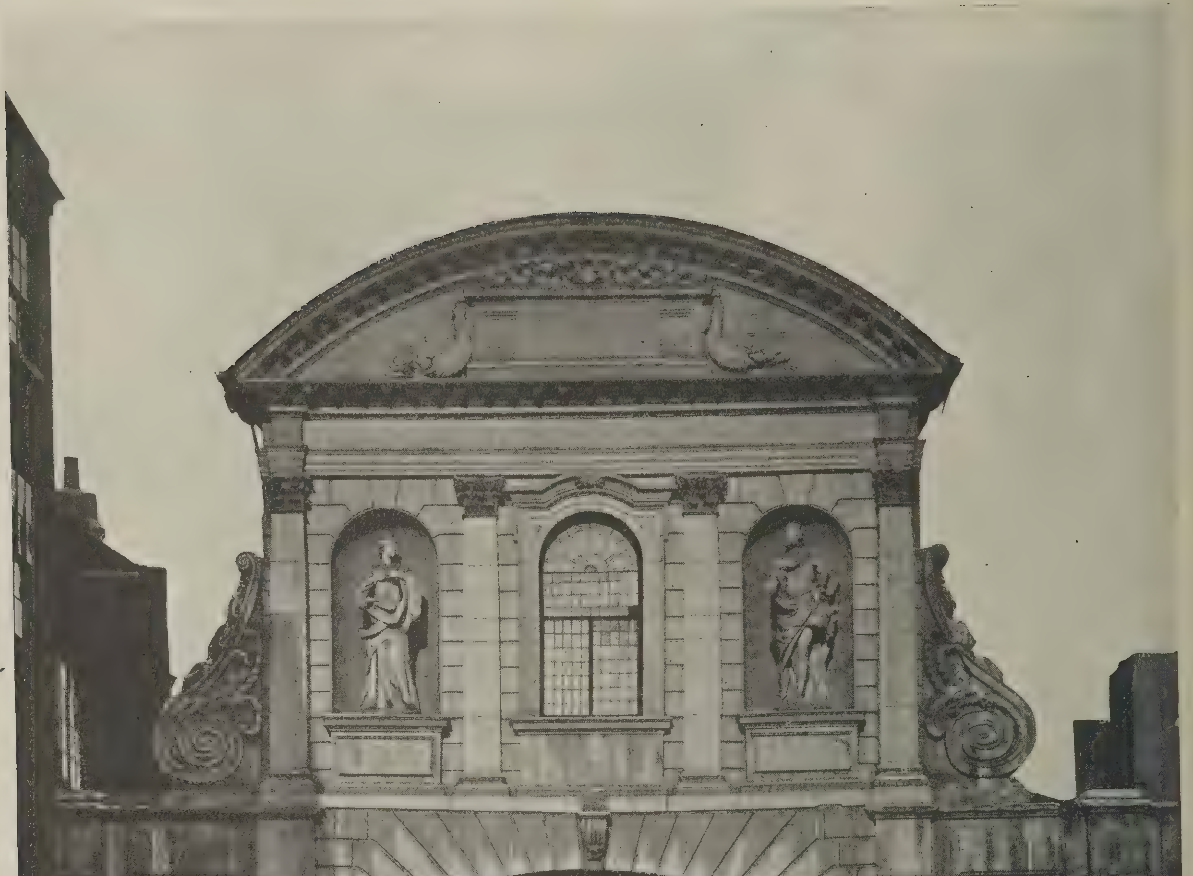
The Leicester Galleries.

An interesting exhibition of drawings enables the student of French art to enter more intimately into the aims of painters from Delacroix to Camille Pissarro, as well as Cézanne, Vlaminck, Van Dongen, Derain, and Picasso, and, moreover, into the methods of such sculptors as Degas and Rodin. Of the latter there are "sculptor's drawings," and there are also some most intriguing small studies for pictures that indicate the possession of the faculty for graphic art, which the great sculptors never developed. There is an unusual "Marine," by Degas, which is a reminder of what this great figure draughtsman might have accomplished in landscape if he had found the time. Another reminder is the "Woman Reposing" of Cézanne; an indication of the powers of figure-drawing which was possessed by this fine landscapist. The sure draughtsmanship of Drivier's "Allégorie" in sanguine, green, pen and charcoal is fascinating, and the "Jeune Femme" of Maurice Denis is an accomplished example of a modernist master of whose sound work too little is seen in London. Van Dongen's two studies, especially the "Figure Reposing," are full of interest. The whole of this show is singularly appropriate and apropos at the moment, when fine and finished examples of the artists are the outstanding features at Knoedler's and Agnew's Galleries. In many exhibitions there have been too many ill-considered trifles from the portfolios of the Paris painters, and these have by no means enhanced the reputations of the owners of the portfolios, although their names have become familiar in the mouths of students and collector-beginners who will one day rue their bargains. It is good to have examples by artists whose names are well-known; it adds to the interest of collections, but it is bad, both for artists and collections, to have bad examples. A little more knowledge and a little less blind enthusiasm are desirable, and the present exhibition will show collectors what things are good for them to have, for there is practically nothing that is negligible in the whole of the eighty-one exhibits.

KINETON PARKES.

Temple Bar, Fleet Street, in the "Seventies": View looking West

Sir Christopher Wren, Architect

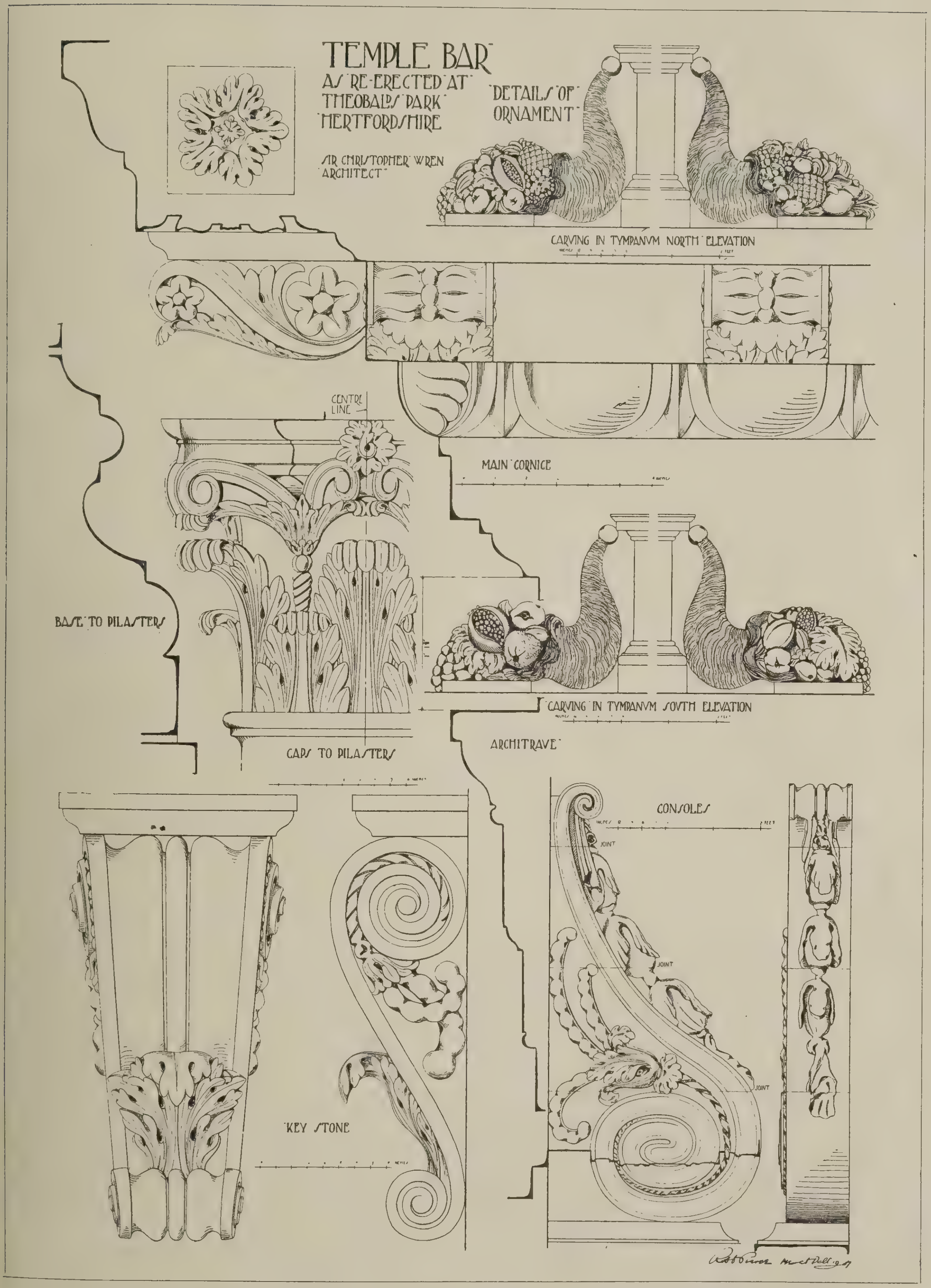


Temple Bar is gone from Fleet Street, and only old photographs and the like—and these rapidly becoming fewer—can show us it as it was. The old gateway must feel a little strange in its country surroundings after the life and stir of the adventurous "Street."

(See Measured Drawing on opposite page.)

Measured Drawings. 38.—Temple Bar

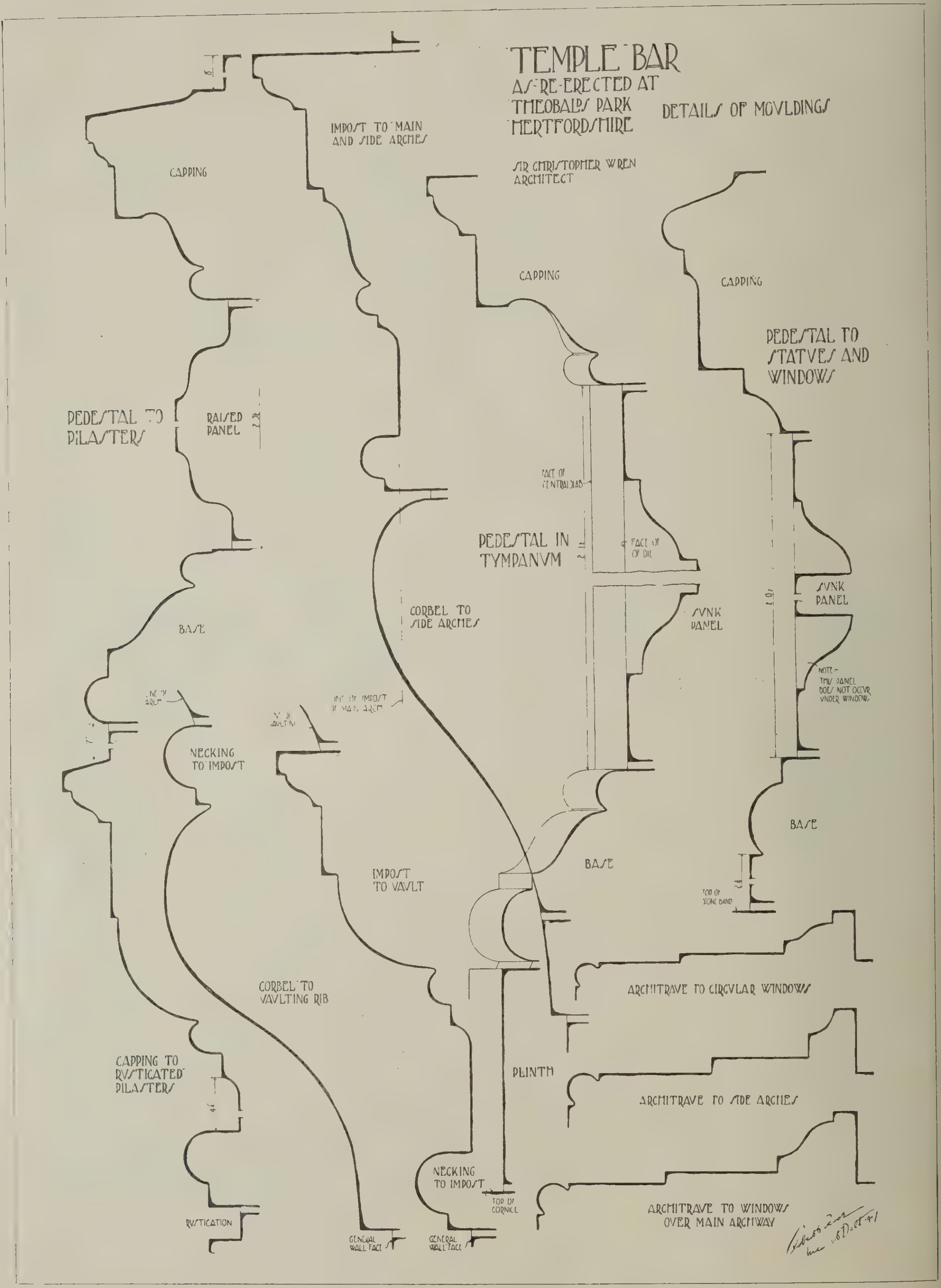
Measured and Drawn by Robert Pierce


TEMPLE BAR
AS RE-ERECTED AT THEOBALDS PARK HERTFORDSHIRE
SIR CHRISTOPHER WREN ARCHITECT
DETAILS OF ORNAMENT
CARVING IN TYMPANUM NORTH ELEVATION
CENTRE LINE
MAIN CORNICE
BASE TO PILASTERS
CARVING IN TYMPANUM SOUTH ELEVATION
CAPS TO PILASTERS
ARCHITRAVE
CONSOLES
JOINT
JOINT
JOINT
KEY STONE

Previous measured drawings of Temple Bar as re-erected at Theobald's Park, Hertfordshire, appeared in our issue for July 18. Above are details of the ornament.

Measured Drawings. 39.—Temple Bar

Measured and Drawn by Robert Pierce



Measured Drawings of Temple Bar should be particularly valuable to architects now that the old gateway has been removed to parts more remote.

ittle Things that Matter. XX—Dangerous Structures

By HARVEY R. SAYER, Assoc.M.Inst.C.E., A.R.I.B.A., F.S.I.

THIS year a case was tried at a county court in which a man claimed damages from a borough council for injury sustained by his little girl through what he considered was a "dangerous cture." The borough council had affixed a name-plate road on an oak garden fence adjoining the footway. plate was about 5 ft. above the ground. In June last r an entertainment was taking place in the garden, and little girl, who was in the road, climbed on to the fence see what was going on, using the name-plate to help self up. The plate gave way under the weight of the d, and fell upon her right foot.

he jury were directed by the judge to answer the follow- questions :—

1) Was the plate properly fixed at first ?

2) Was the plate at the time of the accident in a defec- condition ?

3) Was the plate in such a dangerous condition as to be uisance at the time of the accident ?

4) Did the child use the plate to pull herself up ?

5) Was the plate in such a condition as to be a danger hose using the highway ?

6) Was the plate as fixed likely to induce the child to it as she did ?

he jury's answer to all the questions except number six "Yes," and to number six, "No." They agreed that o would be reasonable damages.

t is cases like this that make architects pause to consider re their liability ends and what constitutes a "dangerous cture." At first one naturally thinks of large buildings state of collapse, but these court cases make one re- nber that a very trivial thing, such as a rusty screw, may stitute a "dangerous structure." In building there are y little things to be borne in mind, in case they should lt in accidents.

In London the district surveyor deals with "dangerous structures" in relation to buildings, and in the provinces the local surveyor. Unfortunately these officials have not the same power. The London County Council and the district surveyor, under part IX of the London Building Act, 1894, have power to deal with any dangerous structure, whether it was dangerous to the individual occupiers, or to the occupiers of adjoining property or the public at large. In the provinces, under section 160 of the Public Health Act, 1875, and section 75 of the Towns Improvement Clauses Act, 1847, the local surveyor can only deal with structures which are dangerous to other than the occupiers of the building or messuage on which such structure exists.

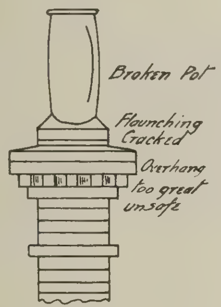


Fig. 1.

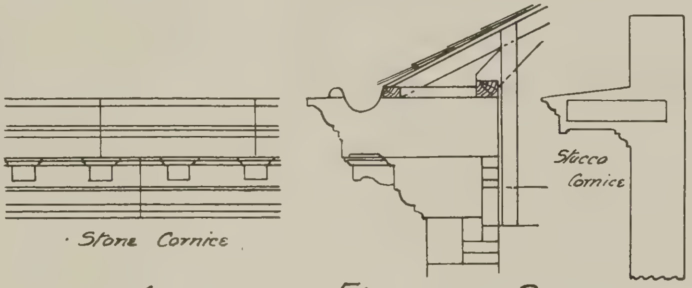


Figure 2.

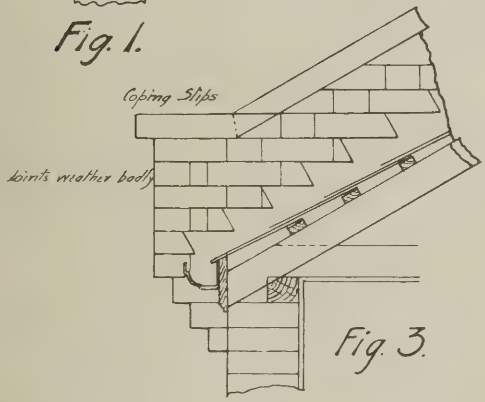


Fig. 3.

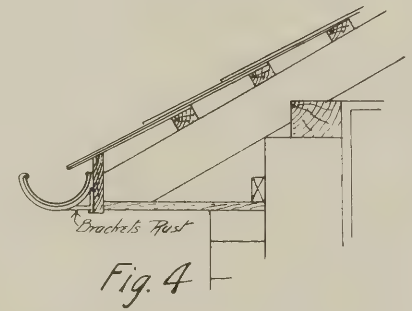


Fig. 4

Loose Slates and Tiles.—Loose slates or tiles, lying upon a pitched roof, are always a source of danger, especially when the building abuts upon the public footpath.

Chimney-pots and Chimney-stacks.—Small chimney fires, due to the occupier not having the chimney swept as often as required, may crack the chimney-pot or the cement flaunching, with the result that during a high wind down comes the chimney-pot. Then again, the chimney-stack itself may become unsafe owing to the bad weathering of the joints of the brickwork, or the decay of a woodbearer built into the side of the stack in the roof, which tends to make the stack lean towards the roof. In 1922, during a storm, a chimney-stack fell through the roof of the house and killed an occupier. Sometimes unsafe chimney-stacks can be made more secure by the use of wrought-iron bands and tie-rods carried to the adjoining building, but it is far better to always rebuild a defective stack. (Fig. 1.)

Roofs.—Common rafters, which are decayed or too weak, and the purlins and struts, if of insufficient number, tend to sag under the load of the roof coverings and wind pressure and may push the top of the wall outwards. This difficulty can sometimes be overcome by strutting up the weak rafters from the ceiling joists or partitions, or by bolting rods through the roof at the lower end of the rafters.

Overhanging Cornices.—Heavy overhanging cornices such as those of the Georgian period become a source of danger as a building increases in age. Sometimes these cornices are of carved stone, and have been laid on their natural bed instead of at right angles to it, with the result that in time the projecting undercut members drop off. Where the house is covered with stucco and the cornice is formed on a stone core, the stucco may become separated from the core and fall. In the case of a dangerous overhanging cornice, whether on a wall or chimney-stack, it is better to demolish the old and build a new one with less projection than to attempt to patch up the existing cornice. (Fig. 2.)

Party-wall Parapets.—In some cases, to conform with the Building By-laws, party-walls have to be carried up above the roof as a protection against a fire spreading from one building to an adjoining one. This exposes t parapet to the weather, the joints become defective, a the weight of the sloping parapet may tend to push o the kneeler, which is usually carried on corbels projecti out in front of the face of the wall. The joint above t stepped flashing is also a source of weakness, and unle it is very well made, water will run down the fa of the brickwork of the parapet, enter the open joi above the flashing, and soak through to the rooms belo (Fig. 3.)

Gutters.—Overhanging cast-iron gutters often fall owi to the accumulation of rust at the head of the screws whi hold the gutter to the woodwork. It is not a wise poli to replace just the one or two lengths of gutter whi actually fall with new and to leave the remainder. Wh one length of gutter falls the remainder should be carefu examined. (Fig. 4.)

(*To be continued.*)

Presentation to Mr. Paul Waterhouse

An illuminated address from his colleagues was presented to Mr. Paul Waterhouse at the R.I.B.A., on Monday of last week by the new President, Mr. J. Alfred Gotch. Among those present were Sir Aston Webb, P.R.A., Sir Reginald Blomfield, R.A., Professor Beresford Pite, Sir Banister Fletcher, Professor W. R. Lethaby, Major H. Barnes, and Messrs. J. W. Simpson, PP.R.I.B.A., Gilbert Scott, R.A., Edward P. Warren, T. R. Milburn (Newcastle), W. G. Newton, Michael Waterhouse, H. T. Buckland, Percy Thomas, Lewis Solomon, G. C. Lawrence (Bristol), W. A. Pite, H. D. Searles-Wood, Delissa Joseph, Alan Munby, Stockdale Harrison, Francis Jones, H. V. Ashley, Walter Cave, H. Austen Hall, Stanley Hall, H. V. Lanchester, H. Chalton Bradshaw, Max Clarke, W. Gilbee Scott, Herbert A. Welch, Herbert Shepherd, Frank Woodward, A. G. R. Mackenzie, John Slater, H. M. Fletcher, and Maurice E. Webb.

Mr. Arthur Keen, Hon. Secretary of the Institute, said that those immediately concerned in the meeting were the members of the Council of the Institute over which Mr. Waterhouse had presided and the Presidents of the Allied Societies. They wanted to express in the written word what they wanted to say to him, and so, with the help of Professor Pite and Miss West, they had produced a document which would be handed to him by the President. They also wanted to go further, and one of them had suggested that as Sir Wm. Orpen was painting the portrait of Mr. Waterhouse, to go with those of other Past-Presidents in the Institute room, it was thought it would give considerable satisfaction to Mr. Waterhouse and his family if a replica of that portrait could be presented to him. Sir William was quite prepared to produce a copy of the portrait—and they hoped to present it to Mr. Waterhouse later on.

Mr. T. R. Milburn, President of the Newcastle Allied Society, as a member of the Council for two years, paid tribute to the fair chairmanship of Mr. Waterhouse, and as a member of the Institute thanked him for the splendid speeches he had made. Their best wishes also went out to Mrs. Waterhouse.

The President then handed to Mr. Waterhouse an illuminated address, bearing the names of many of his colleagues, as follows :—

"The Royal Institute of British Architects.

"Dear Paul Waterhouse,—Your colleagues, who are all your friends, wish by this document to record the sincere pleasure that you have given them during the past two years of your Presidency. The chair of the Institute has acquired a new distinction by your addresses; the amenities of professional contact have been increased by the wisdom and grace of your conduct of business; our conviction of the high aim of the universal but complex art of architecture has been strengthened by the eloquence and dignity of your appeals to the students; and we have been charm by the lambent humour with which your scholarship been illuminated.

"For these particular advantages, which you have our President conferred upon all the concerns of Institute, and for the maintenance of the high professio tradition of your father, whose memory is so strong a valued, we hereby offer to you this testimony of gratit and affectionate esteem."

Then follow the names of about 70 signatories, includ members of the two councils over which Mr. Waterho had presided, and of the Board of Architectural Educati of which he had acted as chairman, and the Preside of the Allied Societies in office during the same perio

Mr. Waterhouse, in reply, said he felt that it had b impossible for him to have gone through two years of Presidency without, in his speeches at some time or anot unconsciously hurting someone's feelings. If that were he asked forgiveness. Words were often dangerous t edged weapons—they hurt the speaker as much as hearer. In saying "Good-bye," he meant no more t "Farewell, adieu!"

Since the presentation the following letter has been by Mr. Waterhouse to Mr. Arthur Keen :—

My dear Keen,—It was impossible on Monday last say even half the things that ought to have been said man in the position in which I found myself. I had no i when I accepted your invitation to be present with wife at Conduit Street, what the acceptance was to im Of a meeting with a few friends I was assured, but that gathering would be so large, so representative, and so tinguished, was quite beyond my thoughts. Your delicate speech and the graceful words of the presi touched me very deeply, so did the cheery address in w Mr. Milburn gave expression to what he assumed to be voice of the "Greater Institute." Even now in writing I am embarrassed by realizing that the mere enumera of these unexpected and undeserved honours empha the disproportion between your praises and my performa The suggestion of a duplicate of the portrait, overwhel in its generosity, means a great deal more than even kindest of the givers can well imagine, because it, the parchment with its warmly fraternal greeting, will a very enduring memorial of the handgrip between family and the Institute.

At moments when I can set aside the thought of the u value put upon my doings I see with increasing clea the amazing kindness of my friends.

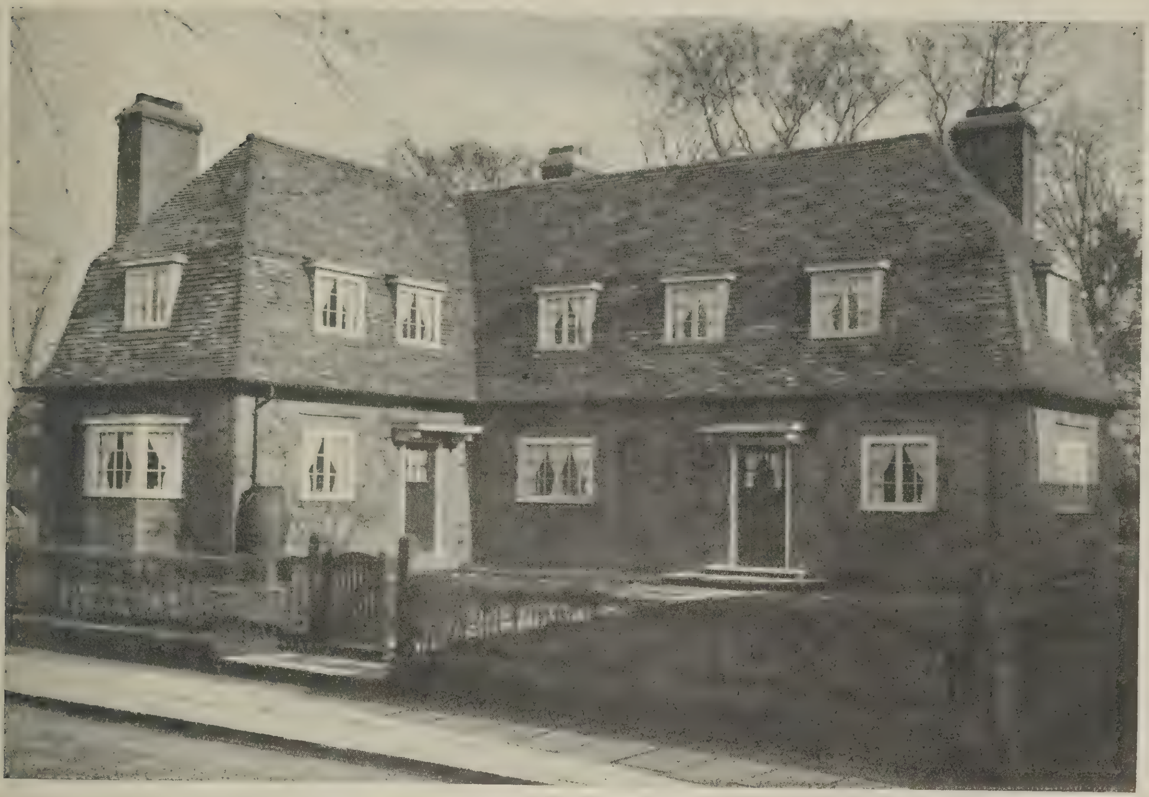
Mrs. Waterhouse and I were made very happy and unreasonably proud.

Yours very sincerely,

Athenæum. PAUL WATERHOUS

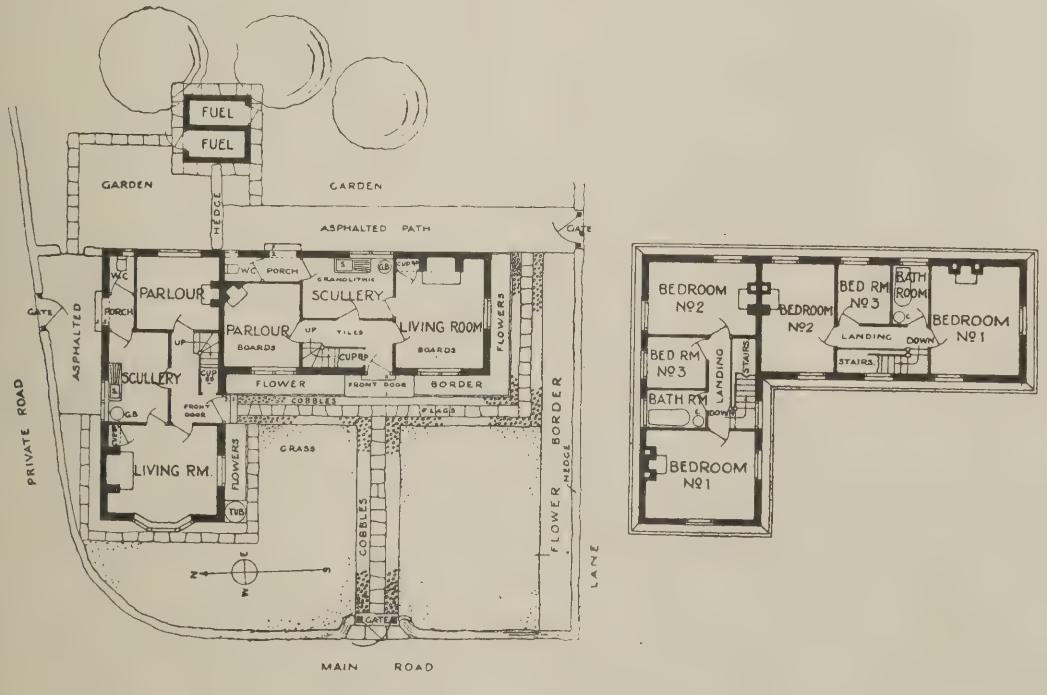
Cottages at Knutsford, Cheshire

J. Hubert Worthington, M.A., A.R.I.B.A., Architect



A VIEW FROM THE MAIN ROAD.

Photo: A. Wolff.



GROUND AND FIRST FLOOR PLANS.

This pair of cottages was erected for the late Captain H. Simon from the designs of Mr. J. Hubert Worthington, of Messrs. Thomas Worthington and Sons, architects. The contractors were Messrs. L. Brown and Sons, of Wilmslow.

Architecture in the Lay Press

The Passing of Regent Street.

It is only a little over a hundred years since John Nash completed the new street for the Prince Regent, afterwards George IV, cutting a way through a maze of unhealthy streets known as St. James's Market, from Carlton House, his residence (Buckingham Palace was not then built), to Regent's Park, which had just recently been laid out by Nash. The street was rightly regarded as one of the finest in Europe. Although each block of buildings differed, each was a unified architectural composition, and each was subservient to the whole street, which thus had about it a real homogeneity of purpose. The passing of the old Regent Street may be said to have begun in the early years of this century, when the south side of the Quadrant had to be rebuilt to make room for the Piccadilly Hotel. The present building is the work of Norman Shaw, and no sooner was it completed than the shopkeepers, with some justification, complained that the great piers between the arches made it quite unsuitable for shop fronts. And so the idea of completing the Quadrant in the same way had to be abandoned. This was the first mistake. Since then building after building has been erected without regard for its neighbour, and with commercial aggressiveness. All will agree that the low, old, dignified buildings were unsuitable to modern requirements, but all who have eyes for their surroundings must lament the waste of an opportunity for a fine street design, and realize the necessity for curbing commercial arrogance.—H. J. Birnstingl, A.R.I.B.A., in "The Daily Herald."

Adam Restored in Whitehall.

London is to have another little bit of genuine Adam architecture on view when the present work on the screen in front of the Admiralty is finished. As it was originally completed the front of the Admiralty, which led into the courtyard, was so mean in appearance that the brothers Adam were commissioned to design a screen which would in some measure hide it. But their idea was altered—and spoilt—by the bricking up of the central gateway with its quaint sentry boxes, and by the cutting of two minor gateways at the sides. These two new entrances are now being bricked up and faced with plaster, and the old central passage is to be re-opened with results that may not be as convenient for traffic but will certainly restore the screen as the brothers Adam intended it to be seen.—"The Evening News."

War Memorials in London.

It is not, I am sure, the fault of our British sculptors that London is deficient in examples of forcible war statuary. The lack is due to two causes. The first, of course, is that a war monument, in the sense in which such an expression would be understood in other countries, is a product to which England would never commit herself. Probably the only campaign celebrated in London sculpture with any spirit of warlike enthusiasm is that once conducted by Boadicea. Cockney children love "Rule Britannia with the 'orses" (so they call her). But after all, Boadicea was a loser. The second cause is that we, as employers of sculptors, shrink from symbolism, or abstraction, or indeed from any too courageous departure from the portrait and facsimile stages of representation. The portrait of an officer is admissible, the portrait of his horse (or of a horse) may be added, so may the facsimile of a uniform. But where the expenditure of large moneys is involved and the occupation of public space is necessary, caution, municipal caution, official caution, even imperial caution staggers and trembles in the dread of that proverbial "step" which separates the ridiculous from the sublime. In fact, the motto of our corporate sculpture - promoters might well be "Cave gradum" ("Mind the step"). We are too timid. It is all t
the honour of England that the glory of triumph is not th
aspect of war that she cares to emphasize in stone or bronz
But this is more a question of temperament than of virtu
The new white woman swashbuckler of the Place du Ca
rousel represents, I believe, the Defiance of Paris.
London had been defiant we should employ no grave
image to let the secret out. But we need not be too prou
of our reserve nor of our unwillingness to put a touch
public pride into some outburst in marble or metal. O
view of war is the view of its sorrow and its sacrific
Sacrifice and sorrow are worthy of our best art. B
patriotism, love of true honour, and even bravery, a
British and Christian virtues. It is a little strange that
grudge them their commemoration.—Paul Waterhous
F.S.A., in "The Observer."

The Gothenburg Exhibition.

Sweden is particularly fortunate in the possession of
brilliant group of architects who bring to their task
fertility of invention and a logical clarity of outlook th
owe nothing to mere imitation of the past, however lovel
The beautiful seventeenth-century pile of the Riddarshol
as harmonious and gracious as anything in Greece, is t
jewel of Stockholm, but such men as Bjerke and Ericss
two of the creators of the framework of the Gothenbu
Exhibition, and Professor Ostberg, whose masterpiece
the capital will make Stockholm an architectural
grimage of future generations, are heralds of a Swedi
Renaissance which has many interesting features for t
student. It is a melancholy thought that the impressi
on the Swede landing in England at one of our great E
Coast ports must necessarily be one of squalor and darkne
The contrast between the clear skies and clean air
Stockholm, high on its granite cliffs, its fine buildi
fretting the horizon in diversity of outline—tall church
lofty towers and the symbolic splendour of its Civic Hal
and the inchoate grime of an English port must inevita
colour his first impressions.—"The Westminster Gazett

Old London.

When giants like St. Paul's and Westminster Abbey
in the doctor to repair their crumbling fabrics, it is not
prising that dwarfs like St. James's, Piccadilly, sho
seek advice. The steeple of that famous church is said t
in a dangerous condition. If the shade of Wren ha
the scene of one of his least successful efforts he must s
grimly, for the steeple he designed was judged to be
expensive, and one designed by a carpenter in the pa
called Wilcox, which cost £100 less, was preferred. If
exterior was not to his liking, the interior is to ou
masterpiece at once light, airy, and capacious. It
fashioned with fine simplicity to seat as many worship
as possible. The marble font is the work of Gibb
the stolen cover is said to have become the sign of a ne
bouring gin-shop.—"The Morning Post."

Architecture of our Streets.

From time to time the new buildings which appea
the streets of our big towns are subjected to criti
in the Press. This is all to the good, and is welcome
our architects, who realize to the full that progress is
probable when public interest is lacking. The questio
the control of architectural treatment is a difficult
In Cardiff it is hoped that the case will be met to a
siderable extent by the appointment of an advisory
mittee to deal with matters affecting architecture and
design. Another point of fundamental importance is
question of the civic survey, a work which should be t
in hand at the earliest possible opportunity, and ca
out to a maximum of thoroughness and complete

considering recent developments in the street architecre of Cardiff there is, however, one point which seems to particularly worthy of emphasis, and that is that certain the new buildings really achieve architectural distinction d show that definite progress is being made. The fact that in London and other great cities of the British Isles onsiderable change has gradually taken place in recent rs in the architectural treatment of business premises d other street façades, and in the best of these buildings e advance made is striking. The architectural treatment the best of this modern work is also as logical, definite, d clear cut as were those of good Greek buildings, and the structures of the best part of the Gothic period. Its uty is that of obvious suitability to purpose, good prortion, refined detail, and the absence of "fuss" and overboration. The leading modern designers evidently see arly exactly what effect they wish to produce, and proce it in the most direct and straightforward manner, is achieving "style" in the best sense of the word.— S. Purchon, M.A., A.R.I.B.A., in "The Western Mail."

Stockholm's Town Hall.

he new municipal hall, the Stadshuset, at Stockholm, ich was opened by King Gustaf V, is probably destined rank amongst the famous buildings of Europe. Cernly in the opinion of the Swedish people themselves it rks the renascence of Swedish architecture. The hall, ich is finely situated at the southernmost point of Kungsholmen, on the shore of Lake Mälaren, facing the old town, is the creation of Professor Ragnar Ostberg, who has risen from being a designer of furniture to a position in the forefront of Swedish architects. Coming into the centre of Stockholm across the railway viaduct the first impression received of the hall is that of an imposing red brick building, severe in character, dominated by a high square tower, which is surmounted by a gilded lantern structure and three crowns, the chief emblem in the Swedish coat-of-arms. The interior of the hall is strikingly beautiful, but while it is within the range of nearly all to admire the grand proportions of the apartments, the gorgeous colours, the beautiful pictures and sculpture, it is impossible adequately to appreciate the architecture without more than a superficial knowledge of Swedish history, because tradition and history are inextricably woven into the fabric. The strange red colouring of the council chamber, for instance, is intended to give the impression of ancient times, when primitive men used to paint their caves with the blood of slaughtered animals. The captivating beauty of the "Golden Hall," where in future the city will receive its distinguished guests, must thrill all beholders, its walls of gold mosaic shimmering beneath soft tints projected through stained-glass windows; but only the student can hope to read the story of the very "modern" —to the untutored mind almost barbaric—mystic mural designs of the young and gifted artist Enar Forseth, who received his first encouragement from the late Crown Princess of Sweden.—"The Daily Telegraph."

---

uggestions Governing the Professional Conduct and Practice of Architects

THE following "Suggestions Governing the Professional Conduct and Practice of Architects" have been adopted by the Council of the R.I.B.A., and have been ordered to be printed in the lendar for the guidance of members :—

n architect in practice, if a Member or Licentiate of the .B.A., is governed by established customs accepted and erved by the architectural profession, and more parularly by the Charter and By-laws of the Royal Institute, ich render him liable, in the case of unprofessional cont, to reprimand, suspension, or expulsion at the discren of the Council.

he following may be considered to record in a general y the practice of architects, and also to indicate a standard conduct in any special cases not specifically referred to rein.

. An architect is remunerated solely by his professional s and is debarred from any other source of remuneration onnection with the works and duties entrusted to him. s the duty of an architect to uphold in every way possible scale of professional charges adopted by the Royal titute. An architect must not accept any work which olves the giving or receiving of discounts or commissions, must he accept any discount, gift, or commission from tractors or tradesmen, whether employed upon his works not.

. If an architect own, or have a commercial interest in, material, device, or invention used in building he must rm his client thereof, and must obtain his sanction ore permitting it to be used in works executed under his ction.

. An architect must not publicly advertise, nor offer his ices by means of circulars. He may, however, publish strations or descriptions of his work, and exhibit his e on buildings in course of execution (providing it one in an unostentatious manner), and may sign them n completed.

4. An architect must not attempt to supplant another architect, nor must he compete with another architect by means of a reduction of fees or by other inducement.

5. In all cases of dispute between employer and contractor the architect must act in an impartial manner. He must interpret the conditions of a contract with entire fairness as between the employer and the contractor.

6. An architect must not permit the insertion of any clause in tenders, bills of quantities, or other contract documents which provides for payment to be made to him by the contractor (except for duplicate copies of drawings or documents), whatever may be the consideration, unless with the full knowledge and approval of his client.

7. An architect should not take part in any competition as to which the preliminary warning of the Royal Institute has been issued, and must not take part in any competition as to which the Council of the Royal Institute shall have declared by a resolution published in the "Journal" of the Royal Institute that Members or Licentiates must not take part because the conditions are not in accordance with the published regulations of the Royal Institute for architectural competitions.

8. An architect must not act as architect or joint architect for a work which is or has been the subject of a competition in which he is or has been engaged as assessor.

9. It is desirable that in cases where the architect takes out the quantities for his buildings he should be paid directly by the client and not through the contractor, except with the previous consent of the client.

10. The business of auctioneering and house agency are inconsistent with the profession of an architect.

11. An architect must not accept an appointment in any commercial firm in which the extent of his remuneration is affected by the profits of the firm.

Law Reports

What are Structural Alterations? An Interesting Point

Godwin v. *Swain.*

July 5. King's Bench Division. Before Mr. Justice Sankey.

This case raised an interesting point as to what constitutes structural alterations. Mr. F. Godwin brought an action to recover arrears of rent and possession of a flat in Avenue Crescent, Acton, and said that owing to the non-payment of rent the forfeiture clause in the agreement operated. Defendant in reply contended that the flat was part of a house that was within the Rent Restriction Act.

Mr. H. J. Wallington, for the plaintiff, said his case was that the premises in question were not within the Act, because the flat was never let before the war, and there had been a *bona fide* reconstruction of the house, resulting in two separate and self-contained flats or tenements, of which this was one. The plaintiff ceased to reside in the house in 1917. In 1921, having failed to sell it, he decided to convert it into two flats, and put in all necessary fittings for this purpose. It was true that no structural alterations were required, but he made the necessary alterations inside, the cost being about £200. The defendant had the lower flat at a rental of £108, and at the date of the writ he owed £72.

Mr. Schultess Young, for the defence, said his client had never taken a flat, but merely, as the agreement stated, rooms or apartments. There was no separate entrance, and a number of things were shared in common. There was no evidence of any extensive alterations so that the house might lose its identity, and the parts occupied by the defendant and the other occupier were by no means self-contained.

Evidence on behalf of the defendant's case was given by Mr. J. P. Gridley, architect and surveyor.

His lordship held that the house was *bona fide* reconstructed by way of conversion into two or more separate and self-contained flats or tenements, and that the Rent Restrictions Act did not apply to this case. He gave judgment for the plaintiff for possession and the rent claimed and mesne profits.

Parliamentary Notes

[BY OUR SPECIAL REPRESENTATIVE.]

Housing Progress.

Mr. N. Chamberlain informed Captain W. Benn that the number of houses approved to date which would rank for assistance under the new Housing Bill was 16,215. It was estimated that if the costs of the material in a cottage in September, 1920, were taken as 100, the present costs could be put at 58.

Insanitary Houses.

Answering another question as to the number of local authorities which had taken action under the Health and Housing Acts in respect of insanitary houses, Mr. N. Chamberlain said the required particulars were as follows :—

	1920.	1921.
Total number of local authorities who submitted reports	1,503	1,665
Number of above local authorities who reported action under the Health and Housing Acts	1,227	1,364
Number of representations made with a view to the making of Closing Orders	3,189	2,965
Number of dwelling-houses in respect of which Closing Orders were made ..	1,808	2,291
Number of dwelling-houses in respect of which Closing Orders were determined after the houses had been rendered fit ..	754	527
Number of dwelling-houses in respect of which Closing Orders became operative following declaration of owners after action under Section 28, Housing Act, 1919	425	62

The Cost of Houses.

Mr. Chamberlain made the following statement, showin the average tender price of A3 and B3 type houses buil under the 1919 Housing scheme :—

Month.	A3 Type. Average tender price.	B3 Type. Average tender price.
1919.	£	£
June	643	785
July	713	833
August	757	852
September	800	868
October	750	834
November	735	822
December	744	837
1920.		
January	782	856
February	798	932
March	817	919
April	817	914
May	855	953
June	860	972
July	870	955
August	875	956
September	881	949
October	888	958
November	859	960
December	841	943
1921.		
January	834	932
February	824	878
March	700	838
April	697	798
May	697	813
June	693	792
July	665	752
August	612	707
September	594	659
October	573	667
November	577	661
December	514	566
1922.		
January	494	560
February	494	518
March	436	513
April	395	446
May	392	422
June	382	419
July	378	413
August	370	407
September	349	398
October	346	407
November	332	387
December	346	387
1923.		
January	346	373
February	367	373
March	363	402
April	355	390
May	363	378
June	299	—

The Wembley Tower.

Lt.-Col. Buckley, Secretary to the Overseas Tr Department, stated that it is not now proposed to proc with the erection of the tower at the Wembley Em Exhibition.

rchitects and the British Confederation of Arts

ARCHITECTURE as practised being both an art and a profession, the demand that the architect would make on such a body as the British Confederation of Arts would differ mewhat from those of the other arts, said Mr. H. V. anchester, F.R.I.B.A., M.T.P.I., in a recent speech before e Confederation. From the purely professional aspect, he ntinued, the architect will ask for little, being already the road to organize his position, and it would be wasting e energies of the Confederation to require its intervention re, although its agency in facilitating a more widespread preciation of the architect's difficulties would be of ndoubted value. Moreover, not only is there the need that e wider contacts for which the Confederation stands shall able others to visualize the technical difficulties that arise in ery profession, but also the need that the professional man all also understand the angle from which others see his work.

We will therefore pass on to the art of architecture, a atter of far greater importance. Comparatively recently e Architecture Club was formed with the aim of stimulat-g public interest in architecture, and it has been so far ry successful; but its appeal has been made to a more nited public than would be reached through the Con-deration which, if allied with the National Federation, ould form an important section of a body with some half illion members, all brain workers and all occupied with nstructive work of a most vital character.

It is to this section of the community that the architect n turn with the best likelihood of appreciation, as the oblems that confront him are most akin to those with ich other constructive workers are faced; and with this utual understanding comes the possibility of united tion on all matters of public interest backed by a weight opinion that would no longer be negligible.

As a town planner, I naturally think first of all those vic demands that are at present so inadequately under-ood and which the new civic associations are just begin-ng to study; but there are many other artistic and social tivities that fail to secure the support they deserve, cause we need waking up to the opportunities they offer r widening our artistic outlook.

The case of architecture is only a typical one; other arts e much in the same position, and though I am speaking for y own art, you can all draw your inferences as to those others in which many of you are more particularly interested. The artist must have a public to which to make his appeal—it need not be a numerous one—but at present he has a poor chance of finding it at all. If we were all members of a federated group we should achieve a much more vivid life, by grasping more of what was being done in directions other than our own, and see the trend of all that gives character to the civilization of our time. You will be tempted to ask how it is practicable to secure such an interpretation. First and foremost, I should point out the possibility of a monthly review, the organ of the Confederation, which would summarize the activities of all its component societies and illustrate outstanding productions in all the arts. The resulting effect would be somewhat that of a chronological encyclopædia quoting all the best criticisms and noting the best efforts.

I claim for architecture that it is in itself a microcosm of the arts, and for the architect that he is, or should be, well equipped for the task of co-ordination. His activity extends from that of the sculptor (as in the design of a monument) to that of the engineer (in the case of a bridge); he has to employ painting and sculpture to complete his works; and most important of all, he has to provide a suitable setting for every aspect of life. The home, the theatre, the church, the hospital, office, factory, etc., must all, in every detail of requirement, come within his range of knowledge. What better training than this can there be in the appreciation of what the arts mean to him and his fellow men, or at any rate, what they should mean were we not too often so shut in on ourselves that we fail to see the wood for the trees?

Therefore the architect ought to be the first to welcome a movement such as this, and to be its protagonist. True, the writer studies life, the painter and the actor depict it; but imagine for a moment how far such life would be possible without the appropriate setting for it that it is the architect's function to provide.

Think how little of past ages we should know were all their monuments and buildings swept away—and how obscure are the peoples that have left none behind them.

Nations of the past are known by their arts and by these alone, and as the arts languish if they are not of the people, every effort that aims at placing these in their true place insistently demands our whole-hearted support.

The late Mr. R. Frank Atkinson

WE regret to record that the death has occurred at Leeds of Mr. R. Frank Atkinson, F.R.I.B.A., after an operation for appendicitis. He was fifty-two years of age. Writing in the Journal of the Royal Institute of British Architects," r. Cyril A. Farey, A.R.I.B.A., says: Mr. Atkinson's rly training was in Liverpool, and he came under the fluence of Norman Shaw. He started practice in London, d his work first became known generally by the new emises which he designed in Oxford Street for Messrs. aring and Gillow. This was followed by the first portion Selfridge's Store.

From the year 1908 to 1912 he was engaged upon his incipal work, the Adelphi Hotel, Liverpool, of which only o-thirds has yet been completed. To appreciate the heme fully, the third portion at the rear must be con-lered. The excellence and delicacy of detail in the lelphi Hotel obtained for Mr. Atkinson the commission r the interior decoration for the Cunard liner "Tran-lvania" and Pullman cars for the London, Brighton and uth Coast Railway. Mr. Atkinson's last important ecuted work is Magnet House, the premises for the neral Electric Company in Kingsway, completed in 1921.

In addition to the above-mentioned works, the following is a list of some of the buildings erected from his designs: Council Offices and Law Courts, Bromley, Kent; Council Offices, Carshalton; Fire Station, Carshalton; Shops and Business Premises, Oxford; Business Premises, Great Portland Street, London; Business Premises, Great Marlborough Street, London; Premises in Bolsover Street, London; Messrs. Darracq Motor Premises in Bond Street, London; interiors of many hotels and mansions; houses at Sanderstead, Surrey, Seaforth, etc.; part of the Whiteley Homes at Walton-on-Thames (the bridge, main entrance gates, lodges, and cottages). The latter work was gained in competition. Mr. Atkinson submitted a notable design for the London County Hall, which was selected for competition in the final round. In 1920 he gained second premium in collaboration with Mr. Farey in the open competition for business premises at Leeds.

Three days before his death he sent in a design for the Bournemouth Pavilion competition in collaboration with Mr. Charles D. Carus Wilson and Mr. W. Boyd Scott, his former assistants, who will carry on his practice. He leaves a widow and young child and five children by a former marriage.

The Week's News

Hampstead Garden Suburb Institute.

Hampstead Garden Suburb institute is to be enlarged at a cost of £16,000.

Housing at Glasgow.

At Glasgow 348 houses are being erected, and 540 more are in contemplation.

Peckham Fire Station.

A proposal to rebuild Peckham Fire Station is being considered by the London County Council. The cost is estimated at £12,100.

Burton's Big Bridge.

The widening of the Trent Bridge at Burton-on-Trent has begun. The work will take over a year to complete and will cost £70,000.

Housing at Leamington.

Leamington Corporation are considering the question of erecting 260 more houses for the accommodation of the working classes.

Edlington Housing.

Seven hundred more houses are to be built in the vicinity in the next few years; 300 of them will be erected within the next twelve months.

London Re-housing Scheme.

A scheme of re-housing is being prepared by the City Corporation in connection with improvements to be carried out at Spitalfields Market.

Town Planning Conference: Gothenburg.

Mr. Raymond Unwin, F.R.I.B.A., has been appointed to represent the R.I.B.A. at the Town Planning Conference to be held at Gothenburg from August 3 to 10.

New Home for Sir Eric Geddes.

Albourne Place, near Hurstpierpoint, Sussex, is being restored and improved for the occupation of Sir Eric Geddes, for whom Messrs. Knight, Frank and Rutley acted as agents.

Hemsworth Housing.

Schemes for 100 houses at South Hiendley, and 350 houses at South Kirkby have been submitted to the Building Schemes Committee of the Hemsworth Rural District Council.

Ripon War Memorial Dedicated.

The war memorial reredos, built in Ripon Cathedral from the designs of Mr. J. N. Comper, has been dedicated. The cost was about £5,000.

New Church at Edlington.

Foundations are now being laid for the new Roman Catholic Church in Staveley Street, Edlington. The architects are Messrs. Wilburn and Atkinson.

Roadmaking on the Film.

The British Reinforced Concrete Engineering Company's film describing and showing in operation the latest methods of roadmaking, transforming marshy lands to reinforced concrete roads, was shown to road makers and users at La Scala Picture House, Inverness, during the Agricultural Show week. The film aroused great interest.

No New Thames Tunnel.

The London County Council have decided not to proceed further with the proposal to construct a tunnel under the Thames at Woolwich for vehicular traffic.

£30,000 for the Carlton Club.

Sir H. Mallaby-Deeley has given £30,000 to the Carlton Club to help to defray the cost of refacing the club building. The total sum required is £60,000.

Royal Leamington Spa and Town Planning.

A Ministry of Health enquiry has been held into a town-planning scheme, which embraces a number of local improvements and developments. There was opposition to several of the proposals.

Presentation at Ripley.

In recognition of his twenty-one years' service as secretary of the Alfreton, Ripley and Belper districts of the National Federation of Building Trades Operatives, Mr. J. Graham was presented with a gold watch at Ripley.

Alton Hospital Extension.

The Management Committee of Alton Cottage Hospital have accepted an offer of Mr. F. B. Summers, of Froyle Place, to build a new administrative block and enlarged wards at a cost of several thousand pounds.

Slum Clearance at Liverpool.

A scheme for the clearance of four slum areas is contemplated by the Liverpool City Council. The cost is estimated at £135,000; 502 houses are proposed to be dealt with, involving the dispossession of 2,000 people.

New Lecturer for London University.

Mr. Walter R. Jaggard, F.R.I.B.A., has been appointed lecturer in construction at the London University School of Architecture in succession to Mr. Martin Shaw Briggs, F.R.I.B.A., now one of His Majesty's inspectors of the Board of Education.

The Royal Sanitary Institute.

The Right Hon. Viscount Burnham has accepted the office of vice-president of the Royal Sanitary Institute. The King is the patron of the Institute, and the Marquess of Aberdeen and Temair, the Archbishop of York, and Viscount Astor are included in the list of vice-presidents.

Holiday Road Maps.

Nine useful road maps, showing the routes recommended for motorists during the August bank holidays, have been prepared by the Automobile Association and issued in the form of a leaflet. The maps deal with the home, north-eastern, western, north-western, eastern, and Midland counties, South Wales, and Scotland. Full information is given as to the condition of the roads and the locations of the Automobile Association area headquarters, fuel supply stations, a
roadside telephones. Maps of the are
adjoining those printed on the leaflet m
be obtained from the Association
Fanum House, Whitcomb Street, Lc
don, W.C.2.

Church Building and Repairs.

At the last meeting of the Incorporat
Church Building Society grants we
made towards the building, repair, a
enlargement of many churches throug
out the country. The society, the offi
of which are at 7 Dean's Yard, We
minster, S.W.1, is in great need
financial support.

Westminster Bank, Ltd.

The directors of Westminster Ba
Limited, have declared an interim di
dend of 10 per cent. for the half-y
ended June 30 on the £20 shares, and
maximum dividend of 6¼ per cent. on
£1 shares for the same period. The di
dends, 10s. per share and 1s. 3d.
share respectively (both less income t
will be payable on August 1.

The Rome Scholarship in Engravin

The Rome Scholarship in Engraving
1923 has been awarded by the Faculty
Engraving of the British School at Ro
to Mr. Charles Murray, a student of
Glasgow School of Art. This scholarsh
like the Rome scholarships in archit
ture, sculpture, and decorative painti
is of the annual value of £250, and
tenable for three years.

The Future of Inter-Imperial Trade

The committee set up by the Fede
tion of British Industries to enquire i
the future of inter-Imperial trade
just issued its second interim rep
The first report of the committee, p
lished in June last, dealt with some of
main principles; that to hand conta
the conclusions on certain additio
aspects, and at a later date the commi
hope to record their views on furt
questions which are still under discuss

Cement in Santo Domingo.

His Majesty's Chargé d'Affaires
Santo Domingo (Mr. Darrell Wil
reports that a local firm is desirou
receiving prices and particulars f
United Kingdom cement manufactu
with a view to obtaining the represe
tion of a United Kingdom firm. Appl
tions for further particulars regar
this enquiry should be addressed to
Department of Overseas Trade, 35
Queen Street, Westminster, S.W.1.

Piccadilly Fountain.

Mr. Andrew T. Taylor, chairman
the Local Government and Record C
mittee, stated, in reply to a questio
a meeting of the London County Co
recently, that the fountain in Pi
dilly Circus might be temporarily
moved if the scheme for altering
underground station came into ef
"It would in that case be reinstat
he said, "in a position to be appr
by the Council and the Westminster
Council."

he Week's News—*continued.*

Quantity Surveyors' Fees.

e Ministry of Health have issued a al housing memorandum (No. 64) regard to the fees payable to quantity yors in private practice for work in ection with the settlement of con- ors' accounts for state-aided housing nes. Copies can be obtained price et from H.M. Stationery Office.

St. James's Park Lake.

James's Park lake, which was ied at the beginning of the war so it should not be a landmark for an airmen, is now filled. Extensive rs to the bed of the lake, at an ated cost of £34,000, have been re- y completed.

Maison Dieu Hall, Dover.

e exterior stonework of the historic n Dieu Hall at Dover, built in the enth century, is perishing, and the ration have decided to apply to the of Works for advice on the pre- tion of the building. The Maison Hall, which now forms part of the r municipal buildings, was founded ubert de Burgh in King John's reign.

The Decorators' Exhibition.

e Decorators' Exhibition will open e Holland Park Hall on October 17. xhibition is not a commercial ven- but is being organized by the master ators themselves, through their nal Federation, as a means of lating interest in their craft and oings. The decorators are great vers in the value of their calling as ans of making more beautiful the s of the people, and they hope to at this exhibition some fine ex- es of materials and methods.

Housing Banks.

e Local Authorities (Savings and ing Banks) Bill, which is being d by several prominent Labour s, aims at enabling local authorities aintain savings banks and to estab- housing departments of the banks. ouncil may make advances on the ity of freehold, copyhold, or lease- estate by way of mortgage to any sitor in the bank desiring to buy or re a dwelling-house within its area. y years is the period specified for ment of the advance, with interest.

---

he Manchester War Memorial

Edwin Lutyens, R.A., has accepted vitation of the committee to design anchester War Memorial, for which a etition was recently promoted and bandoned.

An Apology

ssrs. H. H. Martyn & Co., Ltd., enham, express their regret that in an tisement appearing in this JOURNAL date June 20th the fibrous plaster at Stockport Town Hall was wrongly uted to them, whereas the whole of ibrous plaster was carried out by s. John Tanner & Son, Liverpool Horseferry Road, London—joinery panelling only being executed by . Martyn & Co., Ltd.

Competition News

New Town Hall, Wimbledon.

Wimbledon Corporation propose to invite competitive designs for a new town hall to cost £80,000.

The R.I.B.A. Alfred Bossom Travelling Studentship.

The Board of Architectural Education have issued the draft scheme for the R.I.B.A. Alfred Bossom Travelling Studentship for the encouragement of the study of commercial architecture. This scheme has been approved by the Board who have cabled their grateful thanks to Mr. Alfred Bossom, of 680 Fifth Avenue, New York, for his generous gift.

Wirral Union Extensions to Clatterbridge Infirmary.

"The Competitions Committee of the R.I.B.A. call the attention of members and Licentiates to the fact that the conditions of the above competition are not in accordance with the regulations of the R.I.B.A."

List of Competitions Open

Date of Delivery.	COMPETITION.
Aug. 8	Church and school for the Wesleyan Circuit. Cost between £5,000 and £6,000. Apply Rev. H. Kirby, 2 Palmyra Square, Warrington.
Aug. 25	Public Swimming Baths and Washhouses, East Greenwich. Assessor, Mr Henry V. Ashley, F.R.I.B.A. Premiums: £300, £200, £100. Apply Mr. Frederick J. Simpson, Town Clerk, Town Hall, Greenwich.
Sept. 12	Masonic Temple in Broad Street, Birmingham. Premiums: £500, £300, and £200. Sir Banister Fletcher, F.R.I.B.A., is the assessor. The competition is restricted to architects who are masons subscribing to Lodges in the Province of Warwickshire. Apply Mr. J. P. P. Dutfield, 65 Temple Row, Birmingham.
Sept. 30	Designs for a series of plaquettes in bronze illustrative of London as the capital city of the Empire, or of one or more of her main architectural features. Designs should be submitted in the form of models in plaster. The following prizes are offered:—One prize of 100 guineas, two prizes of 50 guineas, three prizes of 25 guineas. Apply Deputy Master of the Royal Mint, London, E.C.1.
Sept. 30	The best colouring of a design for the vestibule connecting 315–317 Oxford Street with 17–19–21 Dering Street, Messrs. Thomas Parsons and Sons' new offices and showrooms. Prizes: 100 guineas, 50 guineas, 25 guineas, and five consolation prizes of 10 guineas each. Assessors—Sir Edwin Lutyens, R.A., F.R.I.B.A., Sir David Murray, R.A., P.R.I., H.R.S.A., Sir John Lavery, R.A., Mr. Frank Brangwyn, R.A., and Mr. E. Guy Dawber, F.R.I.B.A. Apply Competition Department, Messrs. Thomas Parsons and Sons, 315–317 Oxford Street, London, W.1. There is no entrance fee.
Oct. 1	The Student Welfare Committee, University of Glasgow, invite Competitive Designs (limited to architects having an office in and practising within the Municipal Boundaries of the City of Glasgow) for a pavilion to be erected on the University Athletic Ground at Westerlands, Anniesland, at a cost of £10,000. Assessor Mr. Alexander N. Paterson, A.R.S.A. Apply Honorary Secretary, Student Welfare Committee, The University, Glasgow.
Oct. 1	Lay-out of the Bull Green Site and part of the centre of the Town of Halifax. Premium £50. Apply, with deposit of £1 1s., to Mr. Peroy Saunders, Town Clerk, Town Hall, Halifax.
Nov. 5	Art Gallery for Hull. Assessor, Mr. John W. Simpson, PP.R.I.B.A. Apply (with cheque for £2 2s.) to Mr. H. A. Learoyd, Town Clerk, Guildhall, Hull.
No date	Extensions to the Poor Law Institution, Premium £50. Apply Clerk to the Wirral Board of Guardians.

New Inventions

Latest Patent Applications.

17392.—Boussiron, S. J.—Reinforced concrete structures. July 4.

17078.—Gibson, L.—Precast reinforced-concrete floor. July 2.

17825.—Balfour, J. F.—Concrete buildings. July 10.

18239.—Fortis Reinforced Concrete Safe Co., Ltd.—Strong-rooms and safes. July 14.

17953.—Jones, F. H.—Concrete beams, floors, &c. July 11.

18358.—Jones, T. A.—House construction. July 14.

17762.—Newell, J. — Concrete wall blocks. July 9.

Specifications Published.

199527.—Lowry, S. S.—Slab buildings.

199552.—Walker, J. H., and Knight, R. E.—Construction of the steel reinforcement in reinforced-concrete structures.

199758.—Haramishi, M. — Reinforced-concrete structures.

Abstracts Published.

196348.—Safes and strong-rooms.—American Abrasive Metals Co., 50 Church Street, New York, U.S.A.—Highly resistant materials for use in making vaults and safes are made by casting in a matrix of metal, such as cast iron, superposed layers consisting respectively of masses of a substance, such as fused magnesia, resistant to the heat of oxy-acetylene torches and the like, and of masses of a substance, such as fused aluminium oxide, resistant to drills and other cutting tools. Supporting and spacing members, such as strip and netting, may be added. Slabs of these materials are cast in sand moulds. The ends of the slabs have projections and recesses adapted to fit one within the other to preserve the continuity of the layers of heat and drill-resistant substances respectively. Corner pieces are made with three integral walls.

198066.—Floors, &c.—Dunlop Rubber Co., Ltd., 1 Albany Street, Regent's Park, London, and W. H. Paull, Aston Cross, Birmingham. — Wearing surfaces for roads, floors, and the like are constituted by rubber blocks or sheets which are so formed and arranged that they can be securely held in position by the setting of the liquid cement without using any separate anchoring means. The under-surfaces of the blocks have grooves or recesses, and to provide a composite surface of rubber and cement holes in the blocks are filled with cement or the blocks are spaced relatively large distances apart.

The above particulars are specially prepared by Messrs. Rayner & Co., registered patent agents, of 5 Chancery Lane, London, W.C.2, from whom readers of the JOURNAL may obtain all information free relating to patents, trade marks, and designs. Messrs. Rayner & Co. will obtain printed copies of the published specifications and abstract only, and forward on post free for the price of 1/6 each.

The Bank of England : Soane's Design in Danger

The following letters appeared in "The Times" during last week :—

SIR,—As trustees of the Soane Museum we beg to call attention to the danger that now threatens Sir John Soane's greatest work—the Bank of England. As is generally known, the Governors of the Bank propose to reconstruct the interior of the Bank, preserving the existing façades. However much one may regret the disappearance of much of Soane's design of the interior, the need for increased accommodation for the business of the Bank is probably beyond dispute, but we now understand that not only the interior, but also the façades to the streets are threatened. The Bank is being pressed by the Corporation to increase the width of Princes Street to 60 ft., by setting back the façade on this side some 20 ft. The result of this would be the removal of the very characteristic feature of the "Tivoli" design at the north-western corner, the rebuilding of this front, and the mutilation of the two other fronts by the reduction in their length.

These proposals if carried out would mean practically the destruction of Soane's design, and we sincerely hope that they will be abandoned.

For the same reason we venture to express the hope that the Governors will reconsider their proposal to erect a large and, in our opinion, meaningless portico above the centre of the southern façade. Soane in his design deliberately aimed at horizontality, and the introduction of this new feature is quite alien to the spirit of his design.

The Bank of England building as designed by Soane is too important a building architecturally and historically to be treated in this cavalier fashion. In our opinion it should be regarded as an historical monument; the façades to the streets, at any rate, should be preserved intact, and in any additions no features should be introduced which are out of harmony with what is and has always been regarded as a very remarkable design. We appeal both to the Governors of the Bank of England and to the Corporation of the City of London to stay their hand.

ASTON WEBB.
REGINALD BLOMFIELD.
PAUL WATERHOUSE.
EDWIN FRESHFIELD.

The Soane Museum, Lincoln's Inn Fields, W.C.2.

SIR,—While holding that it is undesirable to enter into professional controversy in the Press, I feel forced to meet the criticism of the trustees of the Soane Museum in their letter of July 25, that the portico in my design for the new Bank of England is "meaningless." Its meaning from a practical point of view is to utilize the immensely valuable building space —sacrificed elsewhere with the principal object of preserving the walls and banking halls of Soane—at this point over the entrance where high building would not interfere with the lighting of these halls, nor of the opposite buildings. On four floors of the portico essential accommodation is provided, some of which could only suitably be placed in that position. The portico, moreover, screens areas lighting and ventilating staircases, lifts, and lavatories, which otherwise might have interfered with the central open court, which will preserve in the new building this unique and distinguished feature of the old Bank.

But the portico has a higher meaning in that it will form the architectural connection between the old low façade and the new high building which will be raised behind it. The directors of the Bank had the alternative either of entirely removing the present building of Sampson, Taylor, and Soane and erecting a wholly new building, or of keeping as much of the old work as possible. In choosing the latter alternative they had to face the difficult problem of maintaining the unity of the building. It was their duty and that of their architect not only to consider the incorporation of as much of the old building as might be possible without unreasonable loss of efficiency, treating it, in the words of the trustees, as an "historical monument," but also to create a new building uniting the old Bank with its familiar associations, embodying in stone the banking development of England after the Napoleonic wars, with the new requirements resulting from the vastly greater development after the late war. The sense of historical continuity and unity of the new building could not be expressed by a design which, without some connecting feature, would convey the impression rather of two separate buildings, a new building reared up some way back and separate in appearance from the long "historical monument" below.

It must be remembered that when Soane designed his long horizontal façade the Bank was surrounded with correspondingly low buildings on the opposite sites, where now high buildings dwarf his design, and one may be allowed to think that if he were to recast his design to meet its present surroundings he would have attempted some vertical expression in contrast to its present dominant horizontality. Some of Soane's own designs, preserved in the Soane Museum, would justify this view. But, while the value of the principle of contrasting horizontal and vertical masses in architectural composition may well be left to experts, I believe the general public will approve of the architect's endeavour to give visible expression to a sense of unity in the design of the new Bank of England.

May I add that the problem of the preservation of the old work has been treated in no wise "cavalierly," as the trustees suggest, but with long and arduous labours and in a most generous manner by the directors, considering all the values involved. The new design incorporates the whole of Soane's external wall and quite a large number of the old banking halls, ante-rooms, and courts, though many are, alas ! threatened by the proposal to widen Princes Street.

HERBERT BAKER.

14 Barton Street, Westminster, S.W.

SIR,—We agree with Mr. Baker that it is undesirable to enter into a professional controversy in the Press, but, as trustees of the bequest of Sir John Soane, we feel bound to endeavour to preserve his greatest architectural work. We are glad to see that Mr. Baker in his letter to you agrees that the proposal to widen Princes Street threatens Soane's external walls and some of the old banking ha ante-rooms, and courts. It is to that we especially desired to draw att tion in our letter, and also to the des bility of making no addition whate to Soane's façades.

ASTON WEBB.
REGINALD BLOMFIELD
PAUL WATERHOUSE.
E. H. FRESHFIELD.

Soane Museum.

A.A. Scholarships an Prizes

Appended is a list of the winners of A.A. scholarships and prizes. A re of the meeting at which the prizes distributed appears on page 161.

Public School Entrance Scholarship, value £63	Miss Betty Scot (Headington for Girls, Oxf
Open Entrance Scholarship, value £63	Charles W. Sull (Municipal of Arts and Southend-on-
A.A. Essay Prize, open to all Students, value £10 10s.	No Competitio

First Year Course.

First Prize, "Howard Colls" Travelling Studentship, value £15 15s.	W. R. Brinton
Second Prize, Books, value £5 5s.	C. Green
Honourable Mention	B. H. R. Murr
" "	W. V. Trubsha
" "	J. V. Nisbet
Art Subjects, value £3 3s.	J. V. Hamilto
General Progress, Books, value £2 2s.	Miss N. Nicka

Second Year Course.

First Prize, A.A. Travelling Studentship, value £26 5s.	R. C. Erith
Second Prize, Books, value £10 10s.	E. T. E. Nash
Art Subjects, Books, value £5 5s.	R. C. Erith
General Progress, Books, value £3 3s.	D. H. Beaty-I

Third Year Course.

Holloway Scholarship, value £300	E. Wamsley
Scholarship tenable for one year in Fourth Year Course, value £52 10s.	F. E. Bennet
First Prize, "Henry Florence" Travelling Studentship, value £50	F. E. Green
Second Prize, Books, value £21	F. Roscoe
Third Prize, Books, value £15 15s.	J. W. Wood
General Progress, Books, value £5 5s.	I. E. Tramco
"Alec Stanhope Forbes" Prize for best colour work during the year, Books, value £5	N. H. Musgr

Fourth and Fifth Year Course.

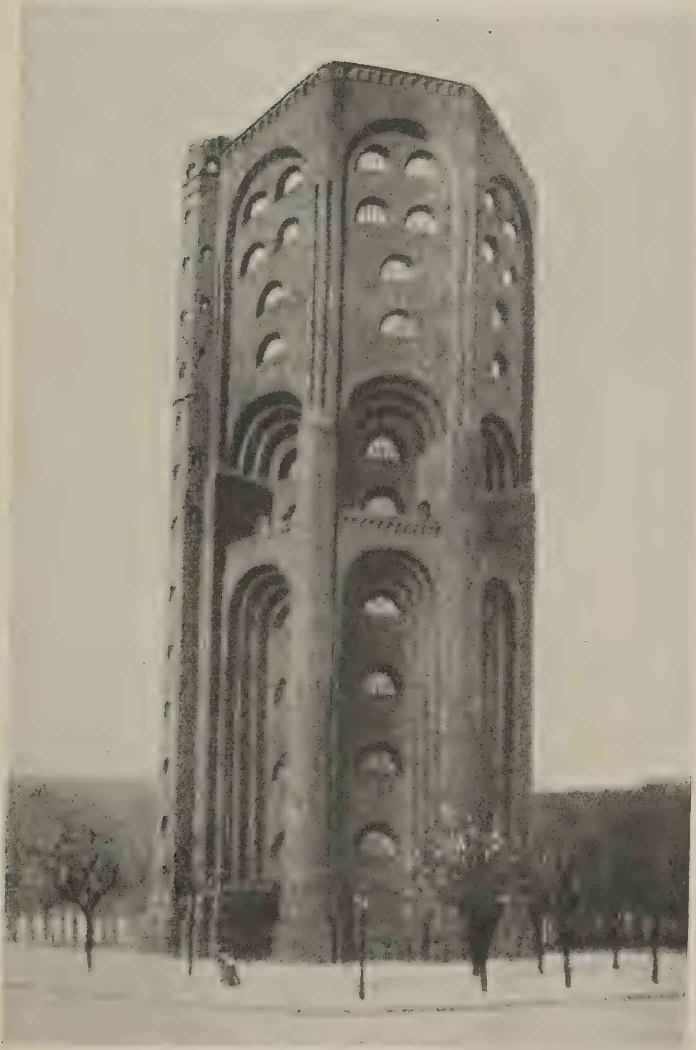
Design.—First Prize, value £6 6s.	R. E. Entho
Second Prize, value £4 4s.	Hon. H. A. I
Decoration.—First Prize, value £6 6s.	John Grey
Second Prize, value £4 4s.	R. E. Entho
Town Planning.—First Prize, value £6 6s.	Miss I. M. C
Second Prize, value £4 4s.	J. C. Sheph
Construction.—First Prize, value £6 6s.	A. S. Knott
Second Prize, value £4 4s.	H. Braddoc
Architectural Association Diploma.—On satisfactory completion of Five Year School Course	Miss I. M. (L. S. Slaugl E. U. Chan L. J. Willia C. S. Morle J. C. Sheph C. G. C. Hy G. A. Jellic G. H. Crick D. S. Petro
Medal presented annually by the Société des Architectes Diplômés par le Gouvernement to the best Diploma Student of the year	J. C. Sheph
R.I.B.A. "Henry Jarvis" Scholarship, value £50	A. E. Cam
A.A. Design Club Prize, value £5 5s.	J. H. Gree
Architectural Association Design Prize. — Awarded annually, Royal West of England Academy School of Architecture, value £5 5s.	R. H. Bre

esday, August 8, 1923.

Vol. LVIII. No. 1492.

THE ARCHITECTS' JOURNAL & Architectural Engineer

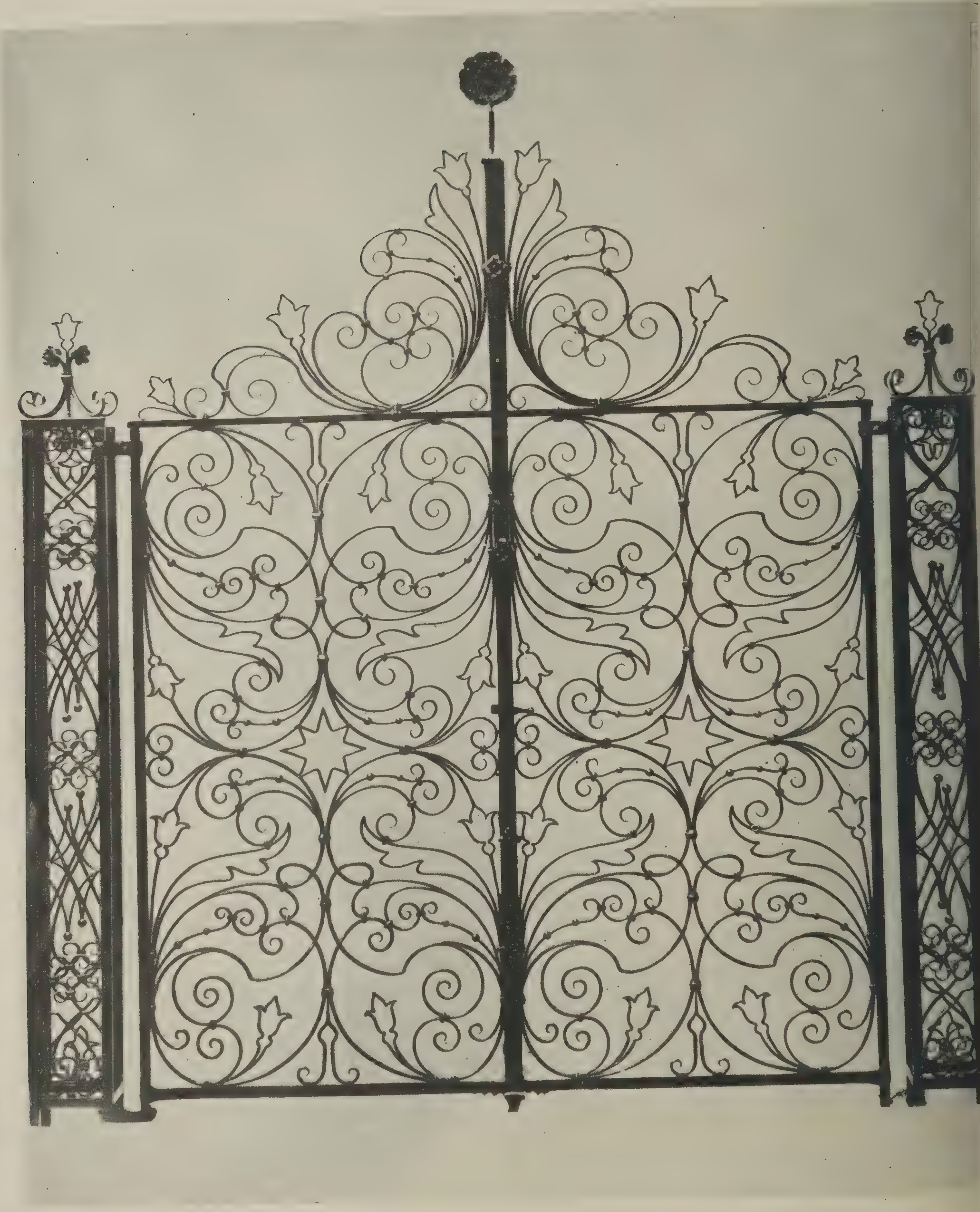
With which is incorporated "The Builders' Journal."



WATER TOWER, HAMBURG.
HANS POELZIG, ARCHITECT.
(See article on "Northern Germany," page 196.)

27-29 Tothill Street, Westminster, S.W. 1.

Details of Craftsmanship. 21.—Garden Gate at Groombridge Place, Kent



This garden gate—in the Italian style after the XVI Century—is of round wrought iron. It was designed and carried out by Mrs. Starkie Gardner, who is believed to be the first woman metal worker.

THE

ARCHITECTS' JOURNAL

27-29 Tothill Street, Westminster, S.W.1.

nesday, August 8, 1923

Volume LVIII. No. 1492

Search of Gaiety: A Holiday Suggestion

WHETHER or no it be an advantage, it is certainly one of the peculiarities of the profession that, for the architect, there is scarcely ever any escape from "shop." The barrister, on oliday, need not concern himself with points of law, nor stockbroker with market fluctuations, nor the doctor human ailments. But wherever the architect may go will be something to be observed, be it only with dis- obation, for architecture is ever around him, intruding upon his vision, and through his vision upon his mind. he most part this is a pleasure, for whereas the practice chitecture may have its dull and trying moments, with arty walls and its ancient lights, its tiresome clients ne more tiresome lack of them !), and its obsolete by- the study of it is ever fresh. It rejuvenates alike the and body, and brings back something of the early and ardour of youth, and with them a realization that, ever the trials of the office, there was justification in first choice of a profession.

much do architects like to have this aspect of their ssion about them on their holidays that most of them erately choose some field rich in architectural deposits. motives may influence the selection of a field. With t may be some particularly cherished epoch which is ht each year in a fresh place, now in Spain and now in nd, now on the fertile banks of the Loire, and now in wn country towns. With another some topographical m may dictate the choice, or some development to be ved from its natal Italy through France to England. n, there is the joy of the unknown; a haphazard selec- made with the careless aid of a gazetteer. And just t is not unlikely that the favours offered by a distraught nge may induce many to travel to lands which can be visited at leisure and at lower cost than has ever e been possible. Such opportunities are surely not despised.

hatever the choice, there is one thing common to all: bject is, for the most part, to study the buildings of the Now we are no iconoclasts. We are fully aware of onstant debt that current architecture must always o the past. The roots of our present growth can be l back to the simplest forms; one long unbroken line- and no one can design in the idiom of the present who aware of the origin of what he uses. Nevertheless, uestion the advisability of this procedure, which so stently ignores the present for the past. We are think- ow rather of the mature architect than of the student. first place it is to be remembered that most of the great ngs of the past are available for study in text-books, graphs, and drawings, whereas contemporary build- re not so available; and in the second place our insu- is not merely geographical, but it is also an aspect of ational mentality. We are slow to the reception of new —foreign travel is the surest way of assimilating them. at our architecture seems to suffer from to-day is a of adaptability of form to purpose. Everything is ied in the same ponderous style—it is as if commer- n had eaten into the architect's soul, so that all is stive of the multiple store. Even in the designs of concert and amusement pavilions the elevations sometimes fail to suggest that spirit of light-heartedness and gaiety which is surely associated with a holiday resort.

Nowhere perhaps is there more ready confirmation of the charge that we are a nation of shop-keepers than in our contemporary architecture, which, whatever its purpose, seems incapable of dispensing with the shopkeeper's stock-in-trade; but if we take our pleasures sadly, as we are accused of doing, then at all events we design our buildings to harmonize with our feelings. Nevertheless, it is surely somewhat to be deplored that we cannot throw off these shackles and let a gayer spirit inform our efforts.

Here, then, is something that the holiday-making architect might look for; aye, and, if he travel wisely, find. For gaiety is a matter that is better understood on the Continent, and much modern architecture is expressive of it. Let, therefore, the architect set forth like Doctor Syntax, but let him not be in search of the picturesque, of consolation, or of a wife—for those things no sea voyage is necessary—but let him set out to find gaiety in modern architecture, for it is the quality most lacking to-day. He will find exhibition buildings, concert halls, casinos, and theatres, which by their outward forms honestly declare their purpose and are no mere assemblage of dead bones. We do not suggest that the actual forms observed should be copied, but that something of the informing spirit should be comprehended. What is it that makes one building suggest devotion, another commercial enterprise (often enough commercial aggression), another municipal importance, and a fourth frivolity? To some extent it is convention; the same convention that leads us to suspect when we meet a friend in a top hat, black coat and tie, that he has been to a funeral, and when we meet him in the same hat, and perhaps the same coat, but with white spats and gay tie and buttonhole, that he has been to a wedding. This convention, let us observe, is arbitrary, for there is actually none of that connection between the above dress and occupation that is to be found, say, between a sportsman and his attire. Here form is really dictated by function. There are many analogies between clothes and architecture, but we will not now pursue them. The point we wish to make is that convention may suggest the purpose of a building. But architecture, since it is a living vital art, cannot rely upon convention, it must be inspired with some more alert quality.

This year has witnessed an attempt to introduce a spirit of frivolity into holiday-making. Many seaside and other resorts have organized carnivals and similar entertainments. These, in themselves, are foreign importations, but as, through swift intercourse by travel, boundaries are broken down, there grows up an interchange of custom. If a spirit of light-heartedness and frivolity is to be brought into the holiday lives of those who frequent these places, does it not behove the architect to design appropriate buildings in the appropriate spirit? Let him, therefore, set out with sketch-book and pencil and spend this holiday in capturing that elusive spirit of gaiety in terms of architecture so that he may design buildings that frankly declare their dedication to the amusement of those who for a short spell would forget the inexorable pressure of mundane matters.

Notes and Comments

Bush House

WITH the scaffolding removed, the central block of Bush House at last stands revealed in all its ethereal whiteness. Not until the flanking wings are added will it be possible to judge the design properly, but if what we now see affords a fair standard of judgment, London is to have a group of buildings at its heart that would do honour to any city. Bush House has its critics; they make much, for example, of its non-axiality with Kingsway. A building that did not stimulate criticism would probably not be worth looking at at all. This, however, is not the place to give a considered judgment of Bush House architecturally (we propose to deal fully with the building in our next issue). All we would say here is that Mr. Corbett, by raising in the heart of London a typical example of modern American architecture, has rendered English architects and architecture a notable service. He demonstrates convincingly the value of reticence, and the architectural effectiveness of plain, smooth surfaces. Professor Reilly put it very clearly, if rather picturesquely, when he said that Bush House has the appearance of being clean-shaven while many of its neighbours have grown whiskers. Bush House will have done excellent work if it does no more than stimulate a certain amount of activity with the razor.

The Threat to London's Open Spaces

What Mr. John Burns once described, in referring to the London squares and open spaces, as "the enlightened self-interest of private ownership," seems with the lapse of years to have done nothing more than provide private ownership with an opportunity of exploiting self-interest of another kind. We are thinking of the threat to Endsleigh Gardens, in the Euston Road, a picturesque garden area about two acres in extent. The danger of this ground being built upon was pointed out in a leading article, by Mr. Percy Lovell, in this Journal some months ago. Endsleigh Gardens is not the only open space threatened, for, according to Mr. Basil Holmes, Secretary of the Metropolitan Public Gardens Association, many of the four hundred odd other areas in London are in danger of being used as building sites, as soon as the rights of the adjacent lessees to use them as private gardens come to an end with the expiry of the leases. Mr. Holmes suggests that these areas should be sterilized or rendered ineligible for building sites, like disused churchyards and burial grounds; fair compensation being paid to owners for placing such a lien upon their properties. This course, he says, would be much less expensive than buying them outright for conversion into public gardens. Whatever is done must be done quickly, or it may be too late. The London County Council must formulate some comprehensive scheme of preservation as quickly as possible, otherwise London will wake up one bitter morning to find that its lungs are gone.

The Temple

The great gates of the Middle Temple in Fleet Street and on the Embankment have been closed, the official explanation being that the Temple is getting as noisy as the Strand. "Boys are using the lanes for roller skating and scooting, and Middle Temple Lane is becoming a thoroughfare from Fleet Street to the Embankment. Until now, the Temple gates have been closed only one weekday a year, to retain the private way. They are, however, always closed on Sundays and every night at ten o'clock." It is difficult for anyone but Londoners to take to heart this drastic measure. Into its pleasant, leafy courts with fountains and sundials, and the breeze coming over the green lawns from the river, thousands of pe
turn every day for quietness and pleasure. But we
sure the gates will not be closed for long. All the
barristers arrive by car in the morning, and clients,
arrive by taxi-cab, and there will be blocks in F
Street if cars have to wait every time for the openin
a gate.

A Sign of the Times

The acquisition by the Canadian Government of
Union Club in Trafalgar Square, as their new Lo
Headquarters, is a further instance of the signifi
changes that are taking place in central London. Not
ago the South African Government acquired Morley's H
on the opposite side of the Square for a similar pur
while along the Strand within recent years other Col
governments have permanently established themse
including, within a short distance of each other, the Au
lian, the New Zealand, and the British Columbian Go
ments. This eagerness of the overseas dominions t
represented at the very heart of the Empire empha
the marked tendency of the times to squeeze out o
central area any interest that has "lagged superfluous
the stage." Thus a gentleman's club cannot for ever oc
a valuable site in Trafalgar Square (it does not pr
to move very far, however—no farther, indeed, than Ca
House Terrace, where it will find itself in rather
intimate relationship with club-land proper). Ho
much one may deplore spiritual changes of this kind,
is some consolation in finding that the old building
frequently allowed to remain. Morley's Hotel, for exa
is still much as it was when T. S. Boys drew it i
forties of last century (the new entrance, copied fro
old Dutch Parliament House, is quite in sympathy
the rest of the building). In the case of the Union
certain alterations must inevitably be made to the int
but we note that, apart from some necessary remod
of the Cockspur Street front, Mr. Septimus Wa
F.R.I.B.A., the architect for the work, does not prop
touch the exterior to any great extent, which signi
welcome change from the ruthless methods of other
What have the Governors of the Bank of England t
to this?

Tests on Building Stones

Ten years ago, the Geological Survey, at the init
of Mr. Allen Howe, and with the co-operation
R.I.B.A., undertook a series of tests upon six co
building stones. Samples of these were placed up
roof of the Geological Museum in Piccadilly, photo
being taken at the beginning and end of the period
results of the tests are shown in these photograph
described in a report which may now be seen either
museum in Jermyn Street or at the R.I.B.A. As Mr. A
Munby cautiously points out in a letter to the Pres
generalisations from the small number of samples
for what, after all, is a comparatively short period m
very carefully guarded. With this reservation, he ob
"it may be said that the sandstone (from Dumfrie
tested showed the least decay, that Portland stone
best quality showed its superiority over other lime
while Bath stone of fine grain showed higher res
than the coarser and more shelly varieties of this
and also probably than a typical oolite stone fro
Midlands. An interesting side issue of the tests in
that the formation of copper salts from the gun
supports of the stones had an appreciably deleteriou
on the limestones." The practical value of such t
manifest, and we are glad to learn from Mr. Munb
they are to be continued for a further period.

The Commercial Man and the Craftsman

By W. L. WOOD[*]

HAVE often wondered at the origin of hierarchies, as there must be some underlying reason for the growth from time to time of the many priesthoods that have held sway over the minds of men. Perhaps it is that en a prophet and his satellites withdraw into the wilder-ss their absence makes their fellow men's hearts grow der, and the common folk, begging their prophets to urn, do homage to them and yield them laurels, and ept them back as a privileged class. Except on these unds it is difficult to explain the position of the artist day. I speak of artists in a wider sense that includes ftsmen. It will not be denied that the artist to-day ims not only a special distinction from his fellows, but ssesses a general freedom in life that we all envy.

Looking back to the time when the commercial world t touch with the craftsman, it seems to me that the ists went into the wilderness when Adam Smith wrote aptly-named book "The Wealth of Nations." It was gospel of industrialism, and like most gospels it overted the case. It ignored the wealth of individuals. e immediate apostles read into it a whole art of life, and artists as a protest went into the wilderness and re-ved their laurels, homage and freedom. But artists, nking of humanity at large, perceived the immediate rse that industrialism had on the world, but did not look ough the darkness to the light beyond. There is a sus-ion of despair in Morris's words written just thirty years :

"Now it seems to me that this impulse of certain minds l moods to certain forms of art is all we can expect under dern civilization; that we can expect no general impulse vards the fine arts till civilization has been transformed o some other condition of life."

And again when he speaks of :

"The decoration of utilities by furnishing homes with uine artistic finish instead of trade finish."

Let us look at the position to-day, and I think you will ee that there is a light on the horizon, at least there is ne, a commercial man. I approach my subject from the ustrial side of the house. You must picture thirty years that industrialism, by its wealth and honoured position the community, was asking itself why there was such a f fixed between it and the "best people," that elect ly of artists, writers, and of dilettants. The industrialist like a wealthy pork-butcher's son entering a public ool ignorant of the reasons for the contempt he experi-es. The position is easier stated than explained, and is y worked out when the pork-butcher's son finds out hat is not done," and appreciates and acquires poise. w I claim that the time is fast coming when artists and ftsmen may see in the utilitarian a refinement he had noticed hitherto. Sweating is not done by any utili-an or commercial man who has any respect for the nions of his own kind. The beginning of welfare move-nts is all evidence of improved status that would have n welcomed by William Morris. Pride in his product st be welcomed as an encouraging sign in the man of nmerce. He is still at school, it must be borne in mind, his benefit to himself and his acceptability to the hier-ny coincides in ultimate effect. He is, however, still an of commerce, and he is learning in a bitter school t price, price, price does not alone command his treasured ket. He has surfeited the world with goods and the sumer is feeding much more daintily, the demand is e and more for quality, and it is the demand for quality t first gave the artist and craftsman a job.

have spoken thus far of the commercial man. I hope ave convinced you that he is not as bad as he was, so perhaps before we talk of arranging a love feast I may be allowed to speak very diffidently of a few blemishes of the otherwise perfect hierarchy of artists and craftsmen. The concern of humanity at large with the arts is in the objective sense, and not in the subjective sense. The delight of the artist in his own work is the concern of himself alone. It is his compensation in life for disappointment and lack of recognition among his fellows. The public has no vote of confidence for the artist—it is too uneducated. It is from the fellow artists that recognition comes, and the public follows the artists, saying that if artists do not recognize one of their own fellows, how can they? But I am concerned with craftsmen's work in the objective sense—its value to humanity at large, who are demanding quality more and more, and the duty to humanity of the craftsmen is to supply this quality. The material is largely immaterial, a good brick and a bad brick are both clay, it is the material I may remark in which Della Robbia worked. We have realized that charcoal and brown paper can give us the material on which great art can be expressed, and that Carrara marble and bronze can perpetrate misguided effort for all too long. Will not craftsmen then accept their vocation as guides rather than continue in the wilderness? I suspect many craftsmen have found an oasis and have become lotus eaters, a grave dereliction of their duty to humanity.

Let me suggest, as a man of commerce, that one of the most deplorable facets of public spending to-day is the unreasonable demand for the antique. Antiques are often good, but the quality of uniqueness does not add to their real value as distinct from their "Christie" value. That there is only one of a thing is the reason for the care of it, often a reason for lament, but never a reason for its great artistic worth.

Can I now suggest that this idea of uniqueness is a very common sin of craftsmen? It is the secret vice they treasure with their old malady of wishing to sign works of art. Why do craftsmen wish to sign their works? Has a craftsman more claim to individual distinction than the designer of a Great Western express engine?

I pass from the critical to the problem of to-day, that the public are wanting quality more and more, which quality can only be given by the artist. I hope you will concede the axioms that perfect fitness of an object connotes all the qualities that craftsmen and manufacturer can give it. The whole duty of the craftsman and manufacturer to humanity and the millennium is to work together to endow each object of common or occasional use with its perfect form. Material of the best of its kind, properly made in sufficient quantity, is the manufacturer's job. The form is the job of craftsmen. When anything takes perfect form for its purpose it becomes simplified.

Manufacturers are now sick and tired to death of price competition, and the merchant has now come to ask himself what is the missing link which his bible "The Wealth of Nations" has not revealed to him. He has found that he has neglected the artist who can alone improve his quality and reduce his price. Alas! he finds the artist lotus eating in the wilderness and not to be found in the market place with his fellow men. He seeks a conference with them, and is met with so many difficulties that he returns abased, not even arranging more and more conferences in accordance with the best political fashion of the day. Cannot then something be done by craftsmen to make a day or two's journey from the desert into the market place? The difficulty arises from an unwillingness of the artists to face the problems and discomforts of the factory. The manufacturer realizes that perfect form cannot be given to material by one unaccustomed to it and its limitations, and this can only be obtained by considerable study not only of the material itself in the raw, but its use in the finished product, and, moreover, by a study of the conditions in the market place. The conditions of the market place, indeed, are anathema to most artists. They refuse to admit that the ultimate test of our manufacturer of perfect form for its purpose is the purchasing public.

---

[*] Mr. Wood is Editor of "House and Garden."

For the purpose of argument we will take the case of household furniture. It is a very necessary article, and in universal demand. Apart from the heritage of other generations, it is in such a deplorable state æsthetically that for one to make the confession that one was furnishing with modern furniture was almost as much as to brand one as having no taste. I once had an article prepared on "Modern Furniture," and scarcely any was to be found which could be chosen with an eye to taste as well as utility. From the workshops of craftsmen a few examples were to be obtained, but few, if any, were suitable for manufacture on a large scale. Thus is the problem. On the one side we have the craftsman designing single pieces without sufficient regard for the use of modern tools. Craftsmanship does not depreciate with an improvement in tools. In the past tools were accepted to give a greater refinement. I will instance the lathe, which was an early invention. Craftsmen accept the lathe's help in giving form to an article. What then is the objection to the modern woodworking spindle? Unintelligently used it will give a hard mechanical finish, but the combination of texture, finish, and even pattern, are the problems of the craftsman which I believe he can readily solve.

With his skill a craftsman can give grace and perfect form to a product, but an artist has to learn in the hard school of commercial work the nature of his materials, the application of his machinery, and the current demand of the market-place.

Given that acquaintance with the problems involved, th most delicate question of all arises: what of remuneration Here both the artist and the mechanic have much to lear The artist must realize what the public will pay, and wh the public wants must govern the remuneration. Th merchant must learn that the craftsman's place in suc designing is a high one, and that of the divisible profi the craftsman should take a good share. I have oft sought a solution of this difficulty, and have come to th conclusion that on a royalty basis alone can a commenc ment be made. On a good selling chair or table, howev few shillings royalty the manufacturer pays on each o sold, the craftsman will reap a large amount. One c imagine the surveyor of taxes gloating over the craf man's rising assessment for supertax. Here, again, t test is severe, as not all craftsmen will be "best sellers to use a publisher's phrase, or even good sellers, any mo than all barristers can become Attorney-Generals.

One may be before one's time, or one may tarry too lo with the taste current in one's youth, or sadder still, o may inherit the taste of a past but not popular generati The craftsman may be quite as good a craftsman, but it the test of the market-place that finally determines wheth worldly goods and material comforts which all arti deserve shall be added to the fine perceptions which alwa makes artists' lives distinguished. In advancing the cla of the common market-place I do not wish to look as thou I, as a merchant, tempted them with gold to be false their art. It is to the market-place I point as the pro place in which they can preach their gospel, and adva the common weal of the public by adding beauty to th surroundings.

[*The foregoing is extracted from a paper read before Art Workers' Guild.*]

Architectural Travel

Edited by F. R. YERBURY, Secretary of the Architectural Association

4.—Germany. (1) Northern

By GORDON H. G. HOLT

FOR reasons not altogether unjustified, it has been the fashion in certain quarters to asperse Teutonic culture. If we grant that the lucid and polished Latin mind can extract tremendous and often divine harmonies from the instrument upon which it expresses itself, it must be remembered that it has often acquired its subtle accomplishments at the expense of cardinal qualities which, on the other hand, are the abiding strength of the Northern mind. Crudely put, it might be said that what the Latin mind gained in finish and felicity of expression, it lost in dynamism and directness, an apothegm the appositiveness of which applies to architecture as it does to the other arts. Was it not Mme. de Stäel who wrote in her book "De l'Allemagne" that "la stérilité dont notre littérature est menacée ferait croire que l'esprit français a besoin maintenant d'être renouvelé par une sève plus vigoureuse"? Substitute, as indeed might well be done, architecture for literature, and you have a criticism as applicable now as it was 120 years ago. And it is partly because Northern (which in our case is confined to Teutonic) culture draws its strength and value from physiological and biological wells far removed from those of the Latin race that it should be studied.

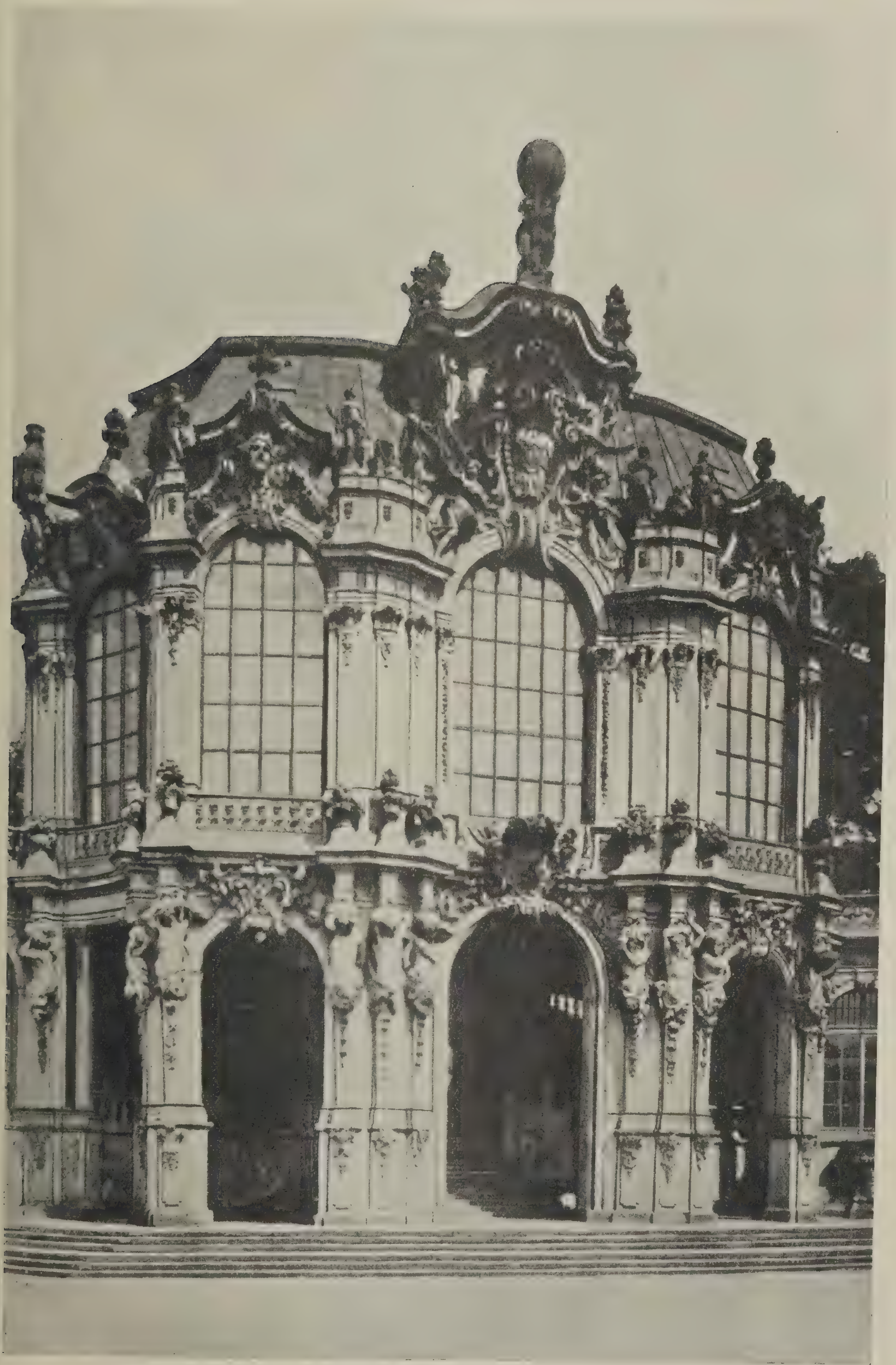
It is not here suggested that in architecture too much benefit will accrue from a study of the picturesqueness of German mediæval buildings *as such* (the most popular notion of which clings to the Rhenish castles or to the street façades of old Nüremberg). But, it is definitely suggested that, looked at from a purely æsthetic poin view, many old buildings in Germany yield, in their ward aspect, combinations of colour and forms both da and unsophisticated. Yet little or no official encourager is given to the student to see and feel this for him Again, the Northern mind is known to be fond of grapp with a problem until it has somehow found its nea solution. Modern German architecture, for instance, unquestionably provided many examples and, to all app ances, will continue to do so in no sporadic man Obviously, this aspect appeals to most students. I therefore, around both this and the other side—the s of strict architectural forms—that these two articles been written, though they can only touch the very fr of the subject. Needless to say, the student should go across Germany to enjoy the substance itself. But a place, should he already have tasted of their red charm, will he be quite immune against the glorious ap and glamour of Italian or French skies and buildings refined polity. . . . And this sapient diversity of civilizations is brought home the more forcibly by a s of its component parts. That is why the time spent ste in Teutonic architecture is, to us architects, of indubi benefit.

* * * * *

Reviewed historically, North German architecture ca well be divorced from the rest, but it has, neverth some peculiarities of its own, which will be pointed

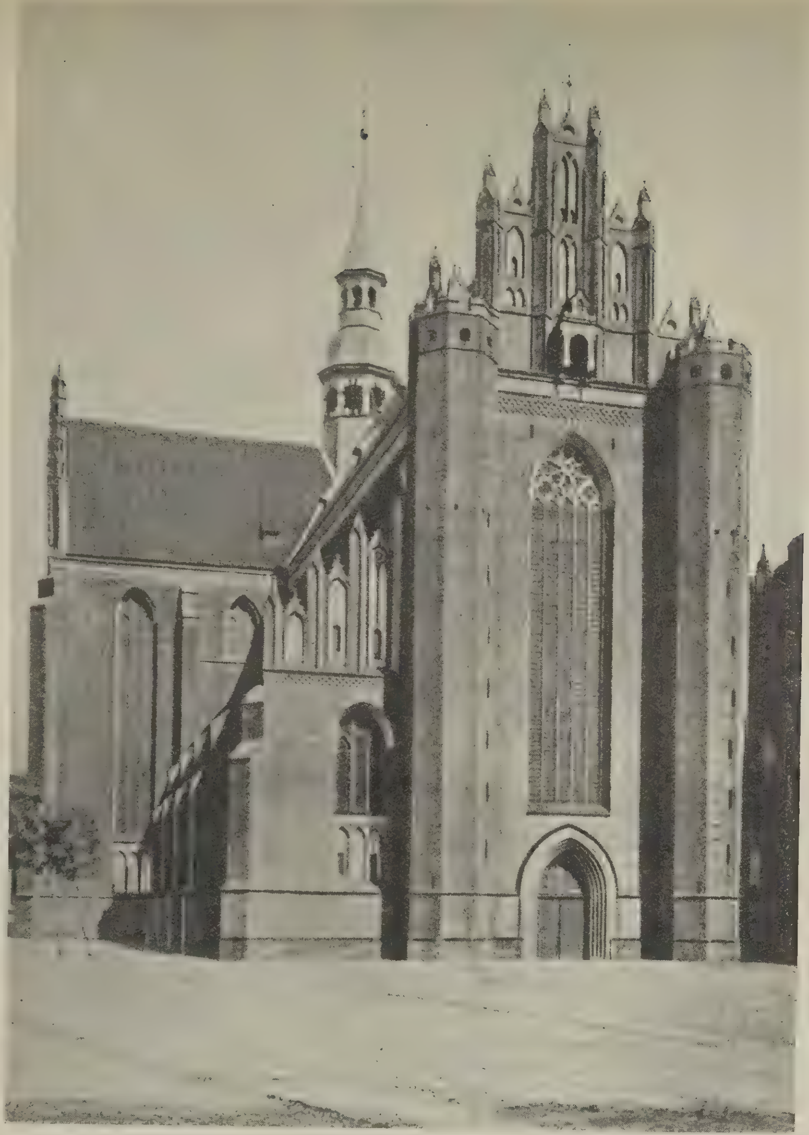
The Central Pavilion, The "Zwinger," Dresden

Pöppelmann, Architect

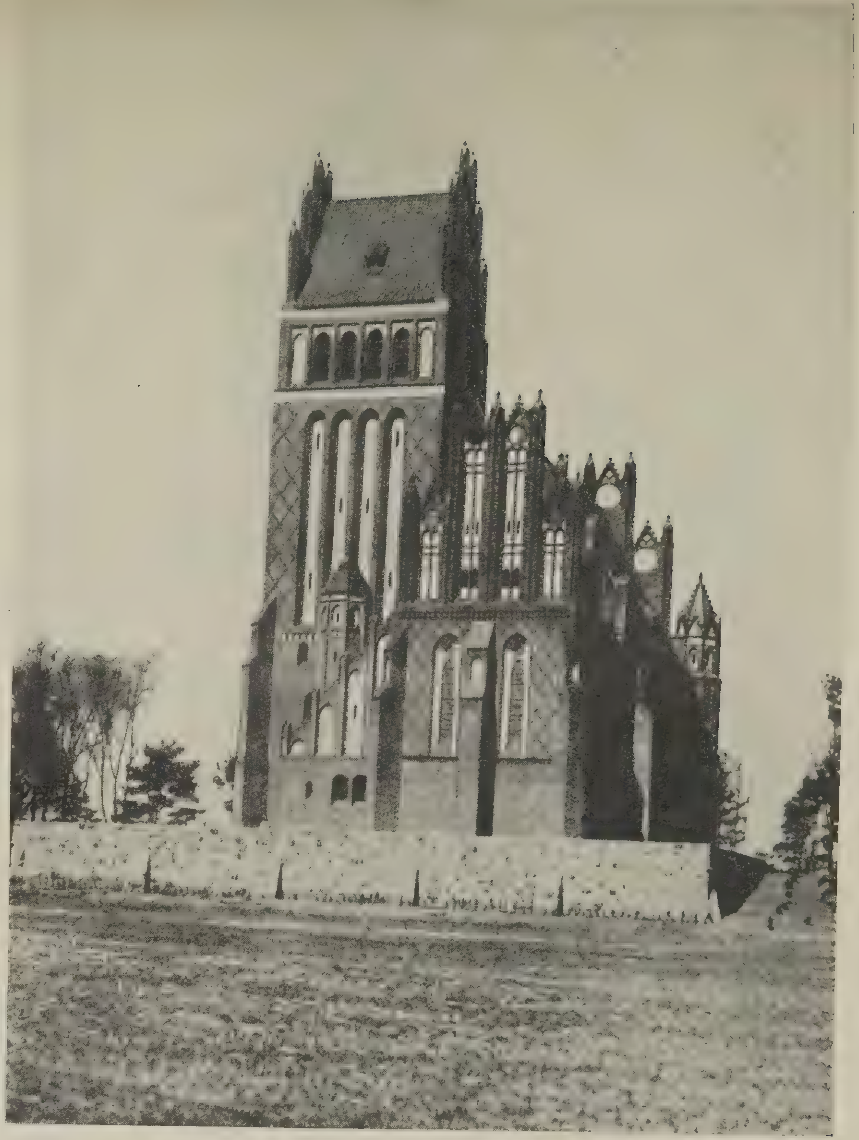


In Pöppelmann's "Zwinger," despite its splendour, the prevailing idea is one of pleasure, and a revelation of the delights in the private life of kings.

THE LIBRARY
OF THE
UNIVERSITY OF ILLINOIS



PELPLIN, THE ABBEY CHURCH: WEST ELEVATION.
(FOURTEENTH CENTURY.)



CHURCH IN CADINEN: NORTH-EAST ELEVATION.
ARTHUR KICKTON, ARCHITECT.

If, in the centre, we take Lower Saxony as the southernmost limit of North Germany, we shall be able to point out early examples of Romanesque architecture in the upper sector, where however they are not so old as those in South Germany, because on the Rhine, and in other parts of Germany where the Romans held sway, substantial buildings were erected long before the North pulsated to a finite life of its own. Even the art of the Carolingian period (say, of the ninth century), which gave us Aix-la-Chapelle and numerous buildings in the Bavarian region, scarcely affected that upper sector. Still, a singularly refined version of Romanesque is to be observed in Saxony where a lively sense for the decoration of the various members of the building is noticeable. For instance, the simple cubical caps of columns soon gave way to more varied shapes, adorned with foliage and carving. The cornices, friezes, and hood mouldings of the interior show this prevalence of refined ornament. Neither the Rhenish churches, most of which are built of soft tufa, nor those of South Germany, in which the details are often very rude, can vie with those of Saxony in that respect. The most important will be found at Magdeburg, Halberstadt, and Goslar, all typical towns, full of charming examples that will not fail to delight the layman and put him in touch with the artistic spirit of mediæval Germany, for it is these Romanesque churches and quaint timbered dwellings which in a way give the most complete food for imaginative thought. That is why so many travellers go to see them and crown their journey with a visit to the best of them: Hildesheim and Brunswick.

The most characteristic efflorescence of old North German architecture is to be found on the sea-coast itself, far from those charming towns between the Harz and the Elbe. There, in the coast-districts, a brick architecture slowly evolved new forms, simple, plain, and vigorous, even though it could not boast of a strictly indigenous birth. (It originally came from Lombardy. After a short experimental stay in Lower Saxony, it moved northwards and, in the trail of German colonists, went even farther to Scandinavia and Russia.) In those days churches were easily the most important buildings, therefore it is in these that the development of brick architecture can be best studied. At first, these churches were made of wood and sometimes of granite, but the new material, once used, brought with it novel forms and deviations from the old traditional style. The builders had to do away with the sharply-defined profile as well as the elaborate ornamentation with the chisel. The larger surfaces were not relieved by projecting and receding members, but by moulded bricks which were combined in various patterns and colours. The buildings in this "Baltic style," as it is often called, are by no means deficient in size or even stateliness, bricks being admirably adapted for vaulting large spaces, while their lightness makes it easy to attain a great height.

Gothic, we know, tended to such heights and after the Romanesque period, when brick buildings already then had much charm, as is so evident in the Mark of Brandenburg,* the towns of which began to obtain some importance in the twelfth century, lofty and substantial edifices were built in increasing number. This Gothic period is certainly the golden era of brick architecture. But the Gothic style of the brick buildings of North Germany is something very different from the "Cathedral Gothic," as Prof. Anton Springer† calls it, that found its way from France to the Rhine in the thirteenth century and thence to Southern and Central Germany, marking its course by a long series of important ecclesiastical structures. The essence of French Gothic lies really in its system of buttresses. But the use of bricks as building material was as antagonistic to the employment of buttresses as it was favourable to vaulting. In brick buildings, it is impossible wholly to renounce the appearance of solidity and mass, and difficult to relieve the surfaces of walls with pillars and other substantial details. The pinnacle and turret, the delicate ornamentation o open tracery are alien to the spirit of brick architecture But, somehow, the contrast between the Romanesque an Gothic styles is by no means so sharp here as elsewhere The pointed arch, for instance, had naturalized itself long before the use of buttresses came into being. Again, whe we speak here of a transitional style, we must remembe that it is not a transition to the ordinary Gothic, but merel to that peculiar variety of it developed on the Baltic coasts

A large proportion of the churches are so-called "Hallenkirchen," i.e. churches resembling halls. This form i already met with in isolated examples in the twelft century, and beyond the confines of this brick style, bu it finds by far its most general adoption in the Gothic perio and in North Germany. The degradation of the choir goe hand in hand with the development of this style of churc While the choir of the usual French, or even Germa Gothic church spreads out fan-like, with its ambulator and radiating chapels, the Hallenkirche terminates mos congenially in a straight gable-wall, and the exterior the church makes no attempt to hide the unassuming natu of the design, or the simple massiveness of the framewor but the appearance of rudeness and heaviness was avoide by the rich ornamentation of the gables and by a free u of coloured decorations. Glazed and coloured tiles, arrange in stripes and patterns, enliven the wall surfaces and fea the eye on the portals and gables. This ornamentation alo constitutes a vast field of artistic investigation, wi Lübeck as its most important centre. There, the lar Marien-Kirche adheres to the type of the great Fren cathedrals, with the nave spreading high above the aisl It served as model for the Cistercian church at Dobera the Schwerin cathedral, and the Marien-Kirche at Str sund. Some of the churches of Breslau,* though qu outside the influence of the Lübeck buildings, show t same tendency to exalt the nave at the expense of the aisl

A characteristic of these Gothic churches in No Germany, and one worth remembering, is that the gr majority of them are town and parochial churches, found by the citizens and standing in the closest connection w the civic community; and there is no doubt that this c origin exercised a great influence upon their form of st It explains, for instance, the modest dimensions of choir, as it was not necessary to find room for a la number of clergy. Again, the desire of the rich burgher perpetuate his name accounts for the extraordinary num of private chapels in town churches. These were of formed by continuing the buttresses through the wall i the interior and occupying the spaces thus indica between them.

The extreme North should not be missed. It cont splendid examples of this brick Gothic, though, on the wh the form with nave and aisles of equal height is pred nant. I will only mention the Jacobi-Kirche, at Stettin, Marien-Kirche, at both Danzig and Colberg, all of proportions. This is not due to an empty striving mere size, but to the necessity of providing accommoda for the large parishes of populous towns. If the decora of these churches is not to be compared with the stan obtaining in those of Brandenburg, on the other hand wealth of fine brasses that cover the tombs (at Lüb Stralsund and Schwerin) and the carved wooden altar frequent in Pomerania, make up the deficiency.

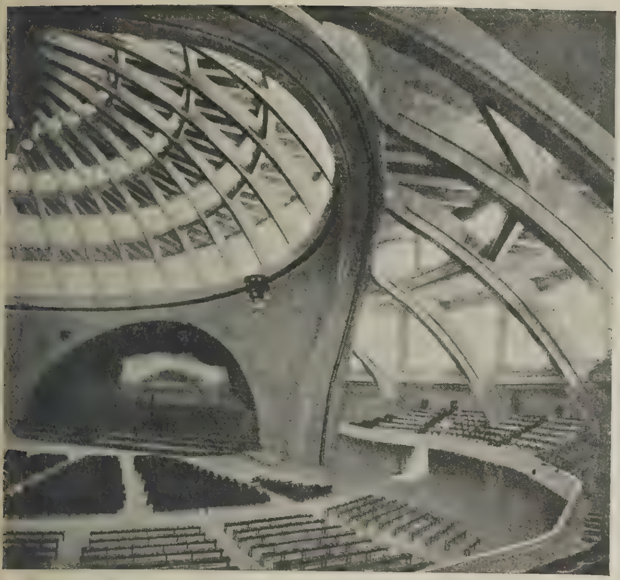
The latest varieties of North German brick buildings developed in the territories of the "Teutonic Or Tradition, and the nature of the material here, cause elaborate external decoration to sink into subsidiary while a plain, massive exterior was encouraged by the that the churches formed part of the fortified posts o knights. The ceilings, however, often consist of elab and very rich fan-vaulting. But above all, it is in the c and palaces that the æsthetic feeling of the Order fin

---

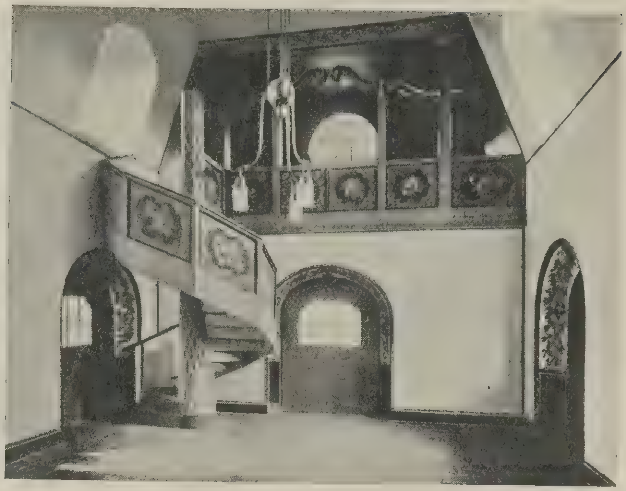
* In Brandenburg itself, both the Cathedral and Nicolai-Kirche exhibit many niceties of planning, whilst the detail is varied and very freshly carried out.

† So great an authority cannot be ignored; I wish to make it clear that I have drawn freely from his learning.

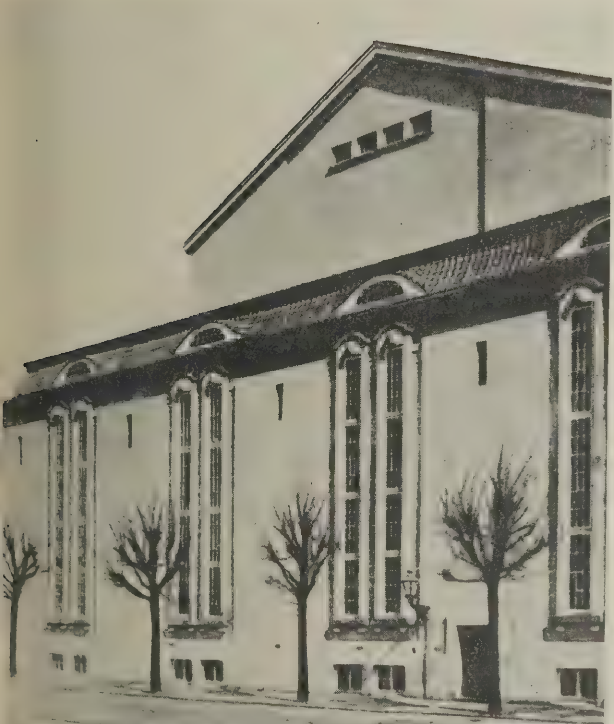
* See St. Elisabeth. Most churches at Breslau testify to the efficien- charm of Silesian architecture. The different stages and varieties of style studied with convenience, for here brick and freestone, cruciform churc "Hallenkirchen" are all found side by side. Breslau is therefore another im centre.



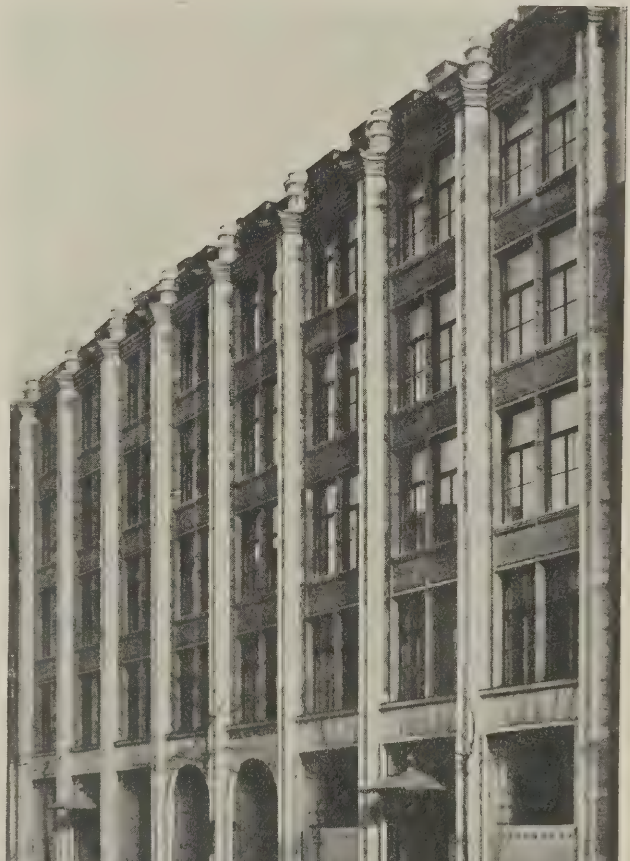
THE GREAT HALL, JAHRHUNDERTHALLE, BRESLAU.
MAX BERG, ARCHITECT.



THE FRIEDHOFSKAPELLE IN FROHNAU: VIEW FROM WEST.
CARL STAHL-URACH, ARCHITECT.



THE STADTTHEATER, BREMERHAVEN: BACK ELEVATION.
OSKAR KAUFMANN, ARCHITECT.



OFFICES, "FISHBEIN AND MENDEL," THE LINDENSTRASSE, BERLIN.
HANS BERNOULLI, ARCHITECT.

truest expression. It may be said that just as the members of the Order combined the characters of knight and monk, so did their palaces partake of the double character of fortress and monastery. Therefore, as in conventual establishments, the buildings are grouped round a quad, surrounded by arcades. Königsberg, Heilsberg, Marienwerder, and above all, Marienberg, should be visited.

If the castles of East and West Prussia reflect the character of this "Teutonic Order," then no less do the town houses and town gates bear witness to the prosperity of North German towns. The brick buildings of the Hanseatic towns cannot, of course, vie with the *hôtels de ville* of Belgium, and even the town halls of solid stone, such as those of Brunswick and Münster, are inferior both in size and decoration to their Belgian prototypes, while the variety of outline afforded by the soaring *beffroys* is entirely wanting. The two distinguishing features of these secular buildings in brick are the lofty gables and the polychromic decoration. Bremen, Hanover, Lübeck, Stargard, Brandenburg, and Wismar have rather gorgeous examples of these. Bracketed with those of the late Renaissance, the products of this Gothic architecture are, æsthetically and historically, the most arresting, and whenever modern German structures bear a semblance of retrospective clothes, so to speak, it is Gothic and Baroque clothes that they usually wear. Between the two stands the Renaissance proper, which can be put down between 1530 and 1670, and which was influenced by external movements: Italian from the south (even as far as Silesia), French and Flemish from the west. On the whole North Germany—particularly in the domain of brick architecture—may claim to have developed the Renaissance more consistently than other parts of the country, to have broken less abruptly with the past, adopted fewer utterly foreign elements, and to have found the truest expression of a national taste in architecture.

In ecclesiastical buildings the German Renaissance has naturally few proofs of its activity to show. Again, in palaces and castles North Germany is poorer than Silesia or Saxony.* The fact is, the whole tenor of the North German history makes us turn to the municipal buildings as the choicest results of Renaissance and Gothic periods alike. The Renaissance may be more picturesque and show greater variety in South and West Germany (such as in the Palatinate), but in the North it appears in such solid array that until lately whole rows of streets and whole quarters of a town showed an unbroken series of Renaissance façades (see the Frauengasse in Danzig). It might be said that a Renaissance private house is to a German what a Georgian private house is to an Englishman: the same charm, less reticent, certainly, but still homelike and refined. It is often only a single feature, such as a bow-window or an elaborate doorway or an ornamental gable, but of undeniable loveliness. The private dwellings of Lübeck and other western Hanseatic towns are much soberer and less pretentious than those built by the merchant princes of Danzig—a very wealthy town in those days—but even with them a solid magnificence is always reserved for the interior.†

Timber architecture covers Lower Saxony, a good deal of Westphalia, Hanover, the Brandenburg, and Brunswick especially, although it is to be found, more or less, segregated all over Germany. The construction is intimately connected with that of the Gothic period, the only marked differences being a diminution of the upper stories and a free use of Renaissance ornaments. Good examples of timber architecture in North Germany are too many to enumerate, but among the most important of the earlier period are the Rathaus of Wernigerode; the Ratskeller of Halberstadt; and the Alte Wage of Brunswick. To the Renaissance proper belong a great many more, at Halberstadt, Brunswick, Goslar, Hamelin, Hanover, Höxter, and Hildesheim. The Knockendauer Amthaus, at Hildesheim, dating from 1529, is a perfect little gem of its kind. The timber structures often display a lot of excellent and vigorous wood-carving and the furniture of these mediæval days is most valuable A stroll through the Thaulow Museum at Kiel, or th Museum of Industrial Art at Flensburg will show th astonishing skill and artistry of the cabinet-makers in eve so limited a district as Holstein. The same remark applie to metalwork, especially in brass.

As to Baroque architecture (of the sixteenth and seven teenth centuries) it is often difficult to distinguish it fro ordinary Renaissance, that is, not in churches, evidently nor in municipal buildings, but in private dwellings, althoug the fierce partiality for flowing lines and the overloade ornaments can be seen to advantage at Schleissheim (b Zuccali and J. Effner), Breslau (the magnificent Universit by Meister), Banz, Dresden (a good deal here), Pom mersfelden, and Potsdam. But the south and south-ea claim most of it, and the best. Often, as at Dresde Würzburg, and Münich, and Bamberg the Baroque form lend an alluring, playful, withal energetic touch to th architecture of the streets.

A new artistic era for North Germany opened towar the end of the seventeenth century, especially in Pruss Berlin now takes first place, with the tremendous activiti of two architects, Johann Nehring (d. 1695) and Andre Schlüter (1664–1714). It is to be observed that about th time monumental sculpture also came ahead, both ar returning to an exalted and severe form of classicism, natural reaction to the Baroque license. To show t awakening of the artistic sensitiveness of the times, it sufficient to remember that there was but an interval of few years between the erection of the "Royal Palace" Berlin and that of the "Zwinger" at Dresden, its on possible rival for first place among the creations of t century. Certainly, no other building of the period c be compared with the works of Schlüter and Pöppelma (1667–1736). The two great edifices also resemble ea other in the fragmentary execution of their original desig In the plans, however, lay an essential difference. Schlüte ideal was a magnificent Roman forum, whilst Pöppelma at Dresden, aimed at the creation of a "Show Palac The impression produced by the two buildings is marke unlike. In Schlüter's work we recognize solid, even hea magnificence; in Pöppelmann's "Zwinger," despite splendour, the prevailing idea is that of pleasure, a reve tion of the delights in the private life of kings.

And so we come to modern times. The storms of Napoleonic period sadly interfered with the architectu development of Germany; but already then the love material and worldly power begins to grip the stricken elated nation and to goad it to homologate the pomp display of its rulers. Prussia possessed two men who w well fitted to respond to the patriotic enthusiasm. work of Schinkel (1787–1841), and still more of Ra (1777–1857), show distinct traces of the influence, direc indirect, of the ideas that led the nation to victory, and a 1870—with the unification of the several States and exchequer getting more and more ample—led further t unparalleled activity, and transformed Germany into a v thurgistic and taut organization for much good ultimately, untold ill.

The last fifty years have witnessed a stupendous e all over Germany, and architecture, with its cognate and sciences, has well kept pace with the general deve ment. It is easy to argue that German architects o allow their deeply-rooted metaphysical mind too n play in the designing of their public buildings, and to poke fun at their absurd love of the "kolossal," and t attempts to embody a mystical idea in a heavy, ruth and inarticulate heap of granite and stucco, with unc carving and uncouth groups of sculpture. All this is and probably true criticism; but criticism, to be of v should go further and acknowledge the ableness, fea ness, and—let us say the word—downright beauty of r contemporary German architecture.

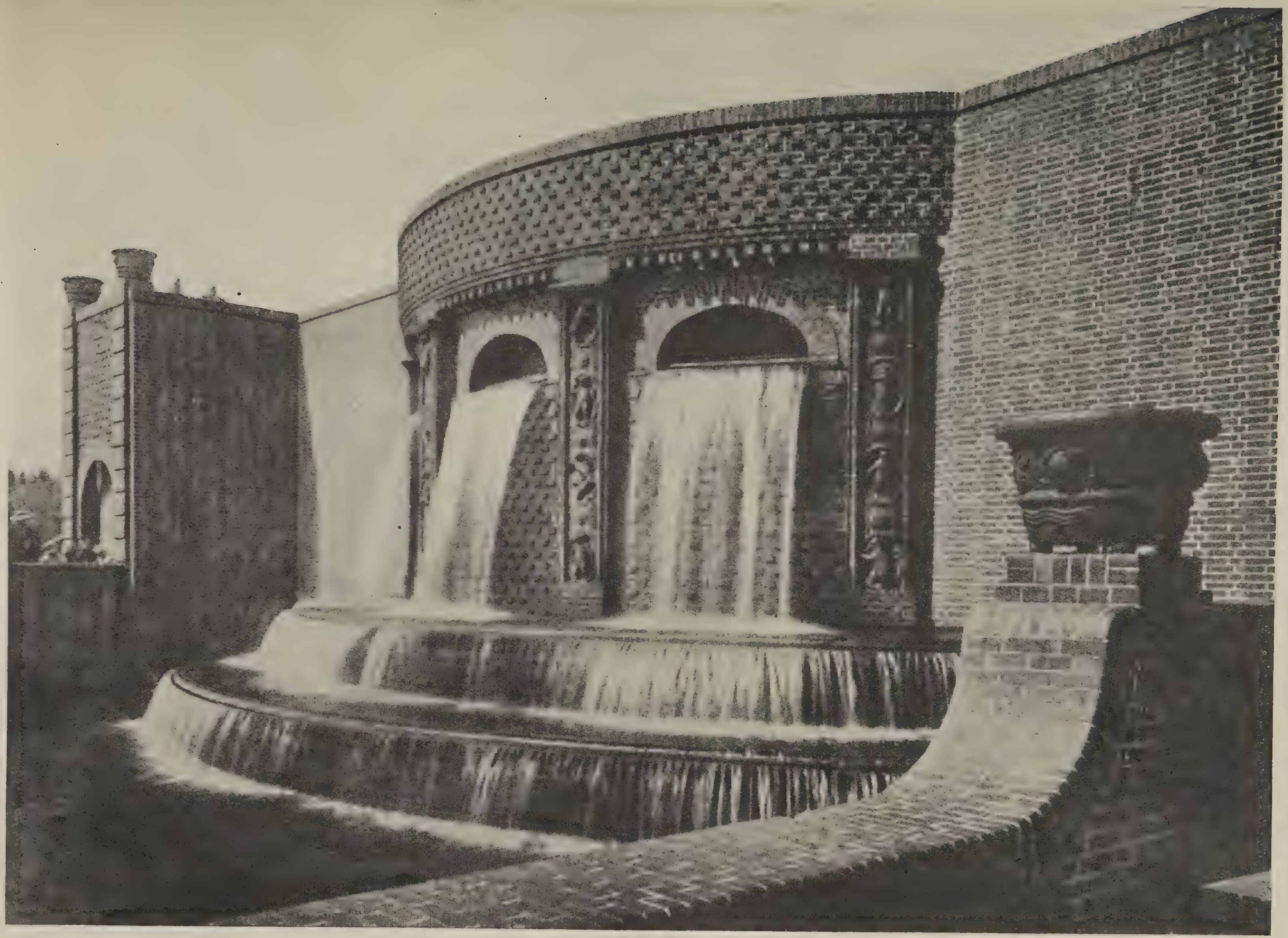
A very good point in favour of German architects— their clients (especially the vast organizations and

---

* In Saxony, mention must be made of the Palace at Torgau, with its magnificent staircase, and the Royal Palace at Dresden. In Silesia, the castles of Brieg and Liegnitz. But these were mainly erected by foreign architects.

† See the house of the Kaufleute Compagnie, at Lübeck.

Fritz Schumacher, Architect



This fountain, built of brick and with the water falling like an apron or a broad scarf, is decidedly arresting. Perhaps the material renders the fountain a little strange, but time will give the softness which it now lacks.

THE LIBRARY
OF THE
UNIVERSITY OF ILLINOIS

unicipal authorities)—is that once they are convinced of e desirability of having a really large and costly scheme arried out, with all the help of town planning, or of the test industrial invention, they go ahead with it for all ey are worth. That is why commercial, industrial, and mmunal architecture has made so much progress lately, d why, in the matter of housing schemes, so near to our es, therefore so important to improve and make economic- y and æsthetically sound, really splendid ventures have en carried out. In most large German towns are to be und offices, shops, and flats which, from the point of view planning and external appearance, are a notable and rious contribution. The same vigour and thoroughness applied to the designing and erecting of schools, hospitals, meteries, baths, and railway stations. New theatres ve also sprung up, especially during the last fifteen years, ich in some cases embody entirely new principles. And stly, beside certain ways of planning worthy of our atten- n, and beside a certain happiness in massing their façades, rman architects and their collaborators have also much show with their handling of materials. Stucco, glass, and saic, iron and woodwork are put to very ingenious and easant uses at times, and that also should be given close tention. Most modern buildings show something of the t. It would, of course, be impossible to describe even a v of them in so short a space, but the following list, show- where and by whom these large and modern buildings re erected, should prove of service. Perhaps in no other untry, even taking into account the U.S.A., are such orts made towards planning new types of building and signing elevations more in accordance with "expressing" th the purpose of the edifice and the spirit of the age in ich it is evolved. This "expressionist" idea, borne in hot or volatile a head, carries obvious pitfalls—and ofs of this are fairly abundant in Germany! A great al is merely put down on paper, and we must add that it just as well with a fair proportion of them, but still, side giving off monstrosities, so self-conscious and precipitated, they do, here and there, show very original potent minds. This, together with the various exhibi- ns that seem to grow under the slightest provocation over re, is worth looking up. A short list is therefore given the last exhibitions, with the names of reviews in which y have been illustrated. A further list, necessarily in- nplete, but still adequate, dealing with all the phases of rman architecture is also appended. These can be ained through the usual channels.

DERN SHOPS AND OFFICES CHIEFLY IN BERLIN.

chbank Offices throughout Germany, by Dr. Phil. Nitze, of Berlin.
adenumbau" Auction Sale Offices, Hamburg, by C. Winand.
p, "Lodholz," Freiburg i. Br., by Rudolph Schmid.
tinental Telegraph Offices, Berlin, by Hans Jessen.
ps, Jacob and Braunfish, Berlin-Zehlendorf, by Friedrich Blume.
nens-Schuckert Werke, Berlin-Siemensstadt, by Friedrich Blume.
ig. Wilk" Shops, Berlin, by Em. J. Margold.
s am Zentrum, Berlin, by Liepe and Gerres.
Vertheim Stores, Berlin, by Eugen Schmoll.
Vertheim Stores, Berlin, by Alfred Messel.
hbein and Mendel Offices, Berlin, by H. Bernoulli and L. Rinkel.
rich Jordan, Berlin, by Cremes and Wolffenstein.
häftshaus, Berlin, by Oskar Kaufmann.
Stores, Berlin, by Bernhard Sehring.
nz Offices, Berlin, by Bod. Ebhardt.
lstern Offices, Schöneberg, by Paul Mebes.
tsche Bank, Berlin, by Hans Jessen.
bau Ullstein, Berlin, by Gustav Hart.
mechanik und Elektrotechnik Co., Berlin, by Hans Hermann.
ch Insurance Offices, Berlin, by H. Wolf.
perhaus, Hamburg, by Fritz Höger.
ziger Insurance Offices, Berlin, by H. Wolf.

INDUSTRIAL AND COMMERCIAL BUILDINGS IN NORTH GERMANY.

Hochpannungsfabrik der A. E. G., Berlin, by Peter Behrens.
Das Gewerbehaus, Hamburg, by Fritz Schumacher.
Chemische Fabrik, Lubau bei Posen, by Hans Poelzig.
Kraftwerk Golpa, Zschornewitz bei Bitterfeld, by W. Klingenberg and W. Issel.
Nationale Automobil-Gesellschaft, Oberschöneweide, by Peter Behrens.
Fahrzengfabrik, Dittmann, Berlin-Wittenau, by Bruno Buch.
Elfenbeinbleicherei, F. E. Schlick, Berlin-Adlershof, by Bruno Buch.
Filmindustrieanlage, Literaria, Berlin-Tempelhof, by Bruno Buch.
Silo Works, Erfurt, by M. Brockert.
Perfume and Soap-Fabrik, Berlin, by Paul Jatzow.
Power Station, Wilmersdorf, by H. Liepe.
Automobil Halle, Berlin, by Alf. Richter.
Sarotti Chocolate Workshops and Offices, Berlin-Tempelhof, by Hermann Dernburg.
Grossstation Nauen der Gesellschaft für drahtlose Telegraphie, Nikolassee, by Hermann Muthesius.

RECENT HOUSING SCHEMES IN NORTH GERMANY.

Wohnkolonie Düneberg, Hamburg, by K. Siebold.
Siedlung Plane, Brandenburg, by Paul Schmitthenner.
Reutengutsiedlung Goldschmieden, Neukirch, near Breslau, by Ernst May.
Siedlung der Allgemeinen Elektrizitäts-Gesellschaft, Berlin, by Peter Behrens.
Kolonie Oheimgrube der Hohenlohewerke A.G. in Kattowitz, by Bruno Taut.
Wohnhausgruppe (in Niedershönhausen), at Berlin-Pankow, by Paul Mebes.
Siedlung Staaken, near Spandau, a large scheme by various architects.
Städtische-Behelfssiedlung, in Hannover-Leinhausen, by Paul Wolf.
Wohnungskolonie Zeche-Sachsen, Hamm i. W., by Alfred Fisher.
Genesungsheim in Buch, Berlin, a huge scheme by Ludwig Hoffmann.
Städtische Kleinhaussiedlung, Hannover-Laatzen, by Paul Wolf.
Waldsiedlung, Lichtenberg, by Peter Behrens.
Siedlung Cöpenick, Cöpenick, by Kinzer.
Siedlung Lichtenrade, Berlin, by Hans Jessen.
Gartenstadt Zehlendorf, near Berlin, by Paul Mebes.
Gartenvorstadt Falkenberg, Berlin, by Bruno Paul.
Baugruppe, Woelck Promenade, Weissensee, by James Bühring.
Siedelung der Mitteldeutschen Reichswerke, Berlin, large scheme by various architects.
Stadterweiterung, Potsdam, by H. Kaiser.

TOWN PLANNING SCHEMES.

Karlsruhe, Bahnhofsplatz, by W. Vittali.
Charlottenburg, Waldhaus, by Heinrich Seeling.

RECENT LARGE CHURCHES IN NORTH GERMANY, CHIEFLY BERLIN.

Hoffungskirche, Berlin-Paukow, by Walter Koeppen.
Johanniskirche, Berlin-Lichterfelde, by Otto Kuhlmann.
Katholische Kirche, Berlin-Friedenau, by C. Kühn.
Kaiser Wilhelm Kirche, Berlin, by Prof. Schwechten and E. Pfannschmidt.
Kirche in Cadinen, by Arthur Kickton.
Erlöserkirche, Homburg, by Prof. Schwechten and Hermann Schaper.
(For long and well-illustrated article on Berlin churches see Vol. 19 of the "Berliner Architekturwelt," pp. 270 to 328.)

RECENT MUSEUMS AND THEATRES IN NORTH GERMANY.

Langenbeck-Virchow-Haus, Berlin, by Hermann Dernburg.
Haus der Volksbühne, Berlin, by Oskar Kaufmann.
Jahrhunderthalle, Breslau, by Max Berg.
Grosses Schauspielhaus, Berlin, by Hans Poelzig.
Herzogliches Museum, Coburg, by Rudolph Zahn.
Stadttheater, Bremenhaven, by Oskar Kaufmann.

UNIVERSITIES AND SCHOOLS IN NORTH GERMANY.

Kunstgewerbeschule, Hamburg, by Fritz Schumacher.
Technischen Stadtslehraustalten, Bergedorf, by Fritz Schumacher.
Parkshule (Gymnasium) Tempelhof, Berlin, by F. Bräuning.
Lyceum, Berlin, by F. Bräuning.
Höhere Mädchenschule in Greifswalder Strasse, Berlin, by Ludwig Hoffmann.
Pflichtfortbildungschule in Grünthaler Strasse, Berlin, by Ludwig Hoffmann.
Gemeindedoppelschule und Hilfsschule, Zellestrasse, Berlin, by Ludwig Hoffmann.
Schulbautengruppe an der Antonstrasse, Berlin, by Ludwig Hoffmann.
Höhere Webeschule, Warshauer Platz, Berlin, by Ludwig Hoffmann.
Kirschner-Oberrealschule, Zwinglistrasse, Berlin, by Ludwig Hoffmann.
Knabenschule, Siedlung Staaken, Spandau, huge scheme by Paul Schmitthenner.
Universitätsgebäude, Jena, by Theodor Fisher.
Baugewerkeschule an der Kurfürstenstrasse, Berlin, by Ludwig Hoffmann.
Lyzeum, Berlin-Lankwitz, by H. Freymüller.
Realschule, Hamburg, by Fritz Schumacher.
Schule in Lichtenrade, near Berlin, by Hans Jessen.

VARIOUS RECENT BUILDINGS IN NORTH GERMANY.

Lotsenhaus Rowing Club, Hamburg, by Fritz Schumacher.
Stadthalle, Kassell, by Humme and Rothe.
Stadthalle, Hannover, by Schöler and Paul Bonatz.
Völkerschlachtdenkmal, Leipzig.
Befreundshalle, Kelheim.
Bridge at Borsigsteg, Berlin.
Police Station, Berlin, by Paul Graef.
Konigl. Amtsgericht Offices, Berlin-Weissensee, by Ministry of Labour.
State Hospital, Berlin-Lichtenberg, by Stadtbaurat Uhlig.
Cemetery Sudwest-Friedhof, Stahnsdorf, by Mohr and Weidner.
Union-Palast Cinema, Berlin, by Neutwich and Simon.
Bridge at Bellevue, Berlin, by Bruno Möhring.
Scheme for the whole street in the Hedemannstrasse, Berlin, by Heilmann and Littmann.
Bridge Hindenburg, Berlin, by Krause and Cremer.
Railway Station, Lichterfelde-Ost, by the Eisenbahn-Direktion.
Ministry of Land Offices, Berlin, by Thoemer and Mönnich.
Rathaus, Charlottenburg, by Heinrich Seeling.
Hospital, Charlottenburg, by Heinrich Seeling.
Water Tower, Berlin-West-end, by Heinrich Seeling.
Two Water Towers, Hamburg, by Hans Poelzig.
Castle at Janitzow, by Heinr. Larsen.
Post Office, Berlin, Dorotheenstrasse, by Lempp.
Funerary Monument at Erfurt, by Hans Walter. (An example of "Expressionismus.")

WELL-KNOWN GERMAN ARCHITECTS WHOSE WORKS SHOULD BE STUDIED.

Hans Poelzig.
Fritz Schumacher.
Hans Philipp.
Hermann Dernburg.
German Bertelmeyer.
Paul Bonatz.
Albin Müller.
Heinrich Straumer.
Peter Behrens.
Bernard Sehring.
Heinrich Seeling.
Bruno Paul.
Paul Meber.
Em. J. Margold.
Bruno Schneidereit.
F. E. Grimm.
Emil Fahrenkamp.
Paul Zucker.
Walter Würzback.
Bruno Buch.

RECENT EXHIBITIONS IN GERMANY WITH STRONG ARCHITECTURAL SETTINGS AND BUILDINGS.

München, 1908.
Breslau, 1913.
Grosse Berliner Kunstaustellung, Berlin, 1914.
Werkbund-Austellung, Cologne, 1914.
Darmstädter-Austellung, 1914.
Düsseldorf, 1915.
Grosse Berliner Kunstaustellung, Berlin, 1921.
See also German section at Rome Exhibition, 1911, and St. Louis Exhibition, 1920.

GERMAN ARCHITECTURAL MAGAZINES.

"Der Städtebau" (monthly). Publisher: Ernst Wasmutl Berlin 8 (20th year).
"Berliner Architekturwelt" (monthly). Publisher: Ernst Wa muth, Berlin 8 (25th year).
*"Wasmuths Monatshefte für Baukunst." Publisher: Ern Wasmuth, Berlin 8 (7th year).
*"Deutsche Kunst und Dekoration" (monthly). Publishe Alex. Koch, Darmstadt (26th year).
"Das Kuns blatt" (monthly). Publisher: Gustav Kiepe heuer, Potsdam (3rd year).
"Moderne Bauformen" (monthly). Publisher: Julius Ho mann, Stuttgart (22nd year).
*"Zeitschrift für Bauwesen," by the Prussian Ministry Finance (fortnightly) (73rd year).
N.B.—Those marked with an asterisk are the most comple and profusely illustrated.

LIST OF GERMAN BOOKS (ALL CONTAINING NUME OUS PHOTOGRAPHS) DEALING WITH GERMA ARCHITECTURE GENERALLY.

Modern.

"Das Kleinwohnhaus der Neuzeit," by E. Haenel and Tscharmann. (Publisher: J. J. Weber, Leipzig, 1913.)
"Kleinwohnhaus-Bauten und Siedlungen," by Georg Metz dorf. (Alex. Koch, Darmstadt, 1920.)
"Deutsche Baukunst" (in three languages). 2 vols. (K Langewiesche, Konigstein in Jaunus, 1920.)
"Die Schöne Wohnung," by Hermann Müttesius. (F. Bru mann, Munich, 1922.)
"Deutsche Stadtbaukunst in der Vergangenheit," by A. Brinckmann. (Frankfurter-Verlags-Anstalt A-G., 1921
"Scönhe Brunnen in Deutschland," by Werner Lind (E. Wasmuth, Berlin, 1920.)
"Die Auflösung der Städte," by Bruno Paul. (Folkw Verlag, Hagen i. W., 1920.) (Metaphysical, Ethical, Utopian Essays in Architecture.)

Historical.

"Deutsche Dome des Mittelalters," by Wilhelm Pinder. (K Langewiesche, Königstein in Taunus, 1921.)
"Deutsche Burgen und feste Schösser," by Wilhelm Pin (K. R. Langewiesche, Königstein in Taunus, 1921.)
"Deutscher Barock," by Wilhelm Pinder. (K. R. La wiesche, Königstein in Taunus, 1921.)
"Die Kunst der Barockzeit und des Rokoko," by Max Sem (Paul Neff, Esslingen a. N., 1914.)
"Vom Geist des Barock," by Wilhelm Hausenstein. (R. & Co., Münich, 1921.)
"Der Renaissance in Deutschland," by Wilhelm Li (Paul Neff, Esslingen a. N., 1914.)
"Sächsischen Plastik der Spät Renaissance und Barok-Z by B. Haendcke. (E. Haendcke, Dresden, 1903.)
"Deutsche Wohn-und Festräume aus 16th Yahrhunder by C. H. Baer. (Julius Hoffmann, Stuttgart, 1912.)
"Das Deutsche Rathaus im Mittelalter," by O. Stiehl. (Seemann, Leipzig, 1905.)
"Die Glasmalerei," by G. Heinersdorff. (Bruno Cas Berlin, 1914.)

BOOKS DEALING MORE ESPECIALLY WITH NO GERMANY.

"Norddeutsche Backsteingotik," by H. Much. (G. W mann, Braunschweig, 1919.)
"Braunschweig, Hildesheim, und der Harz," by Ernst (Kunstwissenschaft, Berlin.)
"Aus stillen Städten der Mark Brandenburg," by L Brieger. (Kunstwissenschaft, Berlin, 1919.)
"Alt-Schlesien," by Richard Konwiarz. (Julius Hoff Stuttgart, 1919.)
"Schlasische Rathäuser," by L. Burgemeister. (Hoffmann, Stuttgart, 1903.)
"Ein Rundgang in Bildern durch das alte und neue B 1920. (Publisher: Kunstgewissenschaft, Berlin.)
"Potsdam mit den Königlichen Schlössern und Gärten," (Publisher: Kunstgewissenschaft, Berlin.)
'Alte Möbel und Raumkunst aus Norddeutschland," by Schöpp. (Al. Schöpp, Elberfeld, 1921.)

[*The previous articles in this series appeared in our iss March* 21, *June* 13, *and July* 11.]

The Ministry of Pensions Offices, Acton

J. G. WEST, M.B.E., Architect (H.M. Office of Works)

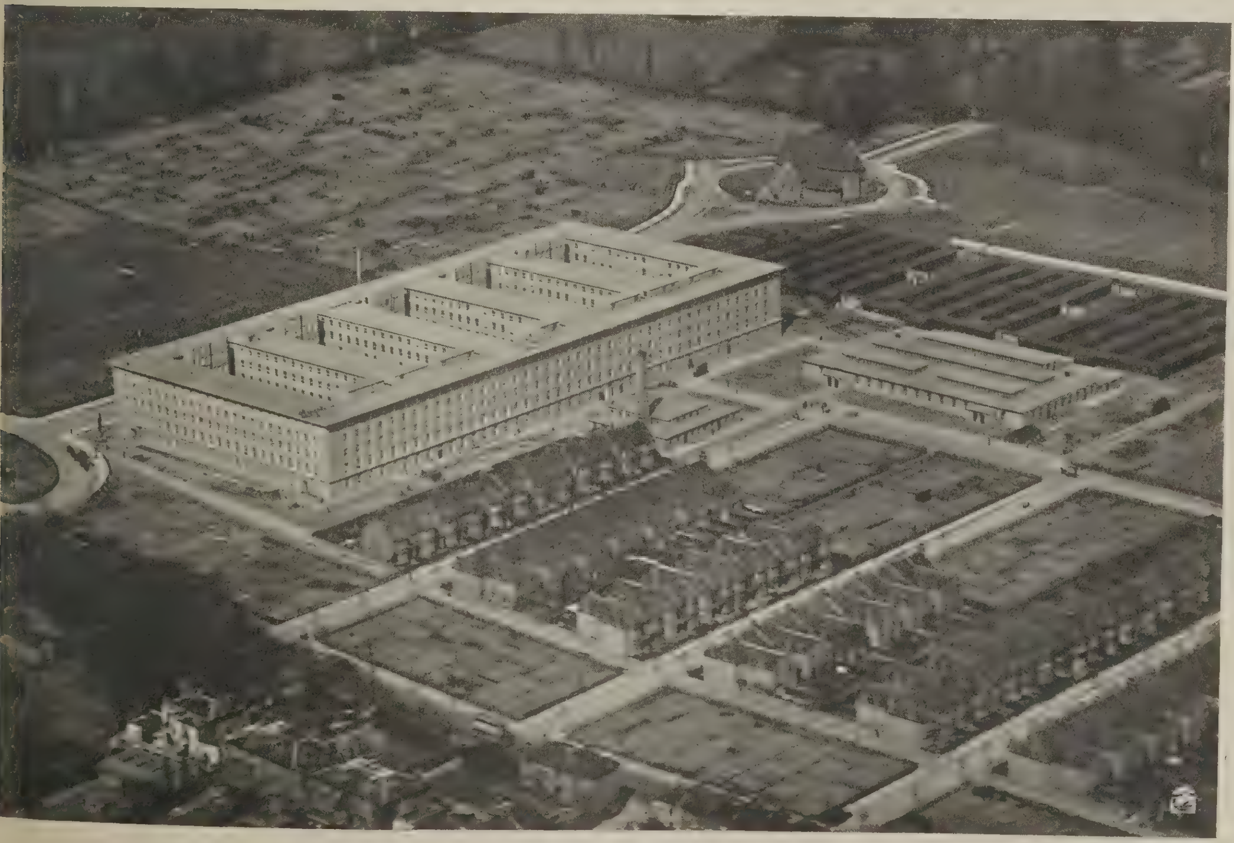
THIS building has been erected on a large open corner site at Acton to provide accommodation for 6,000 officials of the Ministry of Pensions. It is generally regarded as one of the finest examples straightforward planning and design in the country, as most successful solution of a difficult problem—the prosion of a large amount of accommodation at a comparaely small cost—and as a notable experiment in concrete ock construction. Externally the building relies for effect the emphasis given to the doorways, on the bold use of rusticated base, quoins, string courses, frieze, and corce, and on the rhythmical spacing of the windows. nerally speaking, the building is unbroken from end to d except for the entrance porches.

In designing the building the chief problem confronting architect, Mr. J. G. West, M.B.E., architect to H.M. fice of Works, was that of housing the large number of icials of the Ministry at a minimum cost, and this has en accomplished by the erection of a big rectangular, el-framed structure. It is a five-story building, 540 ft. g by 240 ft. wide, providing on each floor accommodation 1,200 persons. In plan it takes the form of two long, rowly designed units, one front and one back, joined by pavilions, placed 100 ft. centre to centre, and lighted five internal courts or areas; the staircases and lavatory cks on each floor being gathered together at the end of courtyards.

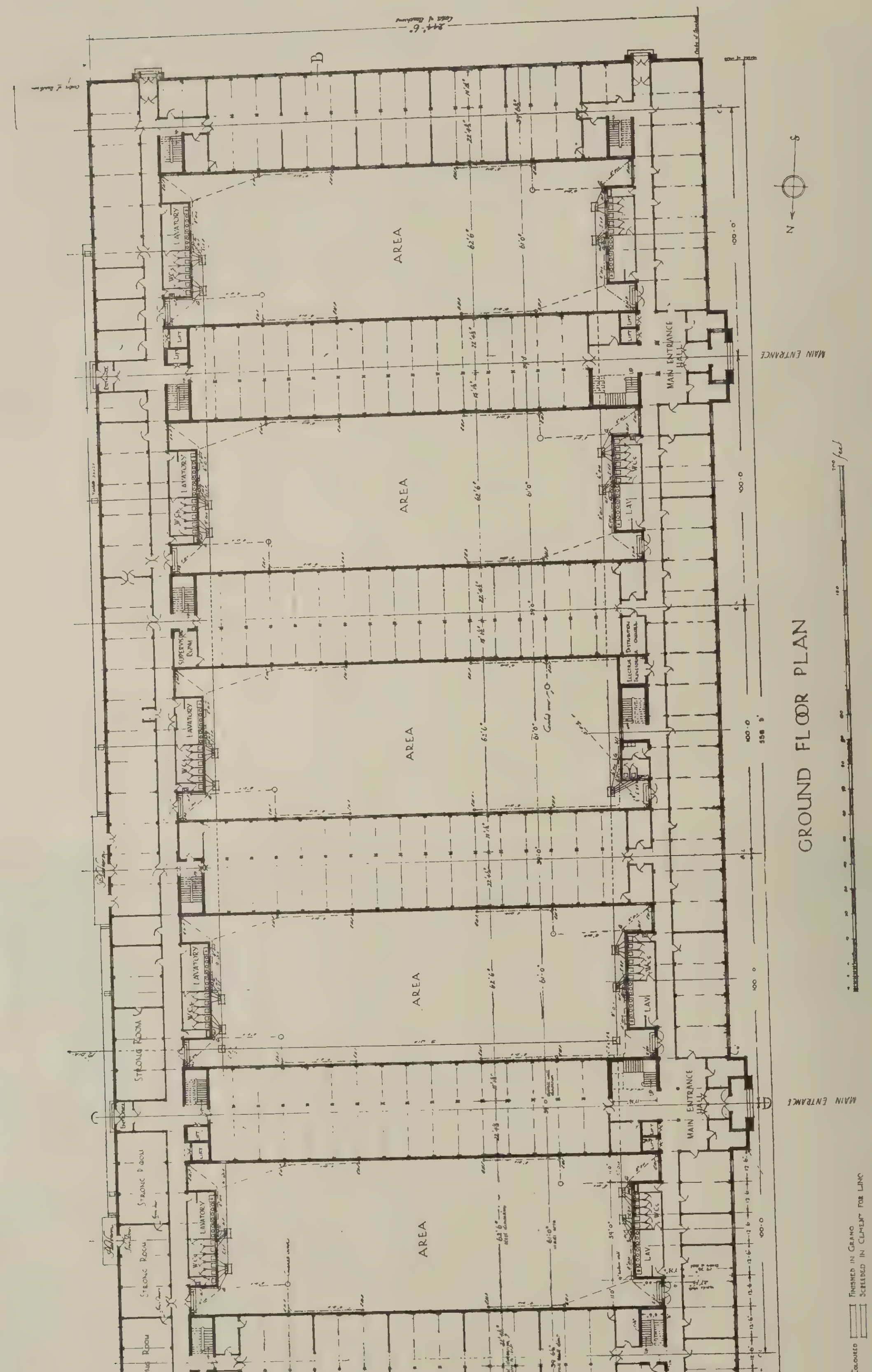
The walls have a total thickness of 9 in., and are comsed of two thicknesses of concrete blocks, held together galvanized iron ties. The outer wall is 4½ in. thick, the er one 2¼ in. thick, and there is a cavity in between of in. At the top and the bottom the walls are of the same ckness. In the case of enclosing walls of the staircases l lift-wells brick has been used.

All the steelwork and reinforced concrete was specially designed by Mr. A. E. Marshall, M.C.I., of the Structural Engineering Department of H.M. Office of Works. Over 2,000 tons of steelwork have been used. The stanchion loads are carried to the clay subsoil by mass concrete foundations of a minimum thickness to carry two tons per square foot, and the sides of the concrete footings to the stanchions are of truncated pyramid shape. Above the first-floor level all the walls are carried by the steel frame, the stanchions of which are embedded in concrete below ground level. In fact, the concrete block covering is independent on each floor. On each of the upper floors the external stanchions are connected by a channel section and parallel beam, which also acts as reinforcement to a continuous concrete lintel carrying the walls. The outer wall of concrete blocks is flush with the flange of the stanchions, and the inner walls abut on the webs of the stanchions, being held in position by a concrete filleting in the spaces formed on each side of the stanchions. The floors and the roof, which take their bearings on the top flanges of the steel beams, are designed as continuous slabs, the top steel being inserted in the slabs for a short distance only, and a larger allowance being made for the bending moment in the centre of the slabs. It has been found, as the result of tests, that this arrangement is perfectly satisfactory. All the interior steelwork has been left exposed, and painted to suit the decorative scheme. All compounds, bent pieces, and stiffened seating brackets have been eliminated, and all the steelwork was riveted in the shops, and with the exception of the stanchion splices, which are hand-riveted, the remainder was bolted on the site.

For the floors hollow reinforced concrete and hollow bricks have been used. They are finished with a cement floating, with a granolithic finish in the corridor, landings,



AN AERIAL VIEW



THE MINISTRY OF PENSIONS OFFICES, ACTON: GROUND FLOOR PLAN.

View showing the Main Front

J. G. West, M.B.E., Architect (H.M. Office of Works)

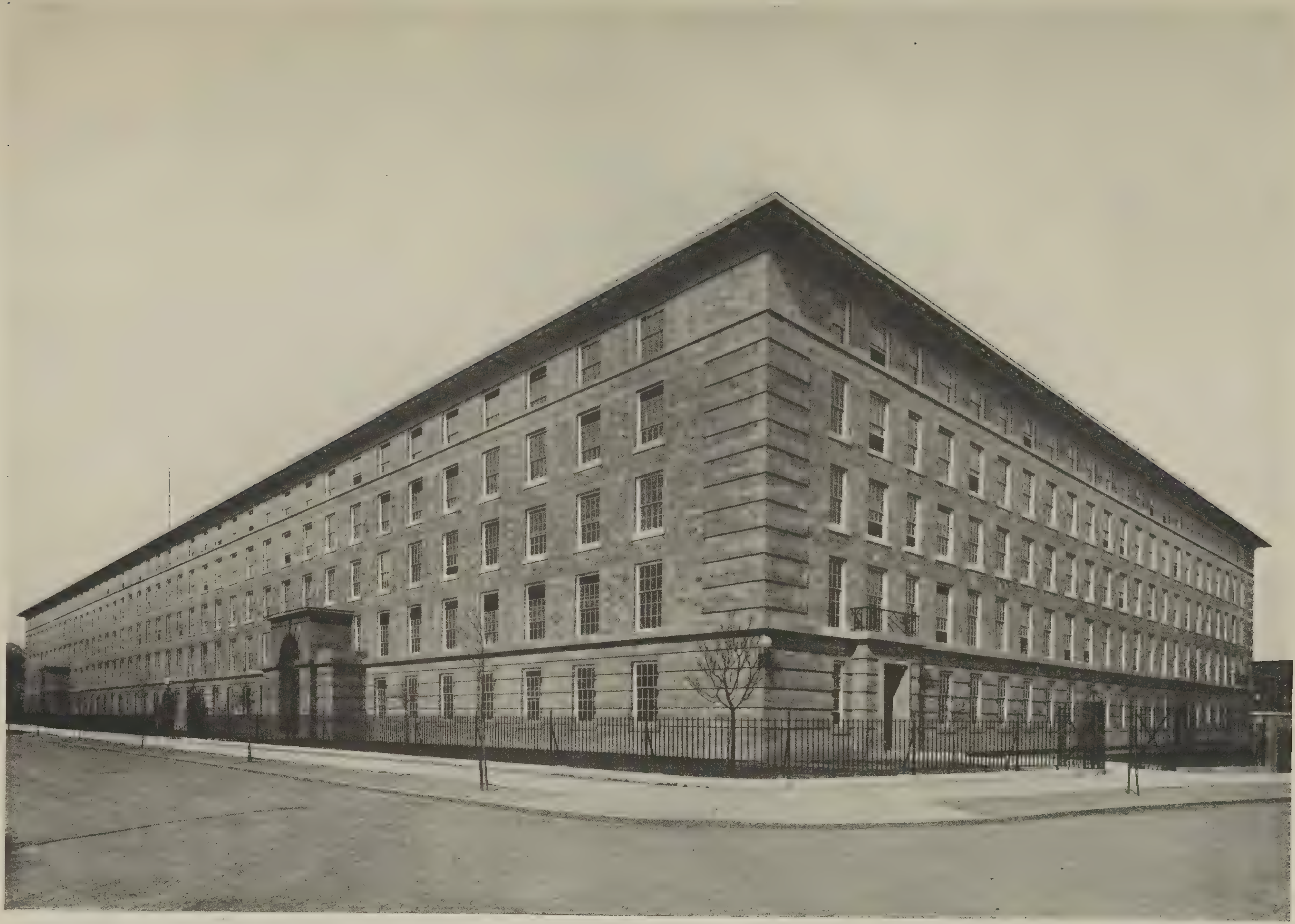


Photo: Bedford Lemere.

The simplicity that can invest a building with the dignity of a palace may be noted here. Every line of it is straightforward. There is no palpable attempt at beautification, and yet something fine has been achieved.

THE LIBRARY
OF THE
UNIVERSITY OF ILLINOIS

the Main Façade

J. G. West, M.B.E., Architect (H.M. Office or Works)

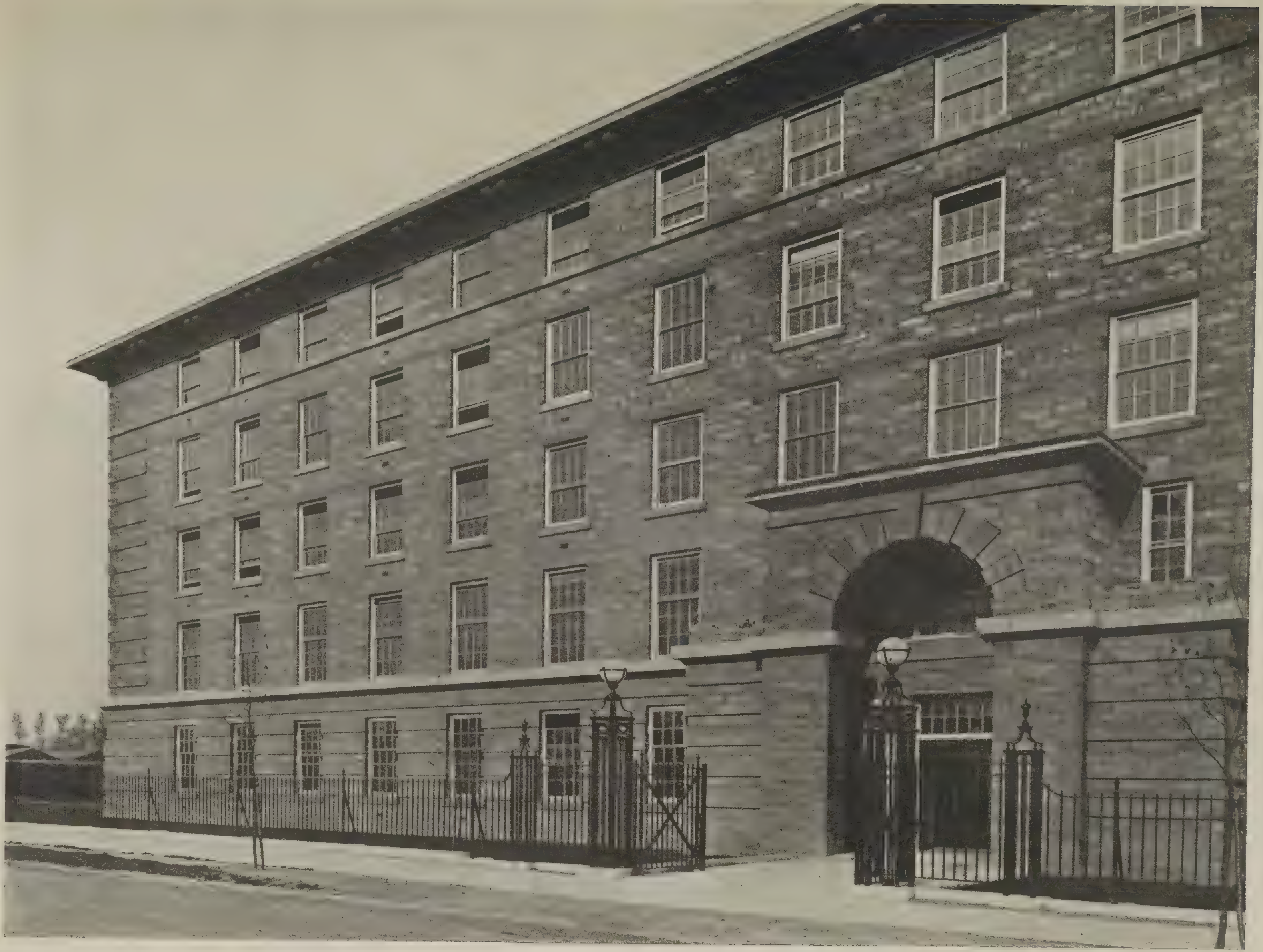
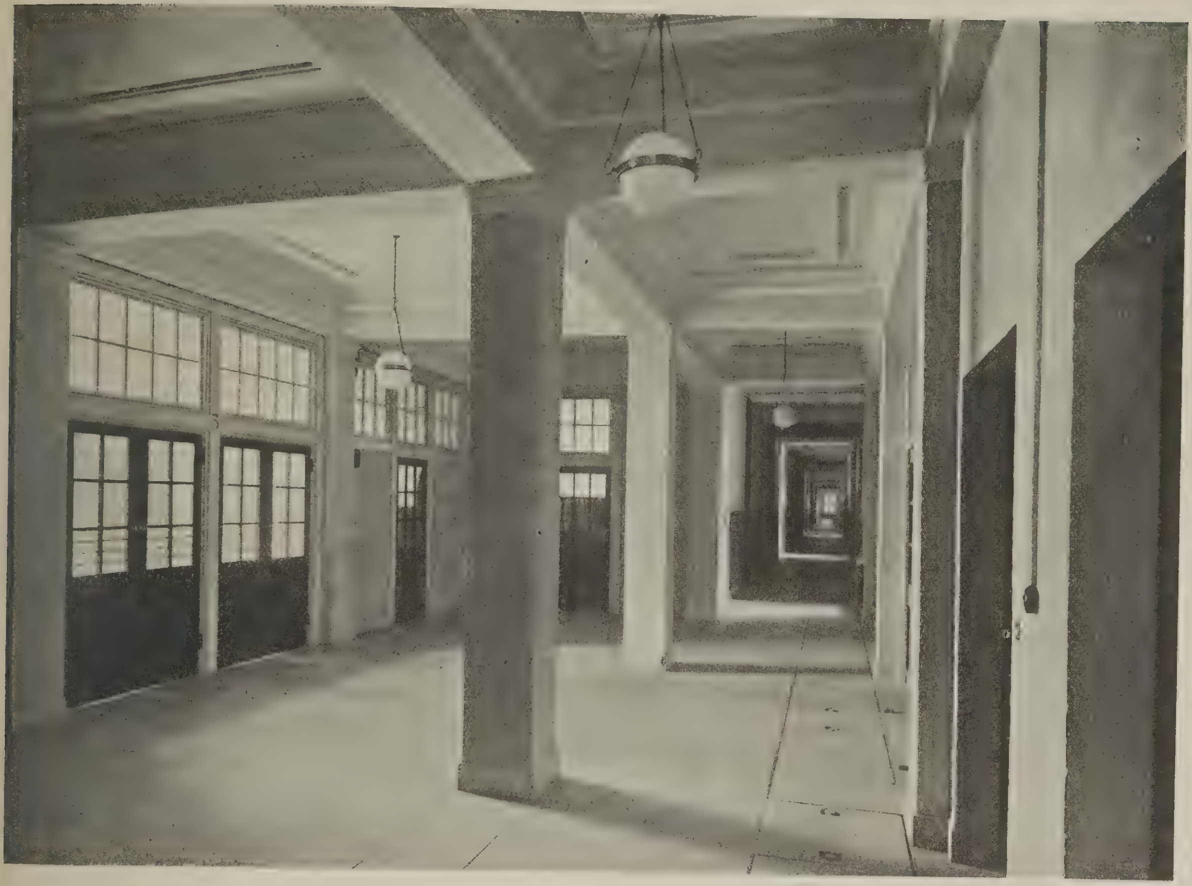


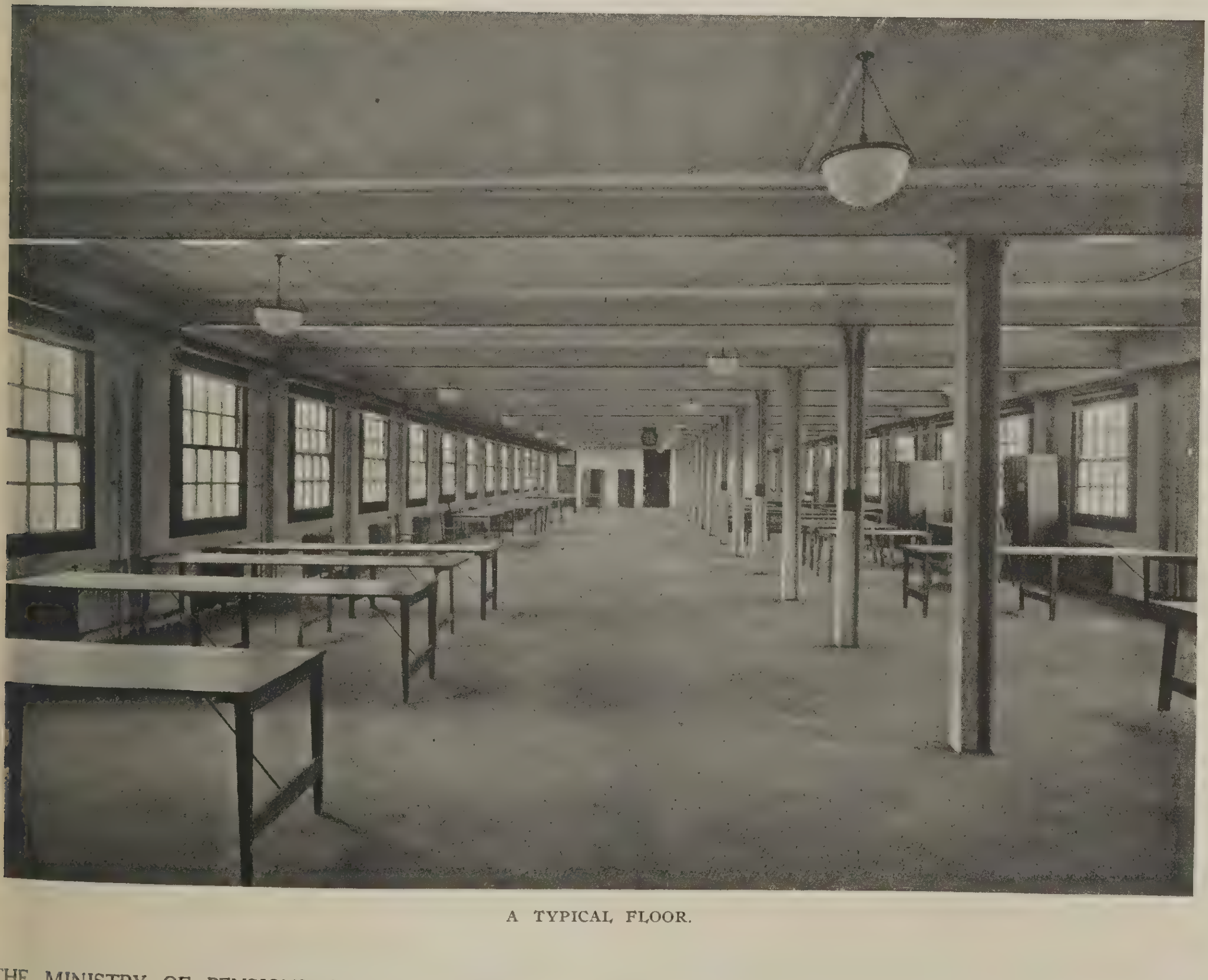
Photo: Bedford Lemere.

In the main front of the building there are two entrances. They are the only features that break the monastic severity of the elevation.

THE LIBRARY
OF THE
UNIVERSITY OF ILLINOIS



THE ENTRANCE HALL.



A TYPICAL FLOOR.

THE MINISTRY OF PENSIONS OFFICES, ACTON. J. G. WEST, M.B.E., ARCHITECT (H.M. OFFICE OF WORKS).

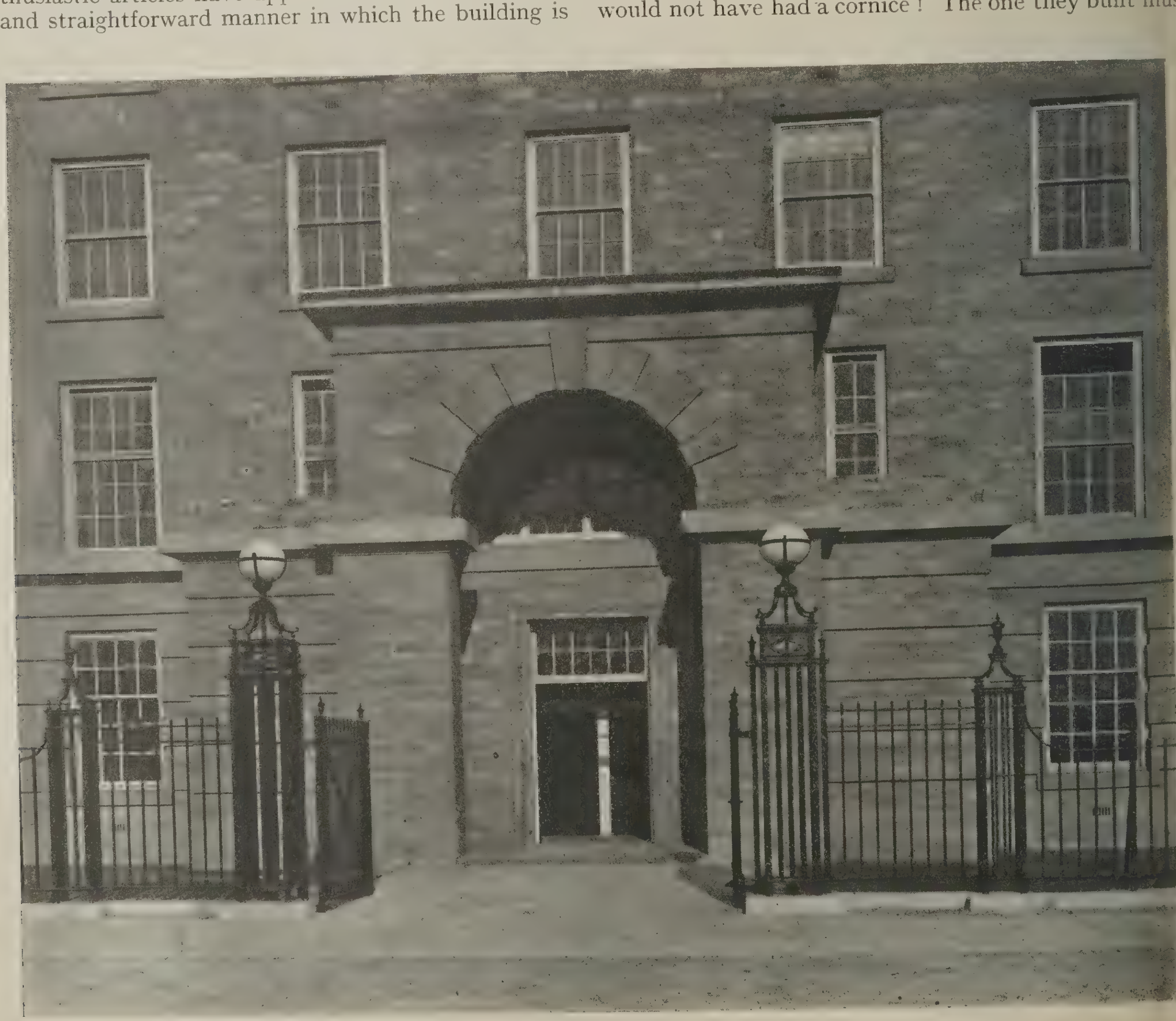
and lobbies. The stairs are of a cantilever type, built into the walls, and are of reinforced concrete with granolithic finish; and the landings and door lintels were cast in situ.

Along the main façade of the building the windows are spaced at a distance apart of 12 ft. 6 in. centre to centre, and along the sides at 10 ft. They are all of equal size, and have wide white sashes and glazing bars. In planning the building particular attention was given to the lighting and ventilation.

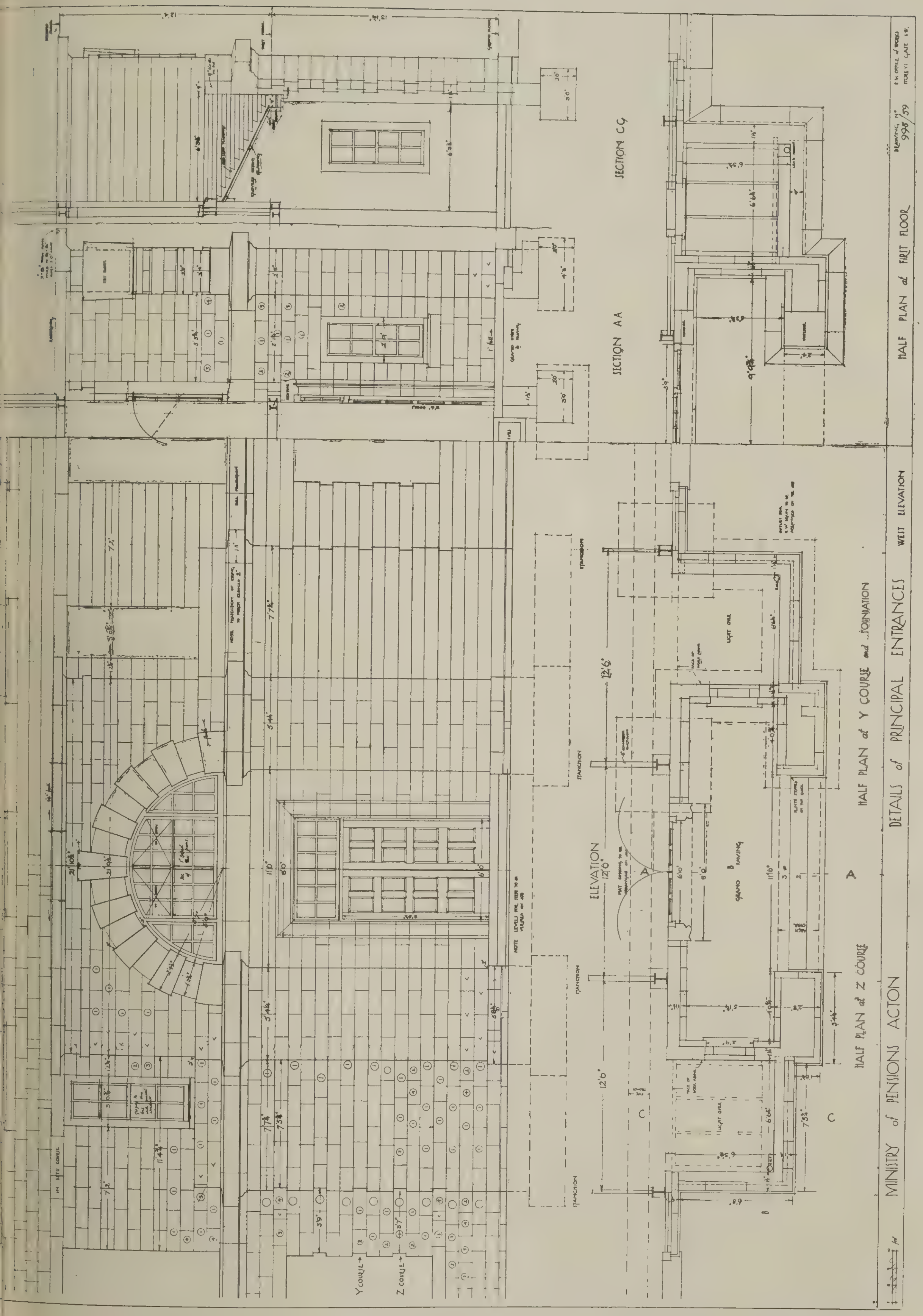
The cornice projects 4 ft. over the front of the building, and the long straight runs at the sides are composed of specially cast hollow reinforced cantilevers, which are anchored to a solid reinforced concrete beam. The beam spans the main steel roof beams at their junctions with the front stanchions, and forms the bed of the cornice. The cornice slabs are designed to carry their loads independently of the modillions, which are only reinforced to provide against accidental stresses. At the end bays and corners of the building the cornice is built homogeneous with the main beams. Expansion and contraction are provided for by "free" joints at certain places in the walls, floors, roof, string courses, and cornice.

Building operations began shortly after the close of the war, and the building, which is regarded as a semi-permanent structure, is calculated to last forty years. In construction and design there is throughout one idea, to build well, easily, and economically. At the back of the main structure is a separate one-story building containing a dining-hall for 2,000 persons and kitchens and sculleries. The whole of the work was supervised by Mr. A. L. Barber, Clerk of Works to H.M. Office of Works.

Enthusiastic articles have appeared in the Press on the bold and straightforward manner in which the building is designed. One that has come to our notice is from the p
of Mr. Clennell Wilkinson. Writing in "The Outlook,"
says: "It is a fact that the more we spend upon our buil
ings nowadays the less satisfactory our results appear to b
We plaster our façades with pilasters, and classical orde
with the sole result of making them look vulgarly orna
and compelling the office clerks on the upper stories to cli
upon chairs every time they want to look out of the windo
because if the windows had been placed within a sensi
distance of the floor it would have upset the 'ord
outside. Now skyscrapers have no classical orders. N
has the new building of the Pensions Ministry at Act
This latter is such an extraordinary erection, and is
exactly illustrative of the point I am trying to make, t
it is worth referring to at some length. The architect
there *is* an architect, though, *pace* the Architecture C
he is utterly anonymous, being an official of the Office
Works—was set a straightforward problem: to get
largest number of typists into the smallest possible spa
at the lowest possible cost. That is the kind of problem t
the architect of the future will have to face. This one
cided upon a thing like a soap-box. It is a vast rectan
540 ft. long (one of the longest straight walls in the count
I suppose) by 247 ft. wide. He has contented himself w
five stories in height. The austere exterior is enti
without projections or decorative effects of any kind, exc
for the rustication of the first story, the plain quoins at
corners, and the porches of the two main doors. The w
dows are square holes in the walls. When they got to
top of this remarkable building, they found that it
necessary to impose some kind of a cornice in order
protect it against the weather. Otherwise, of course, t
would not have had a cornice! The one they built mus

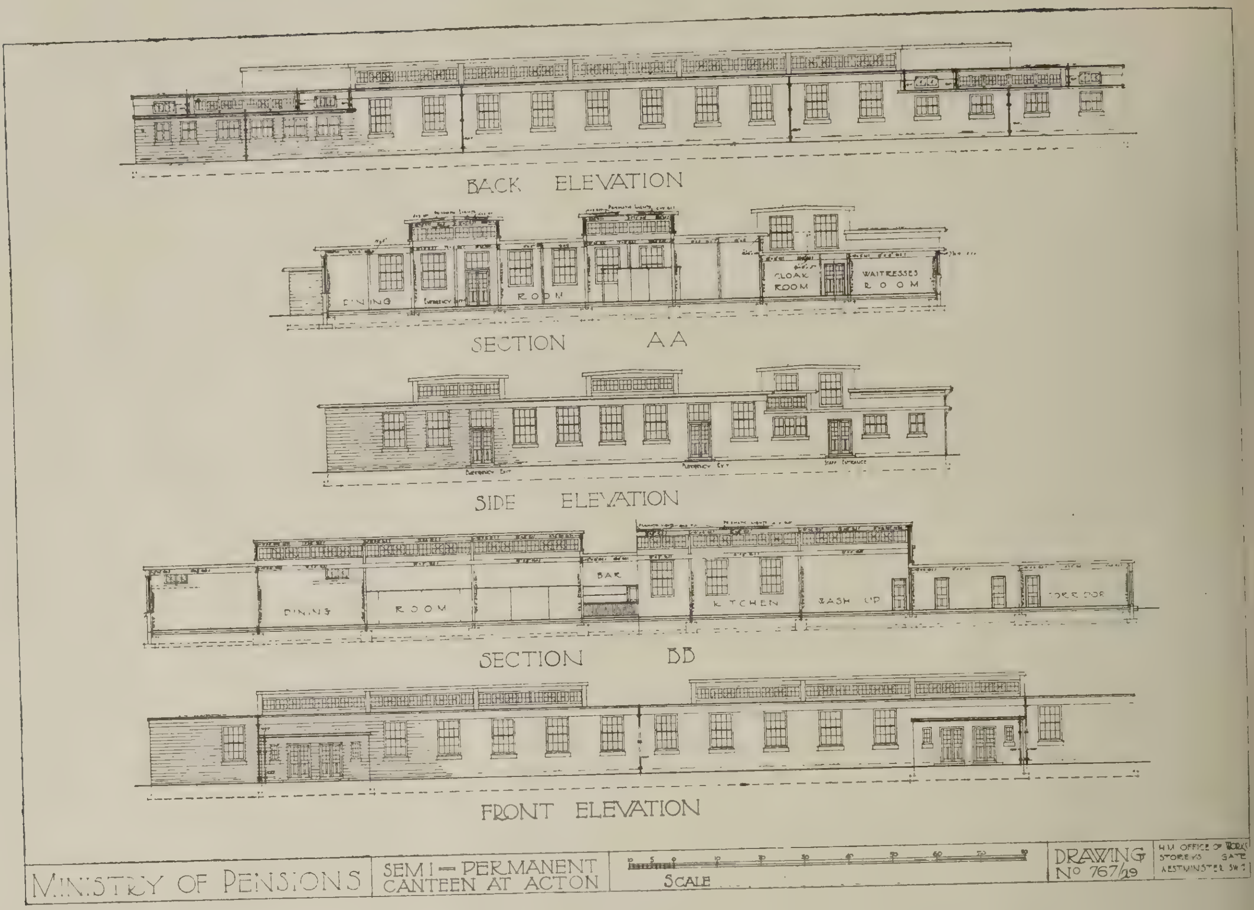


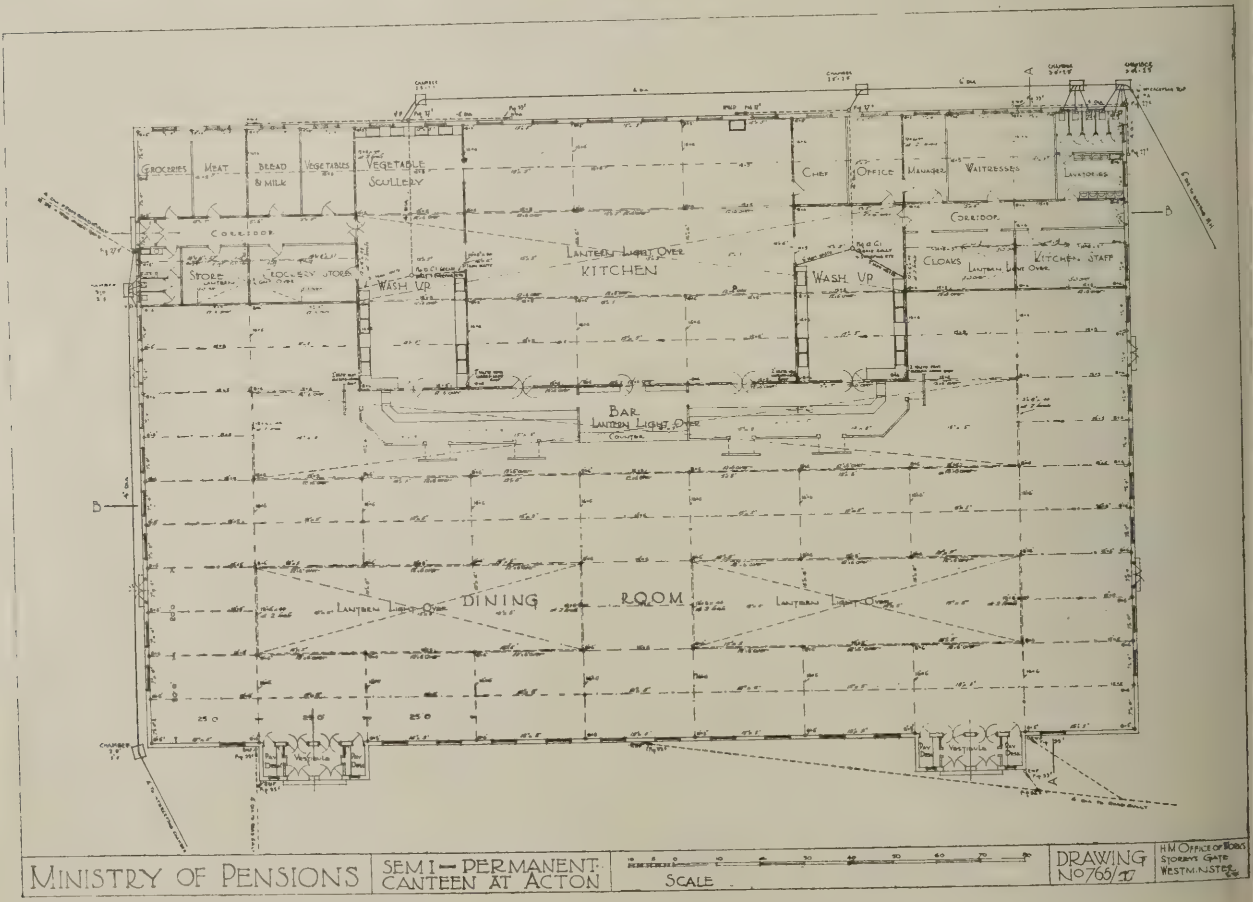
THE MINISTRY OF PENSIONS OFFICES, ACTON: DETAIL OF A MAIN ENTRANCE.
J. G. WEST, M.B.E., ARCHITECT (H.M. OFFICE OF WORKS).



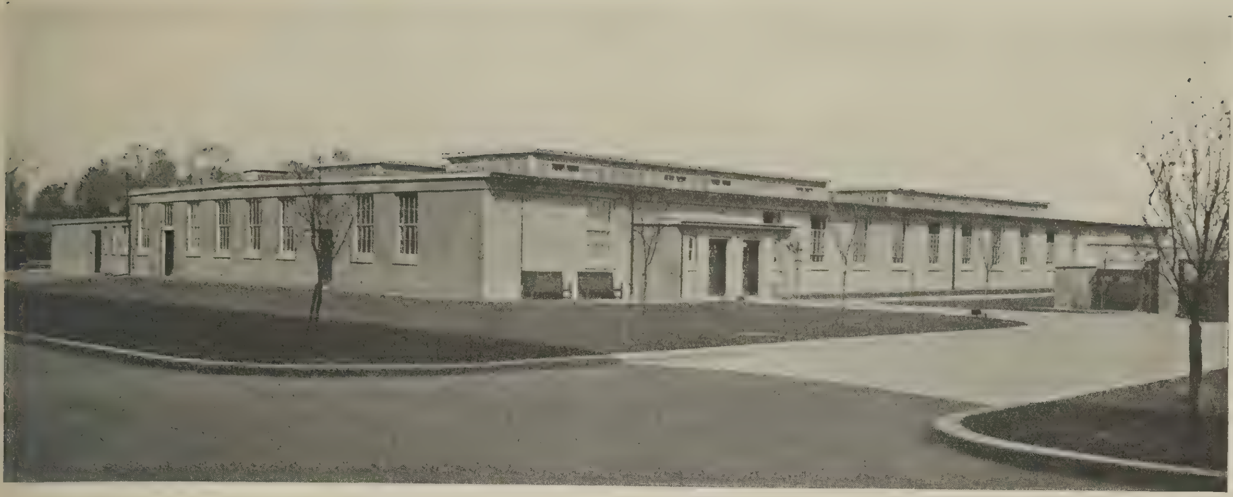
THE MINISTRY OF PENSIONS OFFICES, ACTON: DETAILS OF PRINCIPAL ENTRANCES.

J. G WEST, M.B.E., ARCHITECT (H.M. OFFICE OF WORKS)





THE MINISTRY OF PENSIONS OFFICES, ACTON: THE CANTEEN.
J. G. WEST, M.B.E., ARCHITECT (H.M. OFFICE OF WORKS).



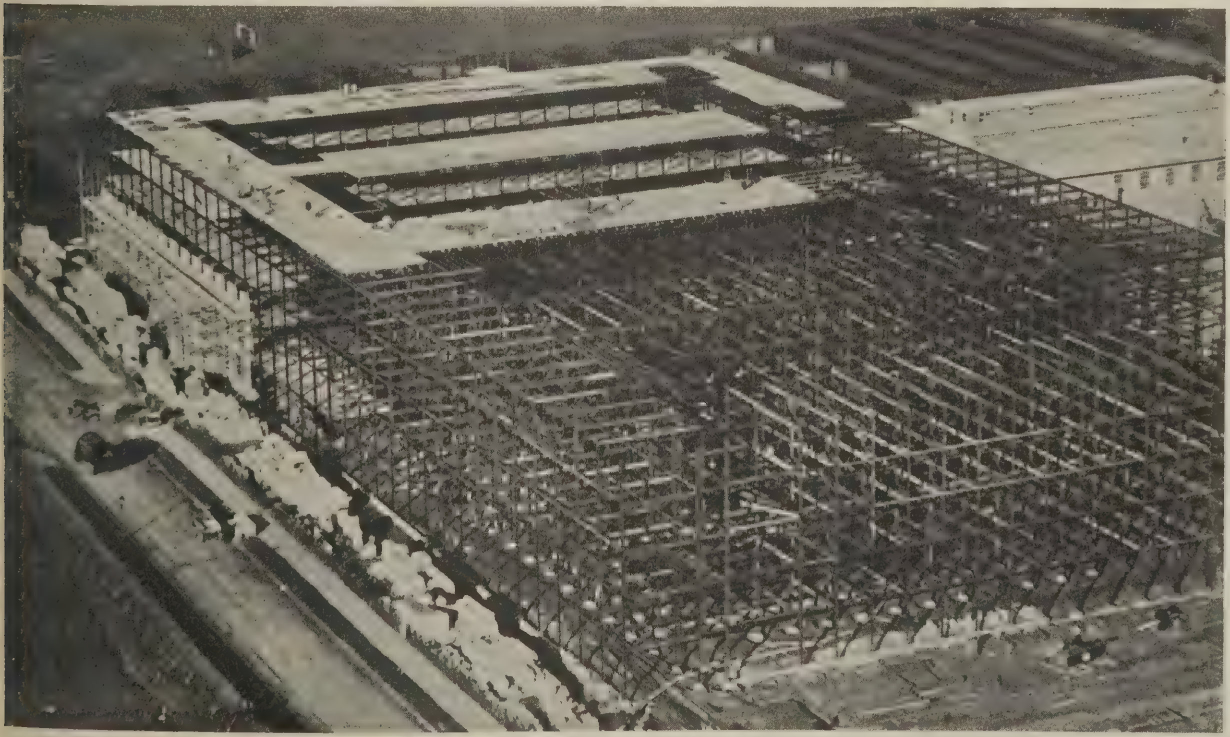
A GENERAL VIEW OF THE CANTEEN.

iique in the history of cornices. It consists merely of a in slab of concrete—I have made it clear that the whole ilding is constructed in concrete ?—projecting 4 ft. from e walls, with another thin slab underneath to support it. nd that, I think, is about all there is to be said about e general appearance of this modern work of architecture, ough in the structural details there are some marvellously genious devices which would have delighted Michael- gelo or Callicrates.

"And the extraordinary fact is that the result is good— finitely, incontrovertibly good. I think almost any archi- ct would agree with me. The complete absence of fussi- ss and pretty-prettiness, the subordination of everything the object in view, the honesty of the building, its utter uthfulness, has an attraction that anyone can see at a ance. I do not say that this is the last word in modern chitecture, or even in the use of concrete as a building aterial, but it does seem to me to indicate the lines upon nich we must proceed, sooner or later, if our architecture to have any future. If we are to talk more about architecture, let us talk about skyscrapers and soap-boxes. Every skyscraper that they build in New York is better than the last one; every soap-box that the Ministry of Pensions puts up in England should be better than the one at Acton. Let them carry on with their soap-boxes!"

* * * * *

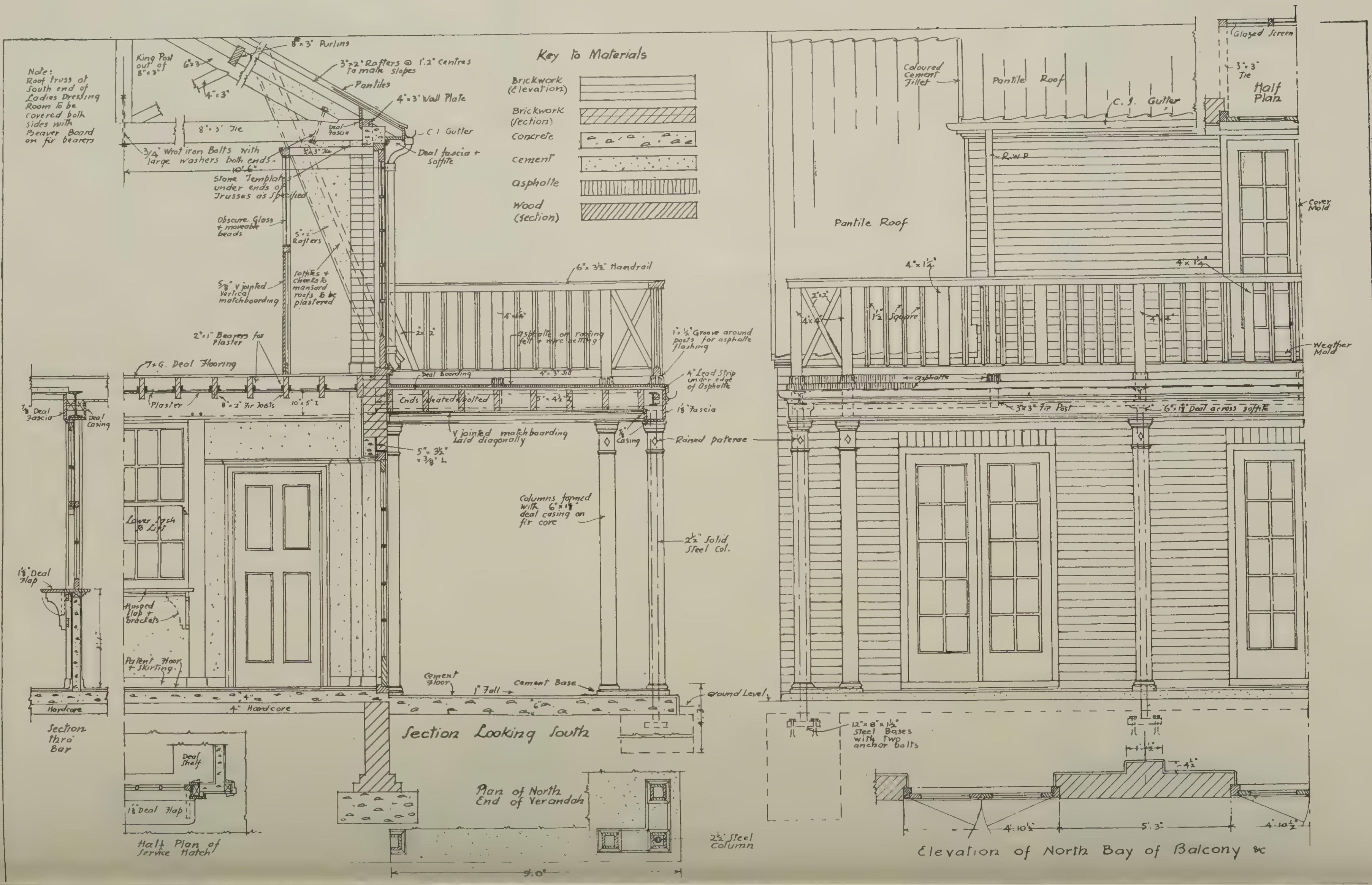
Messrs. Walter Jones and Sons were the main contractors, and the sub-contractors were as follows: Messrs. Dorman, Long and Co., Ltd. (constructional steelwork); Messrs. Stuarts Granolithic Co., Ltd. (granolithic work); The Siegwart Fireproof Floor Co., Ltd. (pre-cast beams); The Kleine Patent Fire-Resisting Syndicate, Ltd., and Messrs. Diespeker and Co., Ltd. (hollow brick roofs); Messrs. Engert and Rolfe (bitumastic roofing material); Messrs. H. J. Cash & Co., Ltd., and Messrs. B. Finch & Co., Ltd. (heating and sanitary installations). The Alpha Manufacturing Co. (electric lighting). The whole of the external blocks for the building were made at Frampton on "Winget" machines.

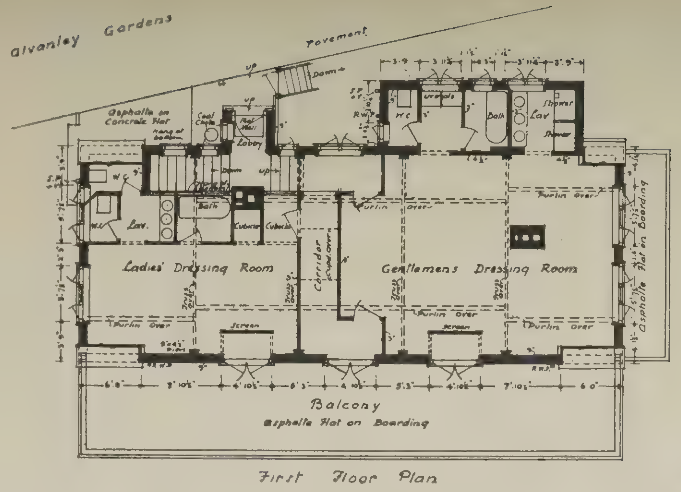


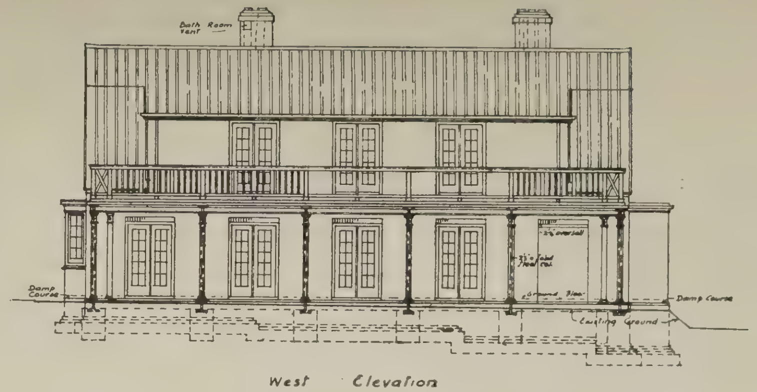
THE MINISTRY OF PENSIONS OFFICES, ACTON: AN AERIAL VIEW DURING CONSTRUCTION.
J. G. WEST, M.B.E., ARCHITECT (H.M. OFFICE OF WORKS).

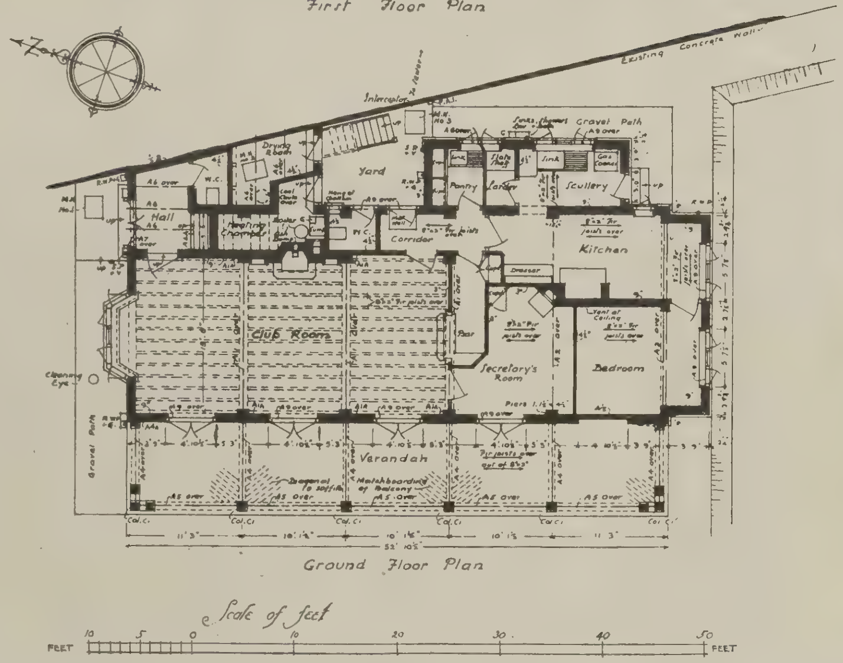
Architects' Working Drawings. 65.—The Cumberland Lawn Tennis Club Pavilion, Hampstead

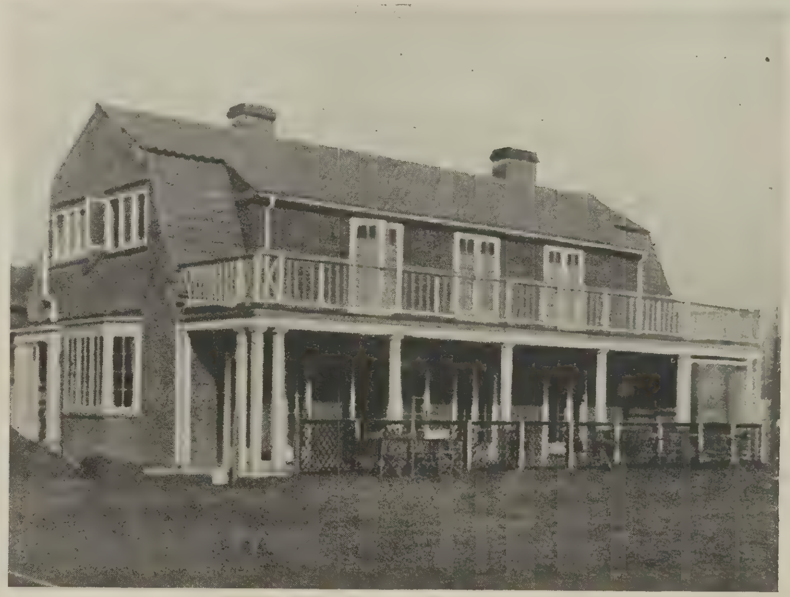
W. Scotter Owen, M.A., A.R.I.B.A., Architect





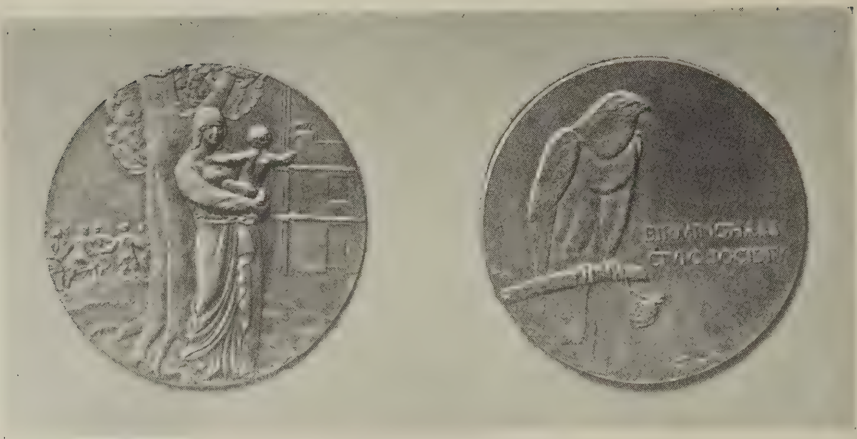






W. Scotter Owen Archt
Architect

This pavilion has recently been completed at Alvanley Gardens, Hampstead. It was designed to provide the amenities required in a modern lawn tennis club. The accommodation includes a large club room, a card room, changing rooms and lockers, and living quarters for a married steward. The site was restricted, and the level of the road necessitated the main entrance to the pavilion being between the ground and first-floor levels. The building is of brick with a steel-framed balcony. Steel joists support the wood floors.



THE GOLD MEDAL OF THE BIRMINGHAM CIVIC SOCIETY.
Designed by Arthur J. Gaskin.

Birmingham Civic Society and its Latest Medallist

IN electing Mr. W. H. Bidlake, M.A., F.R.I.B.A., as Gold Medallist for 1923, the Birmingham Civic Society has this year emphasized the value of architecture in urban amenity, as last year it distinguished drama, and the year before, music. The terms in which the award is made are set forth in the annual report of the Society just issued, and are significant; for while due prominence is given to the quality of Mr. Bidlake's executed designs, special stress is placed upon "the inspiration of his teaching, and the generous encouragement and guidance which he has given without stint to the younger generation of architects"; in which "inspiration" the Society sees tl chief grounds for an award made each year in recognitic of meritorious services towards the amenities of city life.

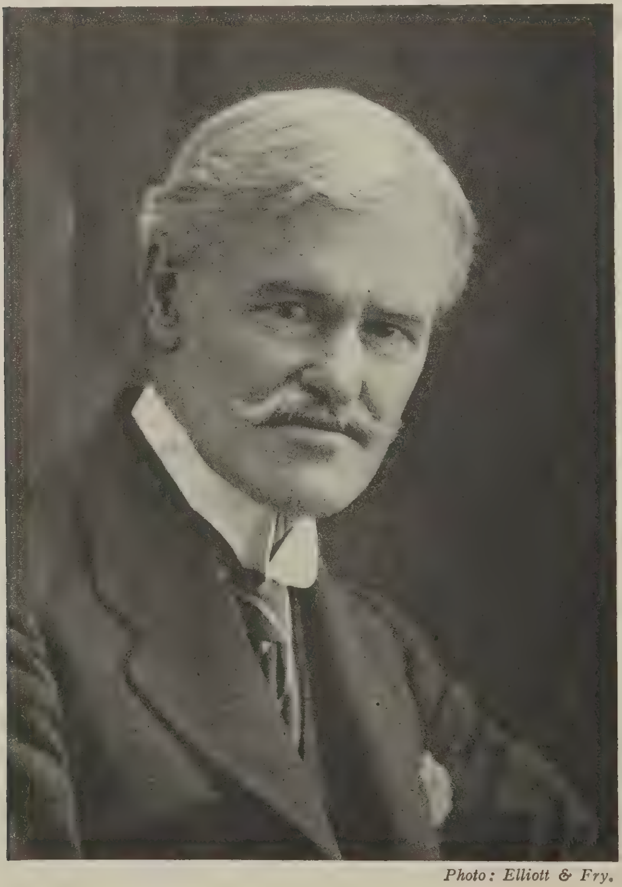


Photo: Elliott & Fry.

MR. W. H. BIDLAKE, M.A., F.R.I.B.A.
Birmingham Civic Society's Gold Medallist for 1923.

Just as Mr. Barry Jackson was awarded the civic med for work at the Repertory Theatre which was distinguish by the public spirit of its performance, so Mr. Bidlake claim to similar recognition rests upon something mo than merit in his strictly professional output, and is four in the wide influence for good of a rare personality.

Mr. Bidlake has not only given close personal attenti to an extensive practice during the past thirty years, bu at the same time, he has controlled architectural educati in Birmingham with an ability and success for which thc who have been trained by him cannot be sufficiently grat ful. Few men have so generous a measure of knowled combined with the still more important capacity of cc veying it pleasantly to others; no man has been able bet to transform hard work into high adventure; and the ci which benefits by the service of such men does the mer obvious thing in giving to them such recognition as is ma possible by an award of this character.

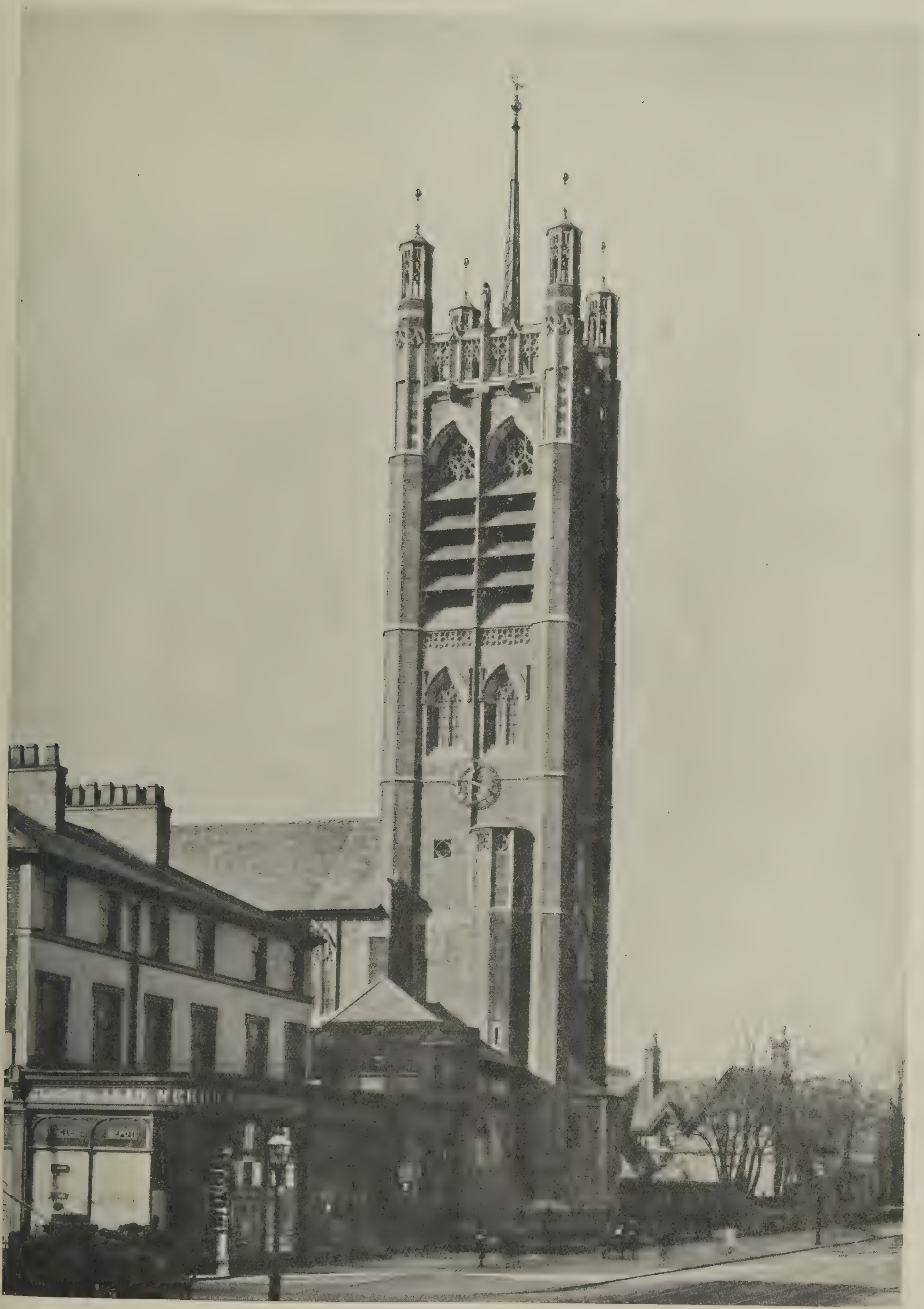
Mr. Bidlake was born in Wolverhampton; is a M.A. Christ College, Cambridge; studied domestic architect with Colonel Edis, and ecclesiastical architecture w Messrs. Bodley and Garner, with whom he worked up the first competition for Liverpool Cathedral. In 1885 won the Pugin studentship; and in 1890 commenced pr tice in Birmingham.

His executed work is chiefly ecclesiastical and domest of which the following list gives the more import examples: St. Agatha's Church, Latimer Memorial Chur St. Stephen's Church, St. Andrew's Church, St. Oswal Church, and Handsworth Cemetery Chapel, Birmingha Emanuel Church, Wylde Green; Designs for Winni Cathedral (not yet built); The Knoll, Leicester; Additi to St. Catherine's Court, Somersetshire; and many hou in and around Birmingham.

All his work is distinguished by ripe scholarship great refinement of detail, but by common consent *chef d'œuvre* is the Church of St. Agatha, with its no tower, of which it may be said—as of another architect jewel—that the road on which it stands resolves itself i two parts—before seeing it, and afterwards when think about it.

* * * * *

The medal shows on the obverse a mother and her cl standing against an oak tree, which signifies that Ar eternally reborn in its immemorial association with nat



ST. AGATHA'S CHURCH, BIRMINGHAM.

W. H. BIDLAKE, F.R.I.B.A., ARCHITECT.

THE DELL AT MUNTZ PARK.

The view is towards the stage, and indicates the general character of the scheme.

beauty. The dancing children upon the right represent the spontaneous sense of life and the impulse for its expression which are the soul of Art. The half-raised building on the left reminds us that Art has a direct bearing on practical life, and fulfils its true function, not in mere ornament, but in transmuting to forms of beauty the common needs of humanity. With this ideal, it both suggests and anticipates a happier future. The reverse shows an eagle looking out from a rocky height upon a wide landscape, symbolizing the spiritual discernment of Art.

* * * * *

The general aims of the Birmingham Civic Society are :—

To stimulate historical interest in the city, and to this end to preserve all buildings and monuments of historical worth.

To preserve all objects of beauty, and to maintain a vigilant opposition to all acts of vandalism.

To promote a sense of beauty, and to stimulate civic pride in the domestic and civic life of the citizens by urging the adoption of the highest standards of architecture for domestic buildings, offices, warehouses, factories, etc.

To work for a more beautiful city.

In addition to influencing the work of others, to select suitable projects to be carried out by the Society itself.

The Society seek to carry out these aims by means of newspaper and other propaganda, including exhibitions, lectures, competitions, etc.

In January the Society received a generous contribution of £1,000 from Mr. and Mrs. Barrow Cadbury for "use in the development of the Henbury's Estate or the development of other land under the care of the Civic Society," and allocations from this fund have been made to Muntz Park (£300) and King's Norton Playing Fields (£300). In each case the grant is to be expended in relief of unemployment, and upon work which would not otherwise have been undertaken by the city.

Muntz Park is situated in a locality already thickly populated and rapidly developing; it is small, but has the unusual feature of a large dell in which music, dancing, and games are held. This kind of recreation has been successfully organized for some seasons past by an active committee of the inhabitants, under the chairmanship of Councillor Hart.

The character of the work undertaken by the Civic Society at Muntz Park, on plans prepared by their Technical Committee, approved by the Advisory Art Committee, and accepted by the Parks Department, is fully set forth in the following extract from "The Birmingham Mail" of June 27, 1923 :—

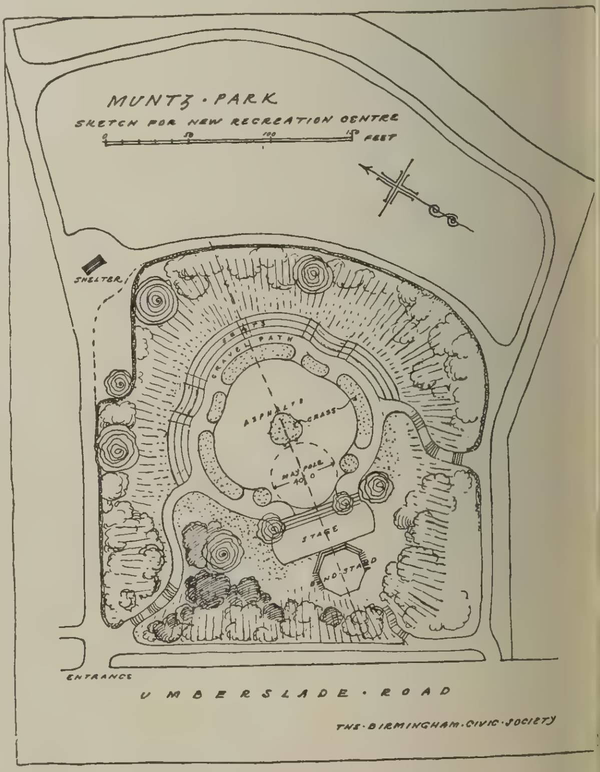
The Dell, in its original state, was obviously unsuitable for the uses to which it was being put by the Bournbrook Committee, and when the needs of the Committee becam known to the Civic Society, a contribution of £300 wa voted by the Society towards the cost of carrying out scheme of improvement, which had for its dual object th æsthetic one of developing the natural beauty of the spo and at the same time providing the local Entertainmen Committee with a most attractive and convenient centr for its praiseworthy activities.

A striking transformation has been wrought in the Del which, while preserving its natural charm of location an contour, has changed it into a delightful open-air amph theatre. In the centre is a paved dancing area, surroundir a large flower bed. Above the narrow grass-covered low slopes is first a footpath and then two rows of rustic seat extending more than half the circle. Beyond these is second broad gravel path, and then the steep banks of tl Dell, which have been planted with shrubs, etc.

All round the Dell are fine, wide-spreading trees, whi provide welcome shade. Facing the middle of the ampl theatre is a raised paved platform, and in front of this the is provision made for erecting a maypole. The platform h a superb setting of trees, and in the background there another dais, with six steps leading to it, which can utilized as a bandstand. Altogether the Muntz Park De when it is completed, will have a most charming sylv setting, and its natural beauty will be enhanced a hundre fold by the changes which have been so cleverly and art tically wrought by those responsible for the scheme. an experiment it will be watched with keen interest.

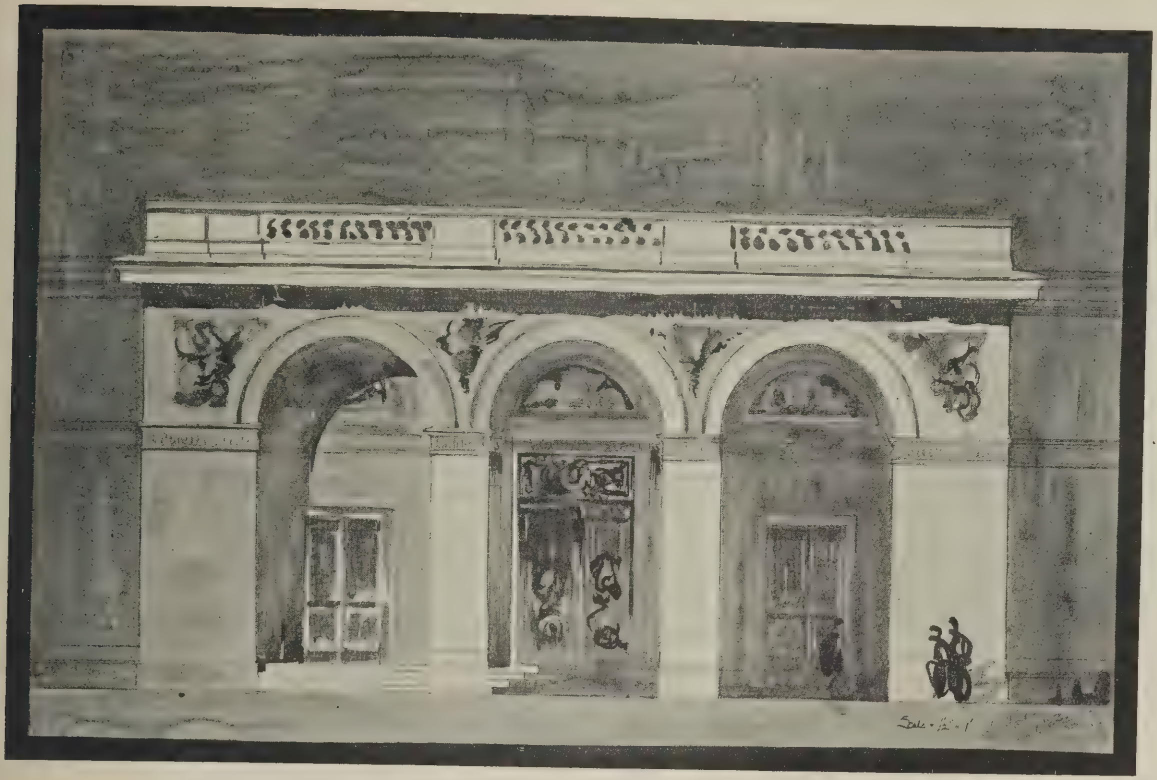
The B.C.S. and Public Telephone Boxes.

From the variety of patterns on which the public te phone boxes in the streets are constructed, it appeared the Birmingham Civic Society that the Telephone Depa ment was not satisfied that the best possible design for purpose had yet been produced. The Council of the Socie feeling that this was a detail upon which they were co petent to advise, authorized the hon. secretary to w upon the director of the Telephone Department with offer of service. Their overtures were readily accept and the Technical Committee has now prepared a des and model which will be submitted in due course to telephone authorities for their consideration.

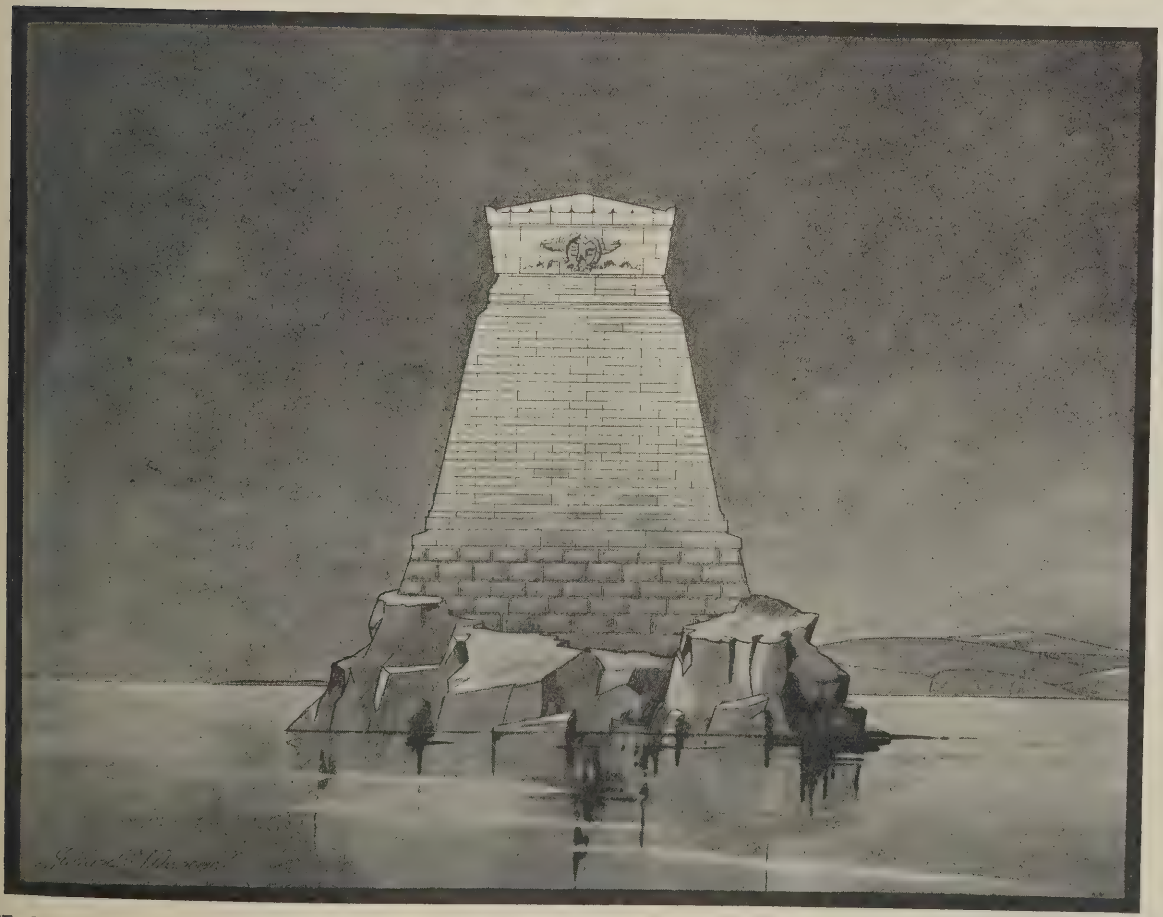


PLAN OF THE NEW RECREATION CENTRE AT MUNTZ PARK.

Students' Work at the School of Architecture, London University.



12-HOUR SKETCH DESIGN. A PORTE COCHÈRE FOR A CITY HOTEL.
BY MISS HARGROVES (4th YEAR STUDENT).



ONE MONTH'S SUBJECT. MEMORIAL TO MEN WHO LOST THEIR LIVES AT THE BATTLE OF JUTLAND.
BY M. NICHOLSON (4th YEAR STUDENT)

Little Things that Matter. XXI—Dangerou Structures

By HARVEY R. SAYER, Assoc.M.Inst.C.E., A.R.I.B.A., F.S.I.

Down Pipes.—Although broken rain-water down pipes can hardly be called "dangerous structures," they have been responsible for much decay in buildings. In one case a broken length of rain-water down pipe allowed the water to soak into the wall, and the wet travelled through and down the wall to the floor timbers. There it set up "wet rot," with the result that all the timber in the house had to be taken out and replaced. Then again, the practice of putting sharp or horizontal bends or "swan necks" in rain-water down pipes should be discouraged. In time an accumulation of dirt lodges in the flat part of the pipe, and chokes up the flow. In the extension of the tube railway at Golders Green, now under construction, the bends inserted in the down pipes from the haunches of the arches carrying the railway could easily have been dispensed with by leaving a chase in the projecting capping to the piers.

Lightning Conductors.—These may become defective after a time through the action of the weather setting up corrosion at the joints. Lightning conductors should be periodically tested electrically to ascertain whether they still convey the lightning from the top to the ground safely, without any fear of damage to the building.

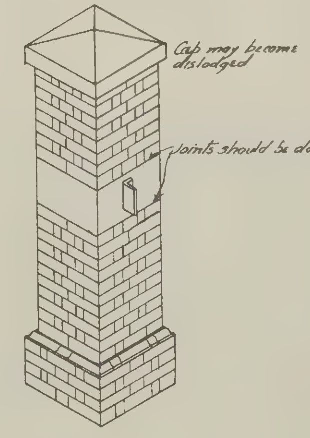


Figure 6.

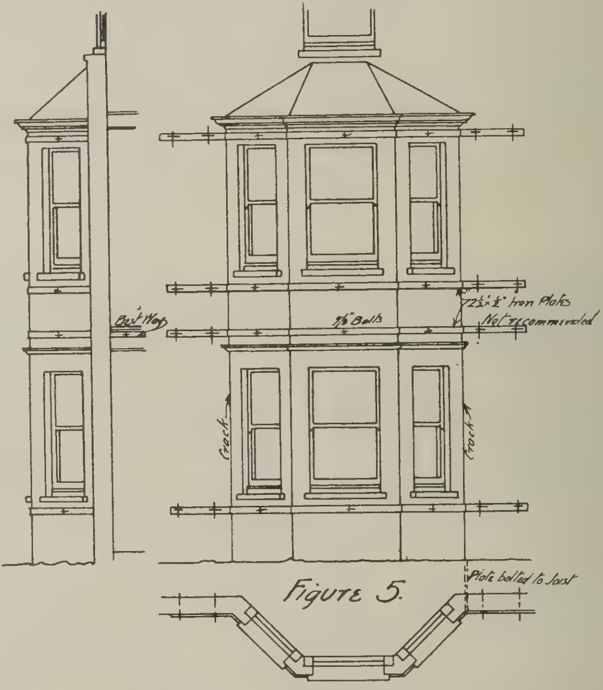


Figure 5.

Overhanging Balconies.—These should always be examined to see whether they will carry any load which may be put upon them. If not, then they should be strutted up from below or removed.

Concrete Roofs.—Flat concrete roofs made with breeze are a source of danger, although it is one of the materials specified in the London Building Acts as a fire-resisting material. Numerous cases have occurred where the breeze concrete roof has expanded, pushing out the walls, some of which have had to be rebuilt.

Secret Gutters.—Secret gutters in roofs are unsatisfactory. They are difficult to construct, and in time of heavy rain they are liable to overflow and set up decay in the roof.

Bulging Walls.—A bulging wall should never occur except in old buildings or after fires. It is then better to take down and rebuild the wall than to attempt to sec it by means of tie-rods. When tie-rods are provided t should be carried through the building to an opposite so wall. The rod should be placed at the level of the f joists wherever possible.

Bay Windows.—Bay windows of old houses o separate from the main walls and show cracks at the j ture down each side. This defect is due usually to se ment caused through the foundations of the bay not b carried down to the same level as the foundation of house. Where the settlement is a bad one, the only rem is to take down the bay completely, to excavate for form a proper solid foundation and to rebuild the When the settlement is not very bad it is sometimes sible to secure the bay from further movement by tyin to the main wall of the house with wrought-iron ba These should be passed round the bay under and a the windows and secured with bolts through the main of the house. When the floor joists run at right-ang the main wall the wrought-iron bands can be passed th the wall at once each side of the bay and secured joists and so get a direct tie. (Fig. 5.)

Boundary Walls.—It is very difficult to state w overhanging boundary wall becomes unsafe. It may hang several inches, yet if the jointing is still sound be quite safe.

Shop Blinds.—The casing of the shop blind very hides defects in the front wall of shop premises. For reason architects when designing shop premises rarel much consideration to the blind box, leaving it to the maker to fix later. Often in fixing his blind box the covers up the sill of the windows on the first floor forming a pocket in which water lodges and soaks in structure.

Gate Piers.—Brick gate piers require special care they are relieved by a band or bands of stone built through the pier. If the bed joint of the stone, bo

bottom, does not contain a strong dowel, then there
iability of the pier being displaced at the joint between
ricks and the stone when the pier is struck by a heavy
le. The stone coping on the top of the pier, which very
overhangs to form a water drip to the pier, is easily
aced by being tampered with. (Fig. 6.)

e Overloading of Buildings.—A building built for a
in purpose, say, as a workshop, may be quite safe in
and for that particular purpose, but when put to
her use, such as a warehouse, it may be overloaded,
me dangerous, and be liable to collapse.

ngerous Structures.—In the County of London anybody
notify the Council, either directly or through the
ict surveyor, that a structure is dangerous. The
cil then instructs the district surveyor to survey and
t upon the structure. Should he report that in his
on it is dangerous, the Council takes action, if necessary,
ng up or hoarding in the structure, and at the same
serves notices on both the owner and the occupier.
his stage the owner should call in an architect who
ld at once survey the structure. Should he agree that
dangerous, he should ask his client to instruct him to
with the matter without further delay.

merous cases could be stated where owners, sometimes
known wealthy companies, neglect to call in an archi-
Instead they instruct a builder to do what is necessary
ake the structure safe, to the satisfaction of the
ict surveyor, thinking thereby that they will save the
of the services of an architect. This is a great mistake, for two reasons. First, it is not the district surveyor's duty to inform a builder how to make a structure safe. The district surveyor, through the Council, has only to see that the structure is forthwith taken down, secured, or repaired as the case requires. Secondly, a builder should only carry out instructions given to him and should not take upon himself the responsibility of deciding how a dangerous structure should be dealt with. Intricate calculations or problems in design may be involved which are the work of the architect. It may also raise questions relating to party structures and result in litigation with adjoining owners.

Should the architect consider that the structure is not dangerous, he should advise his client to give notice in writing to the Council requiring that the subject be referred to arbitration. Should the architect and the district surveyor not be able to agree on the matter within seven days they should submit the case to an independent surveyor, who should have been appointed as arbitrator prior to the discussion of the details of the case between the two.

In London alone about 4,000 cases of dangerous structures are dealt with each year by the London County Council. The procedure is similar in other parts of the country except that in the provinces the local surveyor acts on his own initiative without consulting his council. In the City of London, the City Corporation exercises control. It has exactly the same powers and follows the same routine as the London County Council, but it usually appoints a surveyor in private practice to act on its behalf.

Parliamentary Notes

[BY OUR SPECIAL REPRESENTATIVE.]

The Housing Bill.

le Rent and Mortgage Interest Restrictions Bill has
ved the Royal Assent, as has the Housing (No. 2) Bill.

The Cost of Houses.

. N. Chamberlain, answering Mr. T. Thomson, said
the following statement gave the highest and lowest
ge tender prices for A.3 and B.3 type of houses ap-
ed under the 1919 Assisted Housing Schemes for
us periods were :—

Period.	Highest Price.		Lowest Price.	
	A.3 type.	B.3 type.	A.3 type.	B.3 type.
	£	£	£	£
31 to Dec. 31, 1919 ..	1,002	1,254	576	603
1 to Dec. 31, 1920 ..	1,097	1,258	589	589
1 to Dec. 31, 1921 ..	935	1,080	465	500
1 to Dec. 31, 1922 ..	569	590	297	304
1 to June 30, 1923 ..	446	505	299	329

swering a further question from Mr. Thomson, Mr.
nberlain said that the average tender prices for houses
under the 1919 Assisted Scheme for various months
:—

Date.	Type of House.	Tender Price.	Percentage which labour cost bears to that of Materials.
		£	Per cent.
ember, 1920 ..	A	881	84
” ” ..	B	949	82
ber, 1920	A	888	84
”	B	958	82
mber, 1921	A	514	73
” ”	B	566	71
h, 1923	A	363	58
”	B	402	57

The cost of materials was represented in each case by 100 per cent.

Completed Houses.

Mr. Chamberlain informed Mr. Adams that the figures in round numbers for completed houses were :—

July 31, 1919, to December 31, 1919	100
January 1, 1920, to December 31, 1920	15,700
January 1, 1921, to December 31, 1921	86,700
January 1, 1922, to December 31, 1922	88,900
January 1, 1923, to June 30, 1923	11,000
	202,400

New Houses.

Mr. Chamberlain informed Mr. Ede that 16,868 houses had been approved to date which would rank from assistance under the new Housing Bill, and of these 13,382 would be built by local authorities and 3,486 by private builders. In no case had a condition as to sale or letting value been imposed.

The House of Lords Memorial.

In the House of Lords Lord Curzon, replying to a question by Lord Cawley as to the progress of a project for the erection of a memorial within the precincts of the House of Lords to the peers and sons of peers who fell in the Great War, said that £8,000 was now available. It had been suggested that the great marble monument in the Princes' chamber behind the throne should be removed and that the site should be utilized for the memorial. The King had readily given his assent to the removal of the monument to the head of the great staircase in the Victoria Tower. The committee which had been appointed in connection with the memorial had authorized him to put himself into communication with Sir Thomas Brock, the sculptor, who undertook to act as adviser and assessor. On Sir Thomas's suggestion four sculptors of eminence sent in sketch models of their designs, but, unfortunately, not one of them expressed the object the committee had in view. A few months later Sir Thomas Brock died, and he (Lord Curzon) was then authorized by the committee to approach another eminent sculptor, who accepted the undertaking, and he was hopeful that when the House reassembled in the autumn he would be able to submit the sculptor's model, which would be worthy of the great event it perpetuated. The sculptor had decided in favour of the Princes' chamber site for the memorial.

Unemployed Building Operatives.

Sir M. Barlow, Minister of Labour, gave the following figures as to men engaged in the building trade unemployed on May 21, 1923:—

Occupation.	Estimated No. of insured men employed.	No. of Unemployment books lodged at 21st May, 1933.	Percentage unemployed.
Carpenters ..	123,820	8,795	7·1
Bricklayers ..	58,540	3,050	5·2
Masons ..	23,010	1,183	5·1
Slaters	5,190	552	10·6
Plasterers ..	16,290	1,517	9·3
Painters ..	109,800	8,048	7·4
Plumbers ..	33,090	3,820	11·5
Labourers of above occupations ..	257,180	43,748	17·0
All others ..	88,630	13,981	15·8
Total (Building Trade) ..	715,550	84,694	11·8

The R.I.B.A. Alfred Bossom Travelling Studentship

The following conditions have been approved by the Board of Architectural Education:—

1. The Board of Architectural Education will appoint a special jury consisting of three architects (including, if possible, the President of the Royal Institute of British Architects), a builder, and a property owner, to control and conduct the competitions for the award of the silver medals, the gold medal, and the studentship. The builder serving on the jury will guide his colleagues on the estimates of cost, and the property owner on the estimates of revenue.

2. The competitions will be confined to those students of the "recognized" schools of architecture which enjoy exemption from the R.I.B.A. Final Examination who, after passing through the school courses, have attained the Associateship of the R.I.B.A.

3. On the recommendation of the Board of Architectural Education other schools of architecture, at present not "recognized" for final exemption, may be admitted to the competition, so that those of their students who have passed the R.I.B.A. qualifying examinations and have attained the Associateship of the R.I.B.A. may take part in the competition.

4. An additional competition will be arranged by the jury which will be open to Associates of the Royal Institute who have not passed through one of the "recognized" schools or one of the schools mentioned in paragraph 3. A silver medal will be awarded to the winner.

5. The jury will set a subject each year and send it to the schools. Each of the schools will appoint a local jury of similar composition to the jury mentioned above, to conduct the competition and award the silver medal for the best design submitted by a graduate of the school. Each design will be accompanied by an approximate estimate of the cost of the building and the financial return from it. The silver medals awarded at the schools will be known as the "Alfred Bossom Silver Medals for Commercial Architecture." The silver medals will be handed to the successful competitors at the annual distribution of R.I.B.A. prizes and studentships.

6. The designs of each of the winners of the silver medals will be forwarded to London, where they will be judged by the jury.

7. The jury will award the "Alfred Bossom Gold Meda and the "Alfred Bossom Travelling Studentship" to t author of the best design submitted to them. The go medal will be handed to the successful competitor at t annual distribution of the R.I.B.A. prizes and studentshi

8. The holder of the studentship will be required with a period of not more than six months from the date of t award to journey to the United States of America and spe not less than six months there in the study of commerc architecture.

9. On arrival in the United States the student will rep himself to the Architectural League of New York, whi will, by means of a special committee appointed for t purpose, give him advice and guidance on the subject of studies.

10. At the conclusion of his stay in the United States t holder of the studentship will be required to submit detailed and illustrated report on a particular branch of t subject laid down by the jury. This report, when approv by the jury, will be printed, and copies will be sent to ea of the competing schools of architecture and to each stud who has taken part in the competition of the year.

11. The travelling student will be paid the sum of £ to meet the cost of his journey to and from the Uni States and his stay of not less than six months in t country.

12. The complete roll of silver medallists and gold med lists will be kept at the Royal Institute of British Archite and copies of the reports will be preserved in the R.I.B library.

13. Mr. Alfred Bossom has generously undertaken provide funds to meet the cost of the scheme, including provision of the medals and the payment of the travell students, for a period of five years.

14. At the end of five years the Board of Architectu Education will submit a report to Mr. Bossom on the wo ing of the scheme, and will discuss with him any modif tions which may be found to be desirable with a view placing it on a permanent basis.

15. Mr. Bossom will arrange for the design, casting, supply of gold and silver medals.

Contemporary Art

The French Gallery.

Here, there are examples of French art which r not be missed. They are representative of the sch which preceded the modern movement. There are m of the Barbizon school, including Corot, Dupré, I and Daubigny, and some Impressionists, including Ma Boudin, and Ribot, are represented; the latter's "Le Cor a picture with three figures, being a very striking w There are also several works by Ziem and Jongkind.

Other Exhibitions.

Modern French art forms the feature of the sp exhibition opened at the art galleries at Brighton by Comte de Saint-Aulaire on July 28. The works were lected in France by the director of the galleries, Mr. H D. Roberts, who has been responsible for a long seri exhibitions of the art of several of the European natio

At the Leicester Galleries there is an exhibition of mo etchings by Whistler, Seymour Haden, Raine-Ba E. Blampied, and others.

An interesting series of "Early Morning" studie R. G. Dryden-Alexander is on view at the Little Art R in the Adelphi, and a show of water-colours by H Holding, R.W.S., at the Camera Club near by.

The J. P. Heseltine Collection.

Mr. Alfred Spero, of 35 King Street, St. James's acquired a second portion of about seventy bronzes o J. P. Heseltine collection of Renaissance works, incl the fine bust from the Strozzi Palace ascribed to Bene da Majano, and what is believed to be a bronze moc David, by Michelangelo.

KINETON PARK

.I.B.A. Examination Results

e intermediate examination, qualify- or registration as Student R.I.B.A., ield in London, Leeds, and Birming- from June 1 to 7. Of the ninety- candidates who presented them- thirty-three passed and sixty-one relegated. The successful candidates as follows, the names being given in of merit as placed by the examiners :

r, A. H., Coventry.
G. L., Seaham our.
C. H., Norwich.
K. W. F., Linton, Maidstone.
M. H. Moseley, ingham.
Hilda F., London.
H., Shepherd's .
, W. C., Northfield, ingham.
s, R. E. M., Llan- South Wales.
d, R. H. C., Lon-
W. C., Mansfield, .
E. A. E., Port t, Glam.
d, A. C., Lambeth.
A. E., Bourne- h.
F. G., Reading.
s, G. H., Penarth.
W. H. B., Bridg- .
Jones, L. S., Reading.
Kimber, C. F., Evesham.
Liverseege, Una, Edgbaston.
Morley, C. S., Tonge Moor, Bolton.
Overnell, H., Tunbridge Wells.
Parkin, H. R., Leeds.
Petherbridge, Audrey H., Paignton.
Price, W. J. B., Ilford.
Rogers, D.J., Handsworth, Birmingham.
Smith, B. J. A., Southfield, Hessle.
Stokes, H. W., Lozells, Birmingham.
Tyler, E. B., Penarth, Glam.
Whitwell, E. J., Handsworth, Birmingham.
Wild, C., Failsworth, Manchester.
Williams, G., Hull.
Yorath, F. G., Burslem, Staffs.

final and special examinations ying for candidature as Associate .A. were held in London from June 21. Of the twenty-seven candidates cted (two of whom took Part I only, g elected, in accordance with the ations, to take the examination in arts), eleven passed, and the remain- xteen were relegated. The successful lates are as follows :—

ler, T. M. (Special), pool.
S. N. (Special), on.
t. J. B., Penzance.
gton, W. (Special), on.
A. (Special), Kensington.
n, Hussein Z., .
May, A. J. (Special), Southville, Bristol.
*Mikhail, Fouad (Special), South Kensington.
Riding, R. A. F. (Special), Earls Court.
Ross, W. (Special), Glasgow.
Toy, S. (Special), Strand, W.C.

candidates marked * are not h subjects, but have taken the nations for the purpose of obtaining cates to that effect.

following candidate passed the l examination held in Bombay from 23 to 28.

Parham, A. D., Colombo, Ceylon.

following six candidates passed pecial war examination held in urne in December 1922 :—

. A.
A. R.
gs, C. L.
Gale, D. W.
Hall, A. S.
Parkes, S. T.

R.I.B.A. Council Meeting.

owing are notes from the minutes last meetings of the Council of the A. :—

wing.—It was decided cordially to t the National Society of Art s in their view that drawing should luded for credit in matriculation hool examinations.

itectural Scholarship.—A vote of to Mr. John Keppie, F.R.I.B.A., sgow, for his gift of a scholarship eld in alternate years by the most uished student of the Glasgow of Art and the Glasgow School of ecture, was passed by acclamation.

ish Waterworks Association.— D. Searles-Wood and Mr. Percival aser were appointed to represent I.B.A. upon the Standing Committee on Water Regulations of the British Waterworks Association.

Retired Fellowship.—Mr. I. R. E. Birkett, elected Associate in 1886 and Fellow in 1923, was transferred to the list of retired Fellows.

The Future Policy of the R.I.B.A.—The Council instructed the Charter and By-Laws Committee to meet forthwith for the purpose of considering the general question of the policy to be pursued during the coming Session and to report upon it at the first meeting of the Council after the recess.

Gothenburg Town Planning Conference.—Mr. Raymond Unwin was appointed to represent the R.I.B.A. at the International Town Planning Conference, held at Gothenburg from August 3 to 10.

The R.I.B.A. and Country Members.—Upon the recommendation of the Allied Societies' Conference, it was decided to arrange in November next, in London, a three-day meeting which will include some of the annual R.I.B.A. functions at present held on separate dates during the year. If the experiment proves successful, it is hoped in future to arrange the Annual "Architects' Week" in London, in which will be included the Annual Dinner, the presentation of the Royal Gold Medal, and the President's Inaugural Address, and perhaps other functions. In this way it is hoped that Country Members of the R.I.B.A. will be given an opportunity of attending the most important annual functions of the R.I.B.A., by making a single visit to London only.

Professional Conduct and Practice.—Upon the recommendation of the Practice Standing Committee, the Council ordered to be printed in the "Journal," and in the next and all subsequent issues of the R.I.B.A. Kalendar, a revised series of regulations for Professional Conduct and Practice entitled "Suggestions Governing the Professional Conduct and Practice of Architects."

New Allied Society. — The Burma Society of Architects was admitted to alliance with the R.I.B.A., under the provisions of By-Laws 77 and 78.

The R.W.A. School of Architecture

The annual prize-giving and opening of the exhibition of work of the students took place at the Royal West of England Academy School of Architecture recently. Mr. G. C. Lawrence, vice-president of the Bristol Society of Architects, who occupied the chair, paid great tribute to the work of Mr. G. D. Gordon-Hake, A.R.I.B.A., the resident master. During the proceedings the following prizes were presented by the Lord Mayor : The Dame Janet Stancomb Wills Travelling Studentship (£25) : E. H. Button ; Royal West of England Academy Silver Medal and Bristol Society of Architects Prize of £3 3s. : W. J. Thrasher ; Architectural Association Design Prize of £5 5s. : R. H. Brentnall ; The Savory Design Medal : A. J. Saise ; Royal West of England Academy Bronze Medal and Bristol Society of Architects Prize of £2 2s. : J. H. Bourne ; Master's Prize, value £2 2s. : T.W. Snailum. The exhibition of students' work was open for a week for the inspection of the public. An article on the aim and work of the School was published in a recent issue of the Journal.

Quantity Surveyors' Fees

The Ministry of Health have issued a general housing memorandum (No. 64) with regard to the fees payable to quantity surveyors in private practice for work in connection with the settlement of contractors' accounts for State-aided housing schemes.

Questions of difficulty have arisen between the Ministry of Health and the Surveyors' Institution regarding the application and interpretation of paragraphs (*d*) (*e*) and (*f*) of Part II of General Housing Memorandum No. 31 in individual cases. After exhaustive discussions between the department and the Surveyors' Institution it has been agreed that to obviate arguments and disputes the following statement should be substituted for paragraphs (*d*) (*e*) and (*f*) as representing a reasonable application of those paragraphs as a whole. It must be understood that the terms of this statement are an agreed compromise between the department and the Institution on the various points of difficulty arising under the three paragraphs rather than an agreed interpretation of individual paragraphs and consequently must be accepted in their entirety.

II (*d*) Variations. Measuring and making up account of variations consequent upon alteration in design including foundations :—

1½ per cent. upon gross amount of additions.

1 per cent. upon gross amount of omissions.

The charge shall be calculated on all additions and omissions brought into account (except that no charge shall be made in respect of any item of omission which is taken bodily from the bills of quantities and does not necessitate reference to dimensions or abstracts). It is assumed, of course, that the surveyor will adopt the most economical method of arriving at the adjustments.

II (*e*) Adjustment of contract price consequent upon changes in cost of labour and checking and considering claims in respect thereof.

A fee of 1½ per cent. will be payable upon :—

(*a*) The difference between the amount of the wages payable at the rates specified in the contract and the amount of the wages paid at a higher rate, and also on

(*b*) The difference between the amount of the wages payable at the rates specified in the contract and the amount of the wages paid at a lower rate.

II (*f*) Adjusting contract price consequent upon changes in cost of materials and checking and considering claims in respect thereof.

Where this work is done by the surveyor, a special fee is to be arranged, not to exceed ½ per cent. in respect of the first 100 houses upon the gross cost of the materials dealt with, and ¼ per cent. in respect of any number of houses beyond the first 100 upon the gross cost of the materials dealt with. In the event of any difference as to the amount to be charged for this work, the difference is to be determined by the Minister of Health whose decision shall be final.

The fee should be taken at ½ per cent. in respect of the first 100 houses and ¼ per cent. in respect of the remainder, and applies to materials purchased in the open market. It can also be regarded as applicable to materials supplied through the Director of Building Materials Supply provided that all the work in connection with claims for those materials has been undertaken by the surveyor, viz.: (*a*) ascertainment of the amount of goods supplied to the contractor through Director of Building Materials Supply or the local authority; (*b*) ascertainment of value of the goods at nominal (schedule) rates; (*c*) preparation of statements of accounts of amount due by the local authority in respect of materials supplied by Director of Building Materials Supply and of the railway carriage accounts paid by the contractor.

If the above items have been only partially undertaken by the surveyor the fees should be reduced proportionately. In such case the local authority should communicate with the Ministry stating the facts of the case.

Competition News

Wesleyan New Church and Sunday School, Warrington.

The following notice has been issued by the R.I.B.A.: "Members and Licentiates of the R.I.B.A. must not take part in the above competition because the conditions are not in accordance with the published regulations."

List of Competitions Open

Date of Delivery.	COMPETITION.
Aug. 25	Public Swimming Baths and Washhouses, East Greenwich. Assessor, Mr Henry V. Ashley, F.R.I.B.A. Premiums: £300, £200, £100. Apply Mr. Frederick J. Simpson, Town Clerk, Town Hall, Greenwich
Sept. 12	Masonic Temple in Broad Street, Birmingham. Premiums: £500, £300, and £200. Sir Banister Fletcher, F.R.I.B.A., is the assessor. The competition is restricted to architects who are masons subscribing to Lodges in the Province of Warwickshire. Apply Mr. J. P. P. Dutfield, 65 Temple Row, Birmingham.
Sept. 30	Designs for a series of plaquettes in bronze illustrative of London as the capital city of the Empire, or of one or more of her main architectural features. Designs should be submitted in the form of models in plaster. The following prizes are offered:—One prize of 100 guineas, two prizes of 50 guineas, three prizes of 25 guineas. Apply Deputy Master of the Royal Mint, London, E.C.1.
Sept. 30	The best colouring of a design for the vestibule connecting 315–317 Oxford Street with 17–19–21 Dering Street, Messrs. Thomas Parsons and Sons' new offices and showrooms. Prizes: 100 guineas, 50 guineas, 25 guineas, and five consolation prizes of 10 guineas each. Assessors—Sir Edwin Lutyens, R.A., F.R.I.B.A., Sir David Murray, R.A., P.R.I., H.R.S.A., Sir John Lavery, R.A., Mr. Frank Brangwyn, R.A., and Mr. E. Guy Dawber, F.R.I.B.A. Apply Competition Department, Messrs. Thomas Parsons and Sons, 315–317 Oxford Street, London, W.1.
Oct. 1	The Student Welfare Committee, University of Glasgow, invite Competitive Designs (limited to architects having an office in and practising within the Municipal Boundaries of the City of Glasgow) for a pavilion to be erected on the University Athletic Ground at Westerlands, Anniesland, at a cost of £10,000. Assessor Mr. Alexander N. Paterson, A.R.S.A. Apply Honorary Secretary, Student Welfare Committee, The University, Glasgow.
Oct. 1	Lay-out of the Bull Green Site and part of the centre of the Town of Halifax. Premium £50. Apply, with deposit of £1 1s., to Mr. Percy Saunders, Town Clerk, Town Hall, Halifax.
Nov. 5	Art Gallery for Hull. Assessor, Mr. John W. Simpson, PP.R.I.B.A. Apply (with cheque for £2 2s.) to Mr. H. A. Learoyd, Town Clerk, Guildhall, Hull.
No date	Extensions to the Poor Law Institution, Premium £50. Apply Clerk to the Wirral Board of Guardians.

New Inventions

Latest Patent Applications.

18489.—Baines, J. S.—Composite slab for building, etc. July 18.

18835.—Makram, T.—Means for interconnecting building blocks. July 21.

18773.—Wesley, E. W., and I. E.—Tiles. July 21.

Specifications Published.

200276.—Rings, F. C. C., and Anglo-Danish Concrete Construction Co., Ltd.—Blockwork floors, roofs, and the like.

200283.—Wigley, R. M.—Tiles for decorative, building or other purposes.

200419.—McWhirter, J. — Concrete or other cast, slabs or blocks.

200444.—Rurade, F. W.—Building-brick.

Abstract Published.

198284.—Building-blocks.—Hardoncourt, A., 4966 Broadway, New York, U.S.A.—Building-blocks of the kind described in specification 135740 comprise a pair of hollow wall sections connected by an intermediate section or web, and mortar receiving spaces are provided between the parts. For facilitating handling the spaces are curved and the wall of the intermediate section is corrugated. The under surface of the block may be provided with undercut grooves or with projections opposite the spaces in the upper face and an intermediate groove. The mortar receiving spaces may be vertical with corrugated sides. The intermediate section may be hollow or channelled and the recesses in the end sections may extend below the spaces. The mortar receiving spaces may be partly closed.

The above particulars are specially prepared for the ARCHITECTS' JOURNAL by Messrs. Rayner & Co., registered patent agents, of 5 Chancery Lane, London, W.C.2, from whom all readers may obtain information free on matters relating to patents, trade marks, and designs. Messrs. Rayner & Co. will obtain printed copies of the published specifications and abstract only, and forward on post free at the price of 1/6 each.

A.A. Annual Excursion

The annual excursion of the Architectural Association will be to Avignon and district. The party will leave on September 6, and return to London on September 17. Headquarters will be at Avignon, and excursions will be arranged to Nimes, Arles, Orange, etc., which will be optional. Arrangements will be made for second-class travel (first-class boat), and hotel accommodation (rooms, breakfast, and dinner), tips, etc., at a cost not exceeding £12 for the whole excursion. Those joining the party will make their own arrangements for meals on the journey out and home, and also for lunches. The overhead charge will not provide for fares, etc., to places outside Avignon, and members will be free to attend excursions, arrangements for which will be made from day to day, or make their own arrangements. Those proposing to attend the excursion are requested to send their names to the secretary immediately,
the number of the party will be limit
The tickets issued will be available
thirty-three days, and although memb
must travel out to Avignon in one pa
they may return independently, break
the journey in Paris if they so wish.

A Buenos Aires Tap Co
petition

The Commercial Secretary at Bue
Aires (Mr. H. O. Chalkley, C.B.E.) rep
that the Department of Sanitary W
of the Nation have issued invitations
the presentation on December 13
models of improved brass water t
The Department will offer three pr
of 5,000, 3,000, and 2,000 paper p
respectively for the three best mo
provided they are considered sufficie
meritorious. It is stated that the bul
the water taps used in the Argentine
made locally and are sold at a price
which it is difficult for imported good
compete. Certain quantities are, howe
imported from Italy and from the U
Kingdom. The taps used in Buenos
have to be of a type approved by
Department of Sanitary Works. A t
lation of the conditions attached to
competition can be obtained by inter
British firms on application to the De
ment of Overseas Trade, 35 Old Q
Street, Westminster, London, S.W.1

The Public Works, Ro
and Transport Exhibit

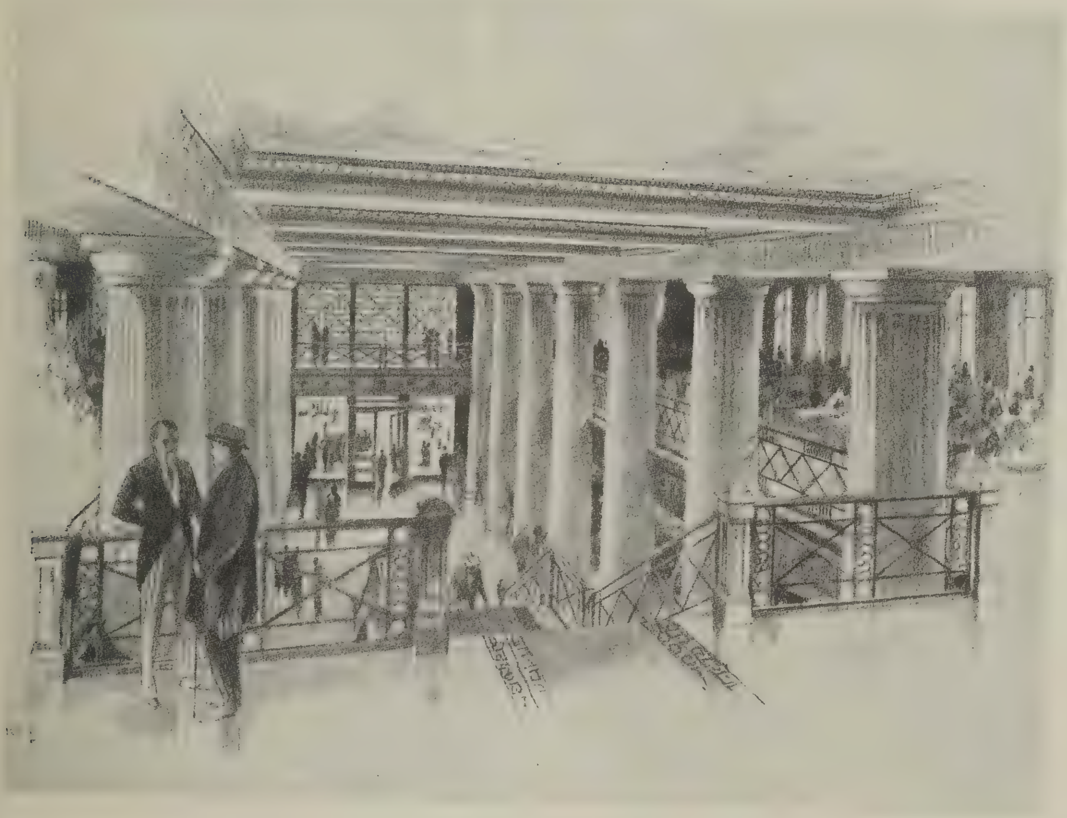
The King has extended his patr
to the Public Works, Roads, and T
port Exhibition and Congress whi
to be held at the Royal Agricu
Hall, London, from November 22
The congress has now been establish
a permanent basis. It is organized
committee representing the Minist
Health, the Ministry of Transport
all the principal organizations of
authorities and their officials. The
indications on every hand to show
the forthcoming congress and exhi
will be attended by an even g
number of official representatives
all parts of the country than here
The number of exhibitors has a
exceeded that of the previous exhib
and the different classes of ex
whilst common to public work
municipal undertakings, are of
diverse natures that they will lend
exhibition a unique character whi
be of extreme interest to all bran
the engineering community, as wel
the general public. Among the roa
exhibiting, there is no company of
tance that has not already booked
whilst firms specializing in water
takings and sewerage schemes oc
large area of the building. The co
as in previous years, is in competent
each member of the organizing com
which is under the chairmanship
Henry P. Maybury, K.C.M.G., C.B
a specialist in his own particula
All available space is rapidly be
consequently should there be fir
desirous of participating, they
at once get into touch with the m
at their office at 13 Victoria Street,

23.

Vol. LVIII. No. 1493.

THE ARCHITECTS' JOURNAL & Architectural Engineer

With which is incorporated "The Builders' Journal."



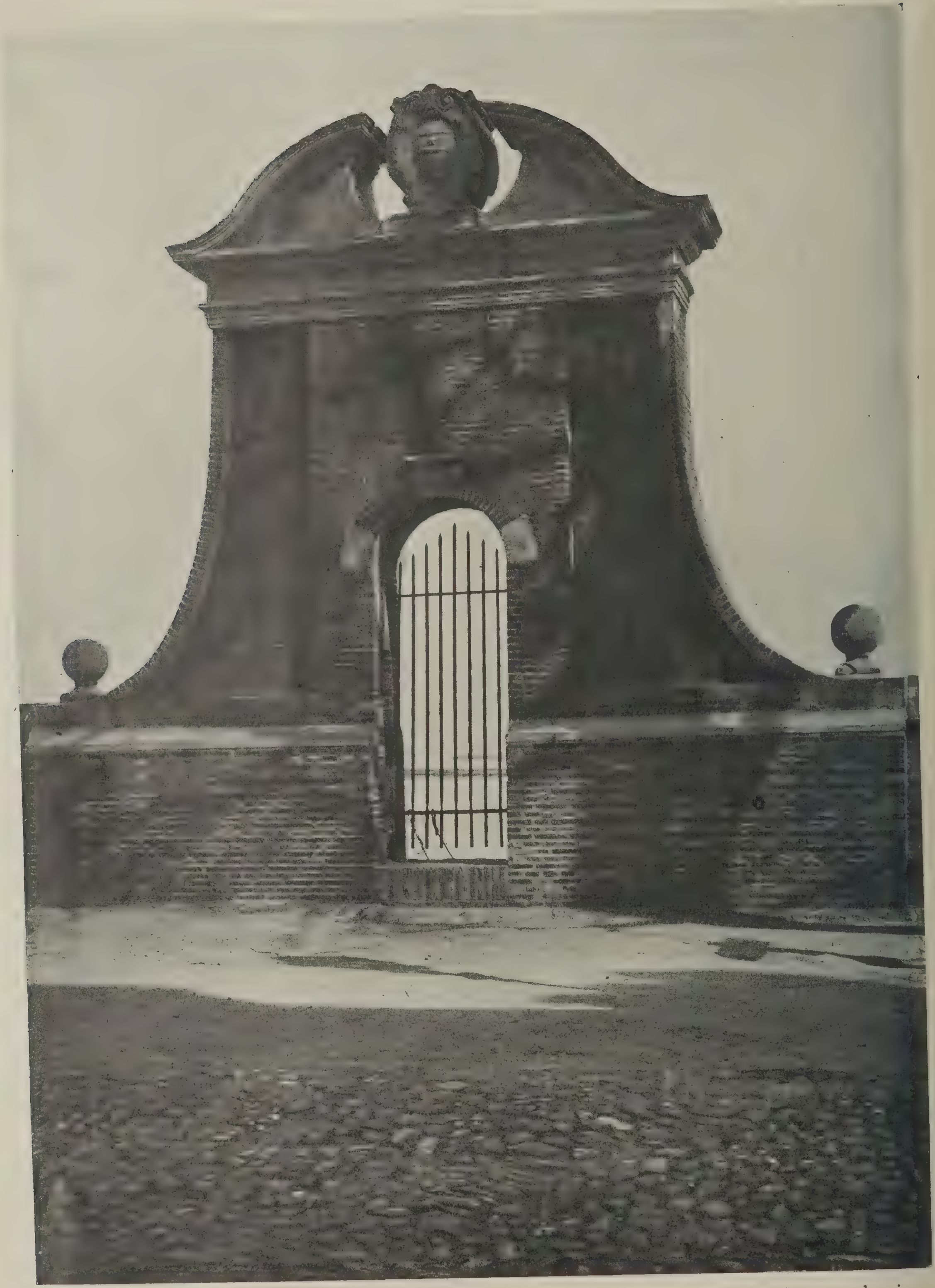
BUSH HOUSE, ALDWYCH: THE STRAND ENTRANCE.
HELMLE AND CORBETT, A.I.A., ARCHITECTS.
(See also page 234.)

27-29 Tothill Street, Westminster, S.W.1.

etary immediately,
y will be limit
be available
ough memb
in one pa
y, break
wish.

Co

A Gate in the Sea Wall, Enkhuizen, Holland



This gateway, in the sea wall at Enkhuizen, is full of character. The brickwork is relieved by stone dressings though the broken pediment is, perhaps, a little heavy. Through the gateway can be seen the Zuider Zee.

THE
ARCHITECTS' JOURNAL
27-29 Tothill Street, Westminster, S.W.1.

dnesday, August 15, 1923

Volume LVIII. No. 1493

Beauty in the Strand

TO that ancient, untidy, and rather threadbare highway of London—the Strand—there has come beauty from America. And since the beauty is architectural it is meet that we should welcome We welcome it in a spirit of courtesy to the visitor from er the seas. We welcome it in friendship for our friends the United States. We welcome it for its own sake as a endid gift to a city with great architectural traditions. d we welcome it for the lessons it can teach us. Beauty always welcome, and in the Bush building it is there all to see. Quiet dignity, a rare refinement, a chastely d restraint and a Grecian subtlety and balance of form point the architectural truth that beauty unadorned is orned the best. Even in its unfinished state, with two-rds of the original design yet to be carried out, it is fine. w buildings will stand so hard a test—a test we would apply were it not so plainly passed. This new palace of mmerce, even as it stands now, adds distinction both to Strand and to the Kingsway. Apart from the fact that survives the stiffest problem of design—relying on its cess by its justness of proportion—it is notable because, ile preserving its own individuality, it is true to its ironment. This is a point too often neglected in the uilding of London, and the Bush House serves to em-size it.

oo many of our new buildings are designed without tion to their site. Too many introduce an alien spirit. architect, whether compelled against his better judg-nt to conform to his client's lack of taste or egotistically ious to make his own work overshadow that of others, duces too often a structure at variance with its surround-. He forgets or ignores the fact that in architecture, as uman life, environment may not with impunity be looked. We suspect that it is usually the client who o blame, for in England, unlike the United States, artist seldom gets a free hand. That is one of the ons of the Bush building for the business chiefs of land.

America they have found that it is good business to he expert do his best, unhampered and unrestricted. is, of course, no more exact than any generalization be, but it is, in essence, a fair statement of the trend to-ls knocking the fetters off the architects. The result be seen in the splendid modern homes of commerce for h the United States is now so justly famed. The rican magnate knows the value of money, and when he ds it on marble and on stone he gets all that can be for his dollars. And there is only one way to do that : employing the best architects and by taking their ce. No artist can produce a work of art if his hands are

And another obstacle in the way in this country is national temperament which extends individuality to th degree. The English shopkeeper does not want ises like those of his neighbour. He prefers them as e as it is possible to get them. And so we get streets look like schools of architecture—a sort of nightmare of design through the ages with parodies of every style from China to Peru. And there is no public sentiment to stop it and no public body to exercise control.

The Bush building responds to its environment because of the architect's good taste, and London should be duly grateful. In his desire to get his Strand façade opposite the church of St. Mary-le-Strand, Mr. Corbett has altered the axis of his central block so that it lies at an angle to Kingsway—slightly, it is true, but still at an angle. This may be regarded by differing schools of thought as a defect or a virtue. In view of all the difficulties and in gratitude for Mr. Corbett's respect for a fine London tradition we acclaim it while we admit that by solving the problem with a change of axis at the centre Mr. Corbett might have got a better effect for his façades. But in preserving the squareness of his fronts he would have lost the fine clean lines of the sides. It is a nice and delicate point, and we feel that in choosing an axis slightly on the slant Mr. Corbett has made, on the whole, the best decision the circumstances allowed.

The Early Greek style of the building, its beautiful proportions, its severity of surface, and its imposing main entrances, harmonizing so well with the classic tradition of the church in the Strand and the general note of the Kingsway, are handled with masterly discretion. Although the architect has been compelled to break up the plain surfaces of his outer walls by many windows, and has had to set back by a series of giant steps the higher stories from the main elevations, he has not lost the dignity and mass which so big a building should of itself possess. The way in which he has refrained from ornament, the quiet austerity which marks the artist who has mastered design and has thus learnt the value of restraint, give to his building an æsthetic dignity and a clean sweep of line that we would gladly see more often. And the interior decoration is in keeping with the fine restraint of the exterior. Here are no garish colours, no oriental riot of jade and gold, of scarlet and purple. Walls faced with travertine—a polished stone of a rich cream tint—or just painted in cream; small windows set near the ceiling and giving ample light for an extensive floor space; offices separated by cool, light partitions; floors of a dull red wood—the whole effect is restful and quiet. It is just the sort of place in which a man could work at ease, with nothing in his surroundings to draw his eyes from his books or to annoy and distract. Here again there is a lesson for some of our London kings of commerce who demand a lavish display of highly-coloured fittings and walls as a certificate, we presume, of financial health, forgetting that simplicity is not always cheap and that luxury is always dear. If the Bush building teaches some of our people the value—and the beauty—of simplicity and restraint we shall have abundant reason to thank America for a splendid gift. While the architect has been happily sparing in his use of ornament, he has handled it where it has been needed in the same chaste mood so that nowhere is there a jarring note. The Kingsway façade is most impressive. The carving above the main doors—which looks so simple, but is nothing like so easy as it looks—is particularly effective.

Mr. W. R. Fagan, the sculptor, is to be congratulated on the justness of his perspective and the beauty of his work. His low relief carvings on the Strand front are also finely done, and show how admirably—and fittingly—sculpture, intelligently applied, can embellish the architect's work. The iron grilles over the ground-floor windows in the two main entrances and the gilt grille above the Strand doorway are architectural features that show how cleverly and effectively simple means can be used to obtain a highly ornamental effect.

An interesting feature of the interior, by the way, is the absence of radiators. Always a bugbear to the architect—though there are instances where radiators have been made beautiful—Mr. Corbett has been able, by the ingenuity of a British company, to dispense with them. Instead the hot-water pipes are carried up the walls. This experiment, which is said to have passed the severest tests, may well lead to a revolution in office buildings, for no architect would introduce radiators if he could do without them. If the Bush building, with its inner walls some 60 ft. apart, can be adequately heated by the new system—as the architect believes—the problem is solved.

We await with deep interest the completion of Mr. Corbett's fine design. When the wings, which are to cover the rest of the island site, are up, the Kingsway end of the Strand will possess one of the best modern buildings in London. The irregularity of this strip of land has made it difficult to secure a balanced and pleasing design, but judging by the plans and elevation and by Mr. Corbett's central building, we are sure that the finished whole will be marked by the same justness of proportion, response to environment, and restraint and refinement which the present building so admirably illustrates.

Dedicated to the enduring friendship of the great English-speaking peoples of the world, the Bush Palace is a worthy tribute to a high ideal—and that is saying much, but not more than should be said, and said here in England.

CROSSLEY DAVIES.

An Optimist on Housing

On another page of the JOURNAL we give some figures about the progress of housing which were communicated by Sir Charles Ruthen, Director-General of Housing, in an interview with a "Manchester Guardian" correspondent. Sir Charles Ruthen was very cheerful. A house that cost £1,000 at the dearest period of building can now, said the Director-General, be constructed for £400. In other words, two and a half houses can be built this year for what one cost two years ago, and he assures us that the two and a half are being built in the time it then took to build one. But, according to "The Manchester Guardian," under the cold and not too friendly scrutiny of the building trade the Director-General's figures take on a much less cheerful aspect. Manchester experts pronounce the £400 house "a flat impossibility." "A local authority building for itself and cutting out all middlemen's charges, might get down to something like it, but, even so, the sum would provide only the shell of a dwelling and would not include the cost of the land." Moreover, the "amazing recovery" of building enterprise, wherever it is to be found, is not within our ken, and wherever houses are going ahead they are not within the purchasing power of the average working or professional man who has the desire to live decently. At the best, they belong to the villa type, which is just beyond his reach. If there is any relief, rather has it come from the workers themselves, who have had to live somewhere, and so have settled down in converted army huts, caravans, and the like. In Southampton, for instance, where the housing shortage is as acute as it is in other parts of the country, cast off Admiralty motor launches are changing hands and being fitted out as houseboats, quite a number of families finding these homes convenient and comfortable enough. In the Lake District, some months ago, one family was discovered living in a cave.

Housing in Italy

Meanwhile, the Rome correspondent of "The Times remarks upon the successful example of Italy, while pointir out that there the problem has not been so complicated elsewhere because the standard of housing is differen Industrialism is a very modern development, and ther fore there has been room to build near the industrial tow huge blocks of flats for workmen within easy reach of the work. It may be said that these erections are monumen ally ugly and allow of no privacy, but the actual accomm dation is not too bad. They are rookeries, but not slumli rookeries. And there is one other interesting point namely, that Italy has rebuilt the whole of her devastat areas. Out of 200,000 houses destroyed, 190,000 have be rebuilt, and they are, moreover, real houses, not tin sha ties, thanks to the existence on the spot of inexhausti supplies of stone and granite. Asiago, for example, whi was blasted for eight months by British guns, bears to-d only the single scar of its shattered church.

Success in Italy has been achieved by the grant of a su stantial annual subsidy in the form of remission of taxatio by the financing of building societies at a low rate of terest; and by a resolute policy, at whatever cost in pop larity, of throwing the arrangement of the relations between landlord and tenant upon the first parties the selves.

Helping Things On

An architect, in a letter to "The Times," reveals a rema able state of trade union affairs. In connection with so important architectural work in the North of England was decided to use a particularly appropriate stone o quarried in the Midlands. The quarry owners had a w equipped masons' yard and masons who thoroughly und stood the stone. The men received the full local tr union rate, and neither desired nor asked for more. owners were—and were recognized by their men as bein model employers. But the Northern trade union r where the stone was to be fixed, was higher than that rul in the Midlands, and the Northern union had given that the stone might come up to the job ready work but only if the Midland men, who worked it, were paid full Northern—not the Midland—rate. Otherwise a st would be called upon the building if an attempt were m to fix the stone.

Now who is benefited by this parlous decision? building will cost about £1,000 more than it need have d The Northern men gain no benefit whatever. The cos building in the district, on the other hand, is unnecessa kept up, and general employment discouraged. The land men do not want the money, which only tends to courage business likely to come their way. The qu owners are put to the expense of keeping elaborate sheets, discriminating between the wages of their employed upon the one job or upon others. The same may, in fact, be receiving different rates at different h of the same day. No one, we think, has cried out against the use of red tape than have Labour Party offici but it was surely on no occasion put to such perfect us on this.

Silhouettes

The Victoria and Albert Museum has recently bene by the gift from Mr. Desmond Coke, the novelist, of fine examples from his collection of silhouettes by the known British craftsmen in this shadowy method of d ing. The art of silhouette is older than the name, w derives from Etienne de Silhouette, Finance Ministe Louis XV, who was so unpopular for his economical p that everything cheap or common was called a silhou in derision. In England the practitioners of the art c themselves profilists, skiagraphers, scissorgraphists, even papyrologists. Most of the examples are portr architectural subjects, regrettably, seeming rarely to appealed to the exponents of the art.

Modern London: Its Public Buildings

By MAJOR HARRY BARNES, V.P.R.I.B.A., F.S.I.

A series of three non-technical talks on architecture is being "broadcast" by Major Harry Barnes. In the first one—published below—he dealt with the buildings of modern London.

A CITY is in some ways like a great house: the buildings are the rooms, the streets are the corridors, the statues and fountains are the ornaments. If we were city proud as we are house proud, we ould take the same pleasure in the planning and decora- on of our city as we do of our houses; but we are not. truth, we are very careless of appearances and very in- ferent to what the stranger within our gates thinks of us. hat is perhaps our temperament. We are no more emo- nal about the place we live in than we are about ourselves. is not that we lack pride in this city of London in which live; it is not that we do not know how many beautiful ings there are in it—the wonderful river which lies as elessly round the city as a necklace round the neck of a ely woman; the beautiful parks and gardens which are legacy to us of Stuart kings, and the fine old squares ich, whatever our opinion on land values may be, we uld not have had but for the great London landowners. r fault, perhaps, is that we do not make the best of our tural advantages.

One has only to remember the banks of the Seine, the ve along the left bank, across one or other of those utiful purposeful bridges which are the glories of Paris, l back by the right bank to Notre-Dame, to realize a le of what might be made of the Thames, and is not. is is, perhaps, because our British individualism has n subject to but slight control. London is a mediæval y over which has never been thrown the yoke of a town n. The boulevards of Paris lie over that city like lace r an old-fashioned, many-patterned gown. We have the innings of a town plan in London—perhaps Regent eet began it, as I shall tell you later, cutting through o, but happily leaving us Golden Square. After that inning London went to sleep for fifty years or more. thumberland Avenue and the Embankment showed a le waking up—Kingsway still more, but London is yet ting for its great town-planner.

When we think of land, most of us think of it as something which we can build an office or a shop in which to make ney, and afterwards a house in which to spend the money have made. We do not think of land as the material n which may be laid out fine streets and erected magni- nt buildings. The conception of the city beautiful has yet taken hold of us; we lack the spirit that in the teenth century found its home in Florence. Let me you what that spirit was. In 1294 the City Council lorence met to consider the situation which had arisen of the triumphal conflict of Florence with Pisa and na, and this is the record of its decision—the words nd like a trumpet, they run :—

"As it becomes the sovereign prudence of a people of origin to proceed to business in such a manner that wisdom no less than the magnanimity of its conduct is sted by words outwardly achieved, the master archi- of our community is ordered to make models and draw- of the utmost prodigality and magnificence for the ration of S. Reparata that the industry and right of may never again invent, or ever be able to undertake hing whatsoever more vast or more beautiful. It is made law that no public works shall be begun unless the intention of making them correspond with the t soul made up of the souls of all the citizens united in soul."

hat a by-law! I wonder if even the London County ncil could get it past the Ministry of Health. It has well said that every country has the Government it deserves, but it is true of London that it has better buildings than, perhaps, its citizens deserve.

Most of us, I suppose, think of architecture as something different from building. It is not really different at all. Architecture is simply building at its best; it is not a question of towers and domes, of cornices and pediments, of columns and porticoes, but of mass and proportion, of the balance and poise and position of walls and windows and roofs, of the right use of materials, of the proper application of ornaments. These are the things which make building blossom into architecture.

Our conception of architecture is a slowly widening circle. Religious buildings we have always considered to be architectural—Westminster Abbey, St. Paul's, the glorious City churches, Bentley's Roman Catholic Cathedral—all these seem properly to exhibit the qualities that we call architectonic. It seems natural, too, to require of palaces that they should possess architectural interest, and so we linger by St. James's, and, it may be, look a little at Kensington Palace. It does not seem likely, however, that there will be many more great religious buildings, it may even be that Gilbert Scott is busy at Liverpool with the last cathedral we shall build, but if that be so, the occasions for great works of architecture will not have passed.

We learned long ago to associate fine buildings with the lodging places of science and art. That tradition we continue, and nowhere more finely than in the extension of the British Museum by Sir John Burnet, facing on to the site where some people would have the new London University built. The National Gallery, the Natural History Museum, the Victoria and Albert Museum, all testify to our willingness to build finely for these purposes. We have always been willing, too, that the Imperial Government should be housed in buildings of great architectural importance, and half a century or more ago we were content to spend some millions for that purpose on the great Houses of Parliament. Whitehall is, indeed, fast becoming a city of palaces, but may it never lose the Horse Guards and the Admiralty. To see these aright one wants to come up Whitehall at 4 o'clock on a fine summer morning (as I have done more than once). Indeed, no better time could be taken by any enthusiast for architecture to see what London is really like.

But modern London is taking new occasions by the hand and I think we are drawing nearer the time when, like Athens, its public buildings will be magnificent and its private buildings modest. The nineteenth century has brought into being great local authorities, and of these there are none greater than two in London. London is a city and a port, its greatness is based on the land and associated with the sea. Of these two authorities, one rules the land and another the water—the London County Council and the Port of London Authority. Within the last few years each has got its home and each is housed in buildings which do present to the citizens some adequate idea of the power they lodge. The London County Council building is, perhaps, better known, but both are considerable examples of architecture. Their architects were chosen by competition, for it is the romance of the architectural profession that from time to time opportunities are achieved of erecting great works of art. It appears that in the case of the County Council building its architect was a young man whose first important public work it is. It is fifteen years since Mr. Knott was proclaimed the author of the successful design, and the completion of the work has been delayed by the war. It is to be hoped that before long we may see the building entirely completed, doing justice both to its author and to the site upon which it stands.

To the architect a building first appears as a plan, and his judgment of it takes that into account. A great plan is like all great things, simple and direct, achieving with simplicity and distinction the object for which it is intended. Those who use a building find their comfort and convenience to be at the mercy of the plan. To the man in the street, however, the building is what it appears to be, he sees the exterior and upon him, according to his capacity, its æsthetic qualities make their impression. Neither plan nor elevation come easily to the architect, they both come with travail.

I do not know what passed through the mind of the architect of the County Council building, but I can imagine him in those days before his ideas found expression on paper—I can imagine his standing on the site formulating in his mind the appearance it should present. Such opportunities come seldom to men, and are not to be lightly received. Standing there one can imagine his eye resting on Barry's great pile of the Houses of Parliament and on Westminster Abbey beyond, deciding that the style of the building must not be Gothic. Then down the river he saw the long Palladian front of Somerset House, and it also had its influence on his choice. The building must compare with neither of these. Shall there be a dome? In the distance was St. Paul's, across Westminster Bridge the new dome of the Wesleyan Central Hall. No; there could be no dome. Should there be a tower? Bentley's high campanile Ashley Gardens pierces the sky, and the decision is tak that gives us the long low roof with its modest turrets the County Council building.

The great building of the Port of London Authority less well known. More people cross Westminster Bric than frequent Trinity Square, but an afternoon would well spent by anyone who pays a visit to the great buildi designed by Sir Edwin Cooper for the Port of Lond Authority. It has been well said of it that it not o stands in the very forefront of modern architectural achie ment, but may without impropriety be deemed not worthy to rank with some of the great works of the Rena sance of similar scale. The plan is almost a miracle. T building is, indeed, a public building in the sense that space occupied and used by the public is the very core a heart of the design. It stands between the Tower of L don and St. Paul's, and its architect has achieved a bu ing which invites no comparison with either, but ha distinction of its own. Internally the great rotun externally the bold and original tower speak at once the imagination.

Londoners may be proud of such buildings, wh proclaim at once not only the ability of their ar tects and the greatness of the authorities which they ho but also the advance in that appreciation and un standing of architecture which alone can produc great city.

Bush House, Aldwych

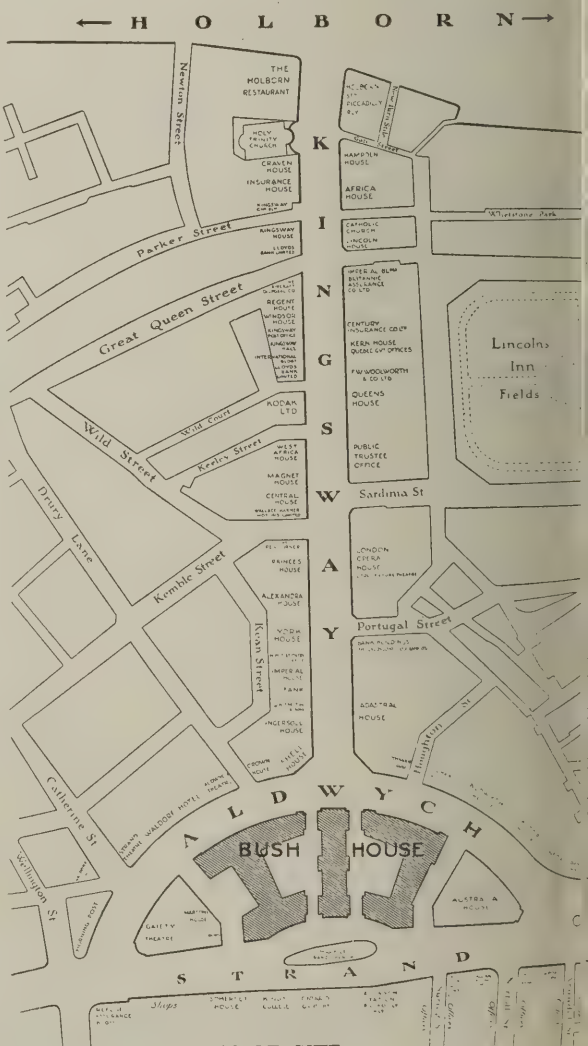
HELMLE and CORBETT, A.I.A., Architects

THE completion of the major portion of the central block of Bush House brings us face to face with a big achievement. It represents the concrete realization of one unit in a triple conception, and crowns the vast co-ordinated effort of designer and workman, which is the true romance of building. And also it marks the moment when professional and lay critic alike will direct their minds towards forming an opinion, voiced or unspoken, of what the Bush building means to London and to the art of architecture.

Most London buildings nowadays appear almost, as it were, by stealth. Jostled by their neighbours, new or old, they rise from the débris of some former structure which has fallen a victim to modern efficiency. Masked at first by scaffolding, they are suddenly unveiled one day in the full glory of their dazzling whiteness. The public notes with approval, and architects consult their confrères to compare appreciations or to rend a reputation. But nearly always there is a verdict possible—the critic is able to compass his task and deliver judgment.

With Bush House the situation seems to be completely changed. It has grown strongly and sturdily. The power of its massive frame has shown for months past through the flimsy garment of its scaffolding. And to-day, revealed, it stands like a good-natured Colossus, smiling on its critics with the quiet good humour of the strong man conscious of his strength. One has, in front of this building, the feeling that the fact of achievement admits of no discussion, that the evidence of success disarms criticism by transcending all its usual standards. For once the building dominates the critic, and when architects appraise or dispute its greatness, their powers of analysis are tested almost to breaking point. The clamour over Regent Street is heard in every quarter, but about Bush House we preserve a strange silence. The quality of greatness cannot be patronized, even though its alloy may not throughout be pure.

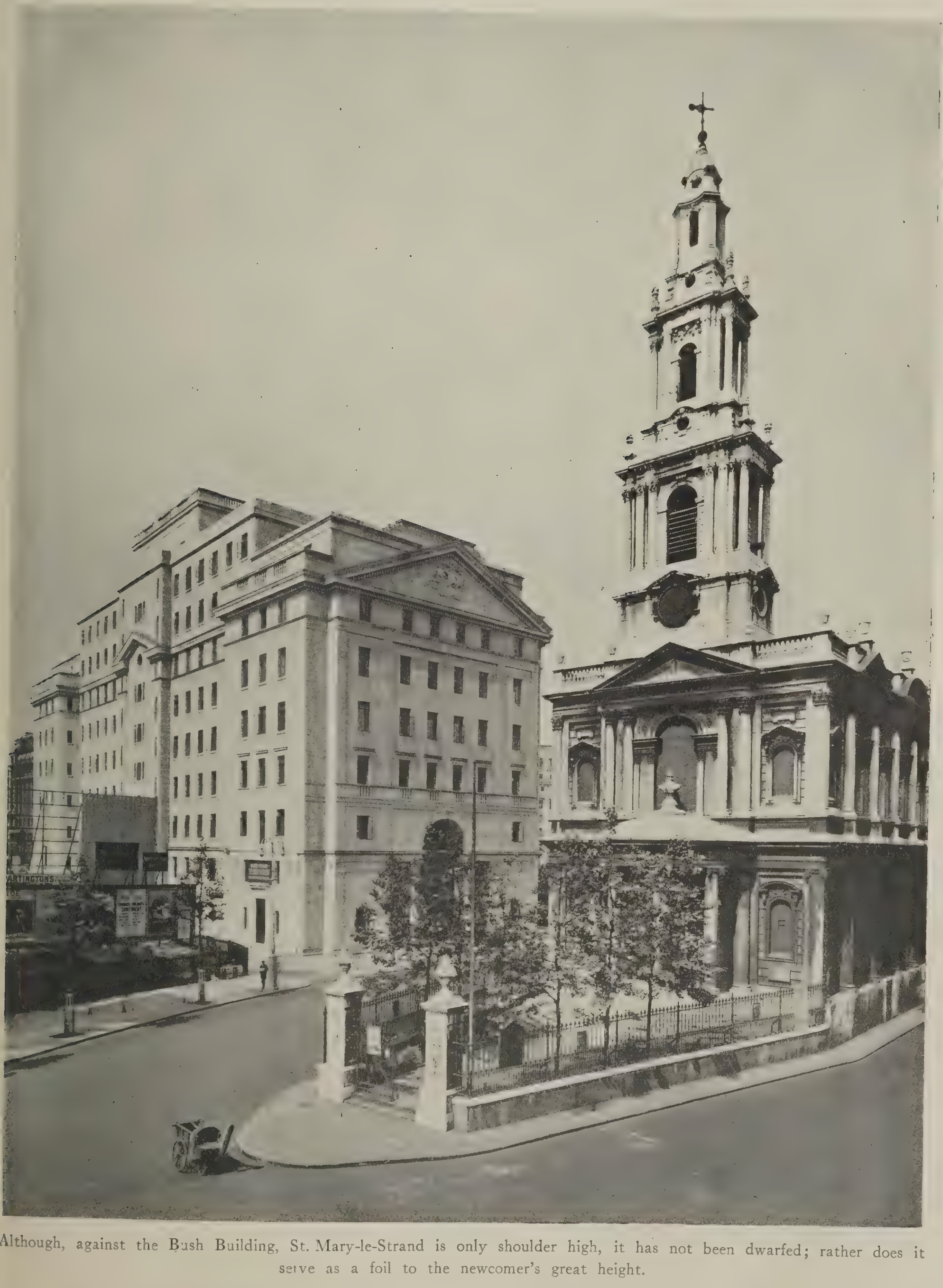
The magnificence of the task which the erection of Bush House has set for its creators must have produced in their minds a potent blend of enthusiasm and responsibility. The opportunity presented by one of the finest sites in the greatest city of the world, coupled with the necessity of



PLAN OF SITE.

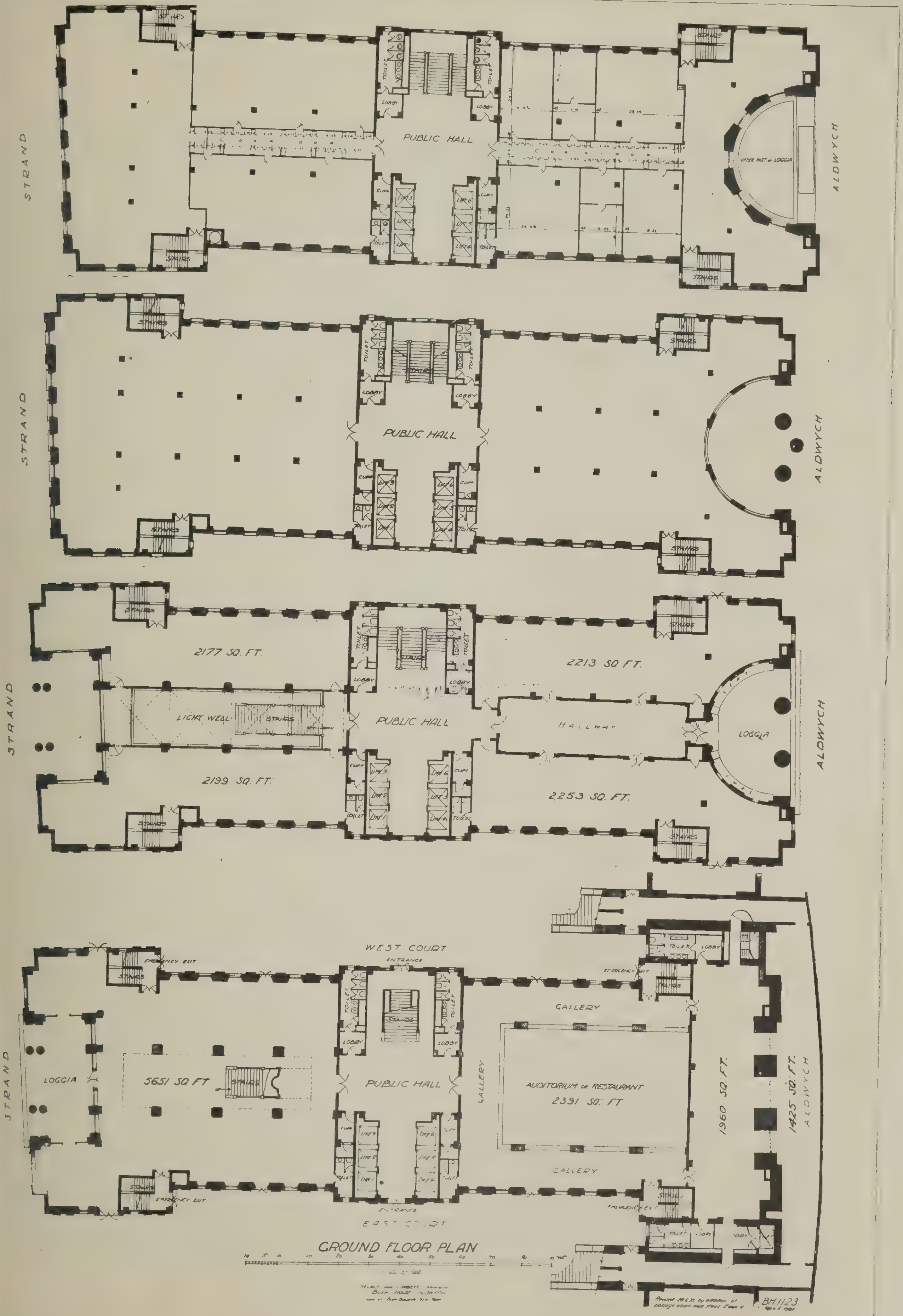
Current Architecture. 186.—Bush House, Aldwych : View looking North-East

Helmle and Corbett, A.I.A., Architects

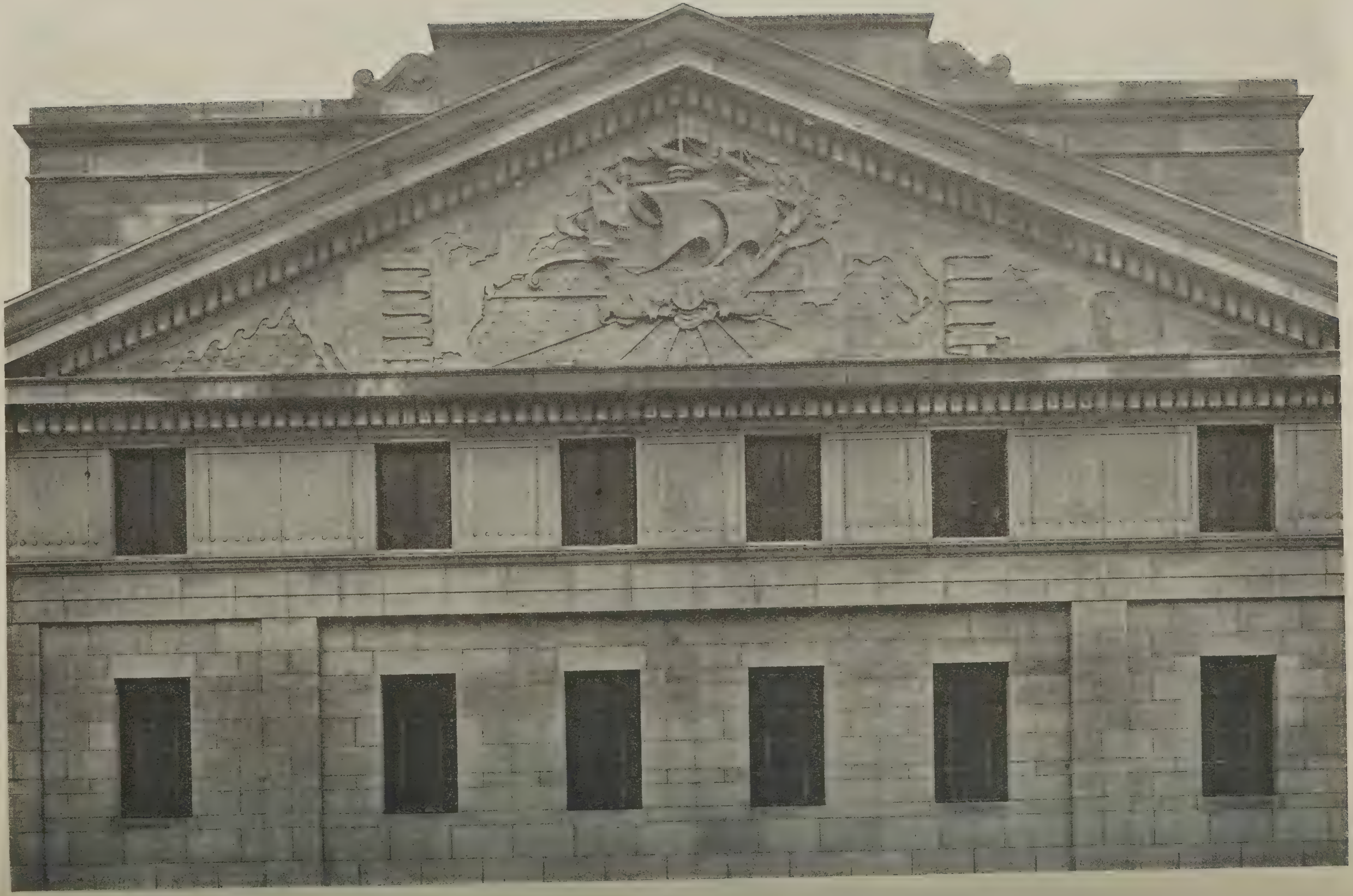


Although, against the Bush Building, St. Mary-le-Strand is only shoulder high, it has not been dwarfed; rather does it serve as a foil to the newcomer's great height.

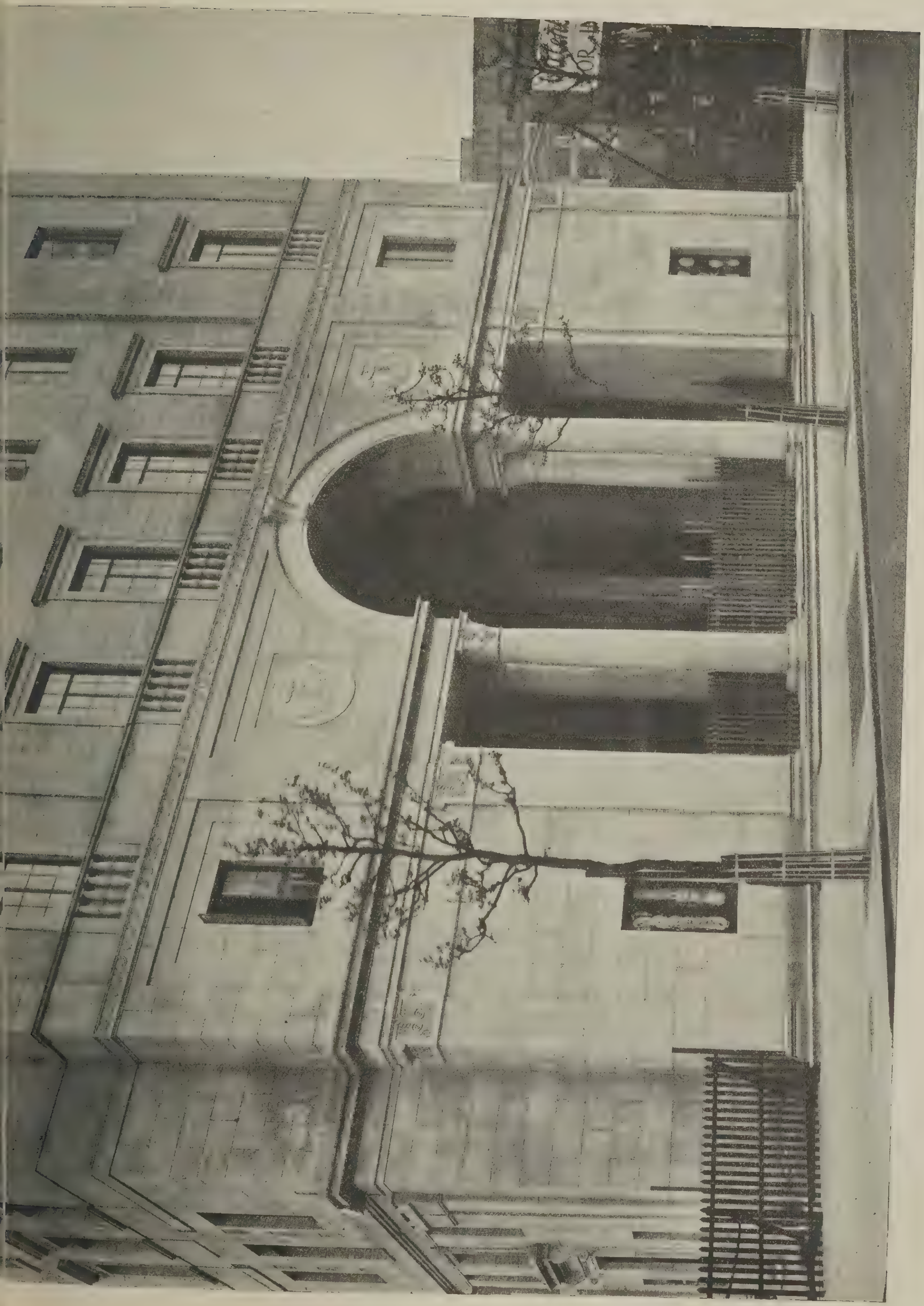
THE LIBRARY
OF THE
UNIVERSITY OF ILLINOIS



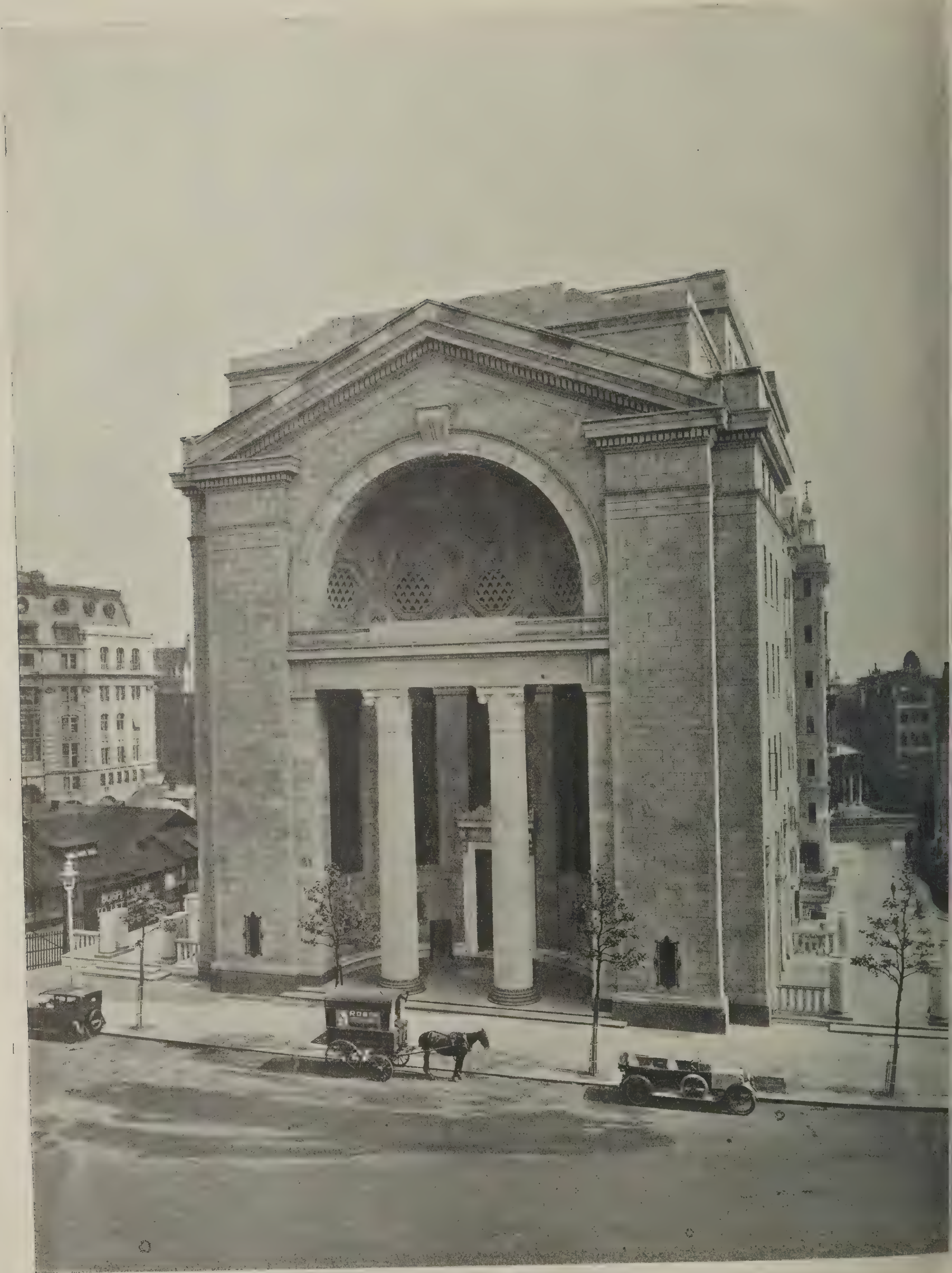
BUSH HOUSE, ALDWYCH: PLANS OF GROUND, FIRST, THIRD, AND FIFTH FLOORS.
HELMLE AND CORBETT, A.I.A., ARCHITECTS.



BUSH HOUSE, ALDWYCH: UPPER PART OF THE STRAND FAÇADE
HELMLE AND CORBETT, A.I.A., ARCHITECTS.



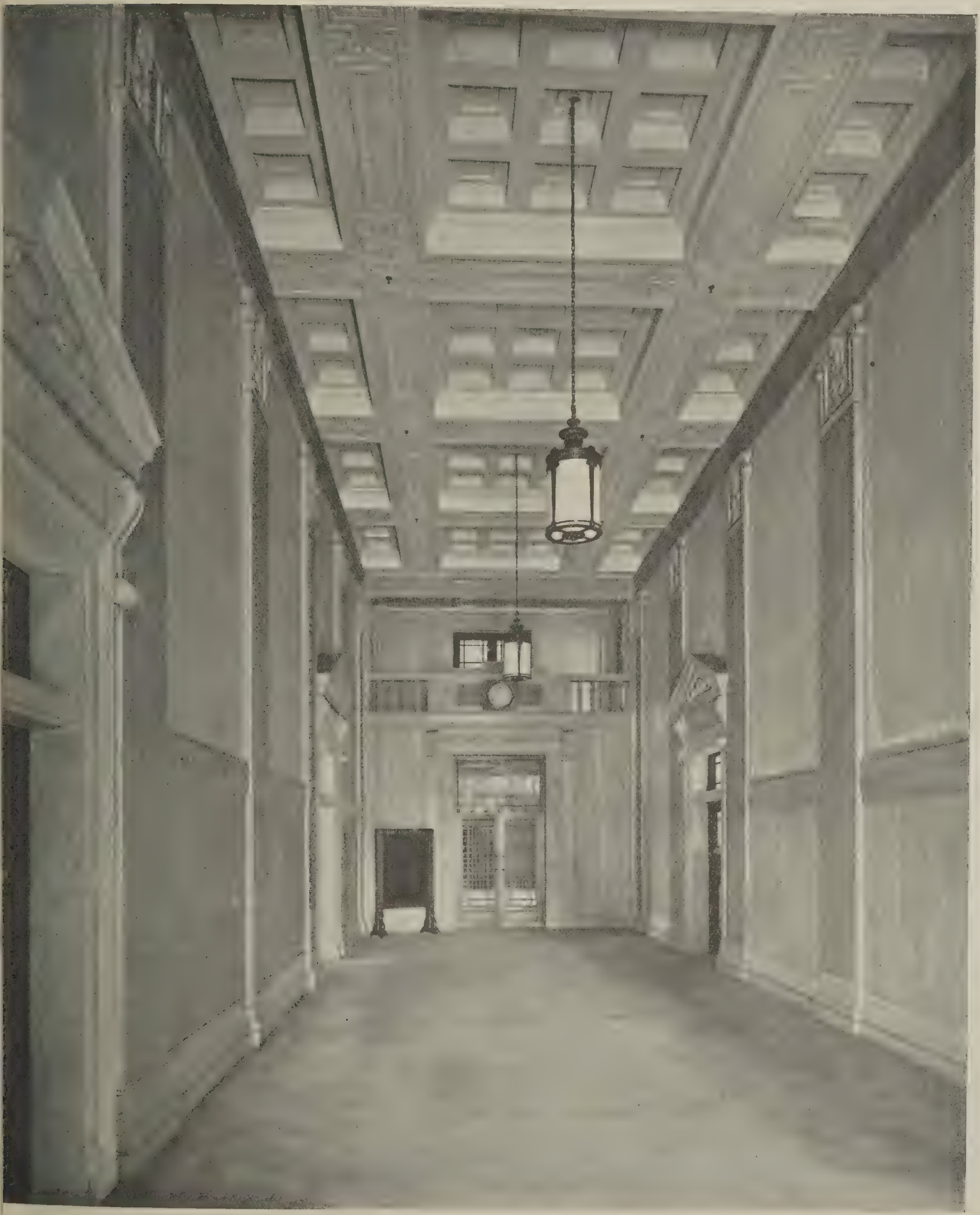
BUSH HOUSE, ALDWYCH: THE LOWER PART OF THE STRAND FAÇADE
HELMLE AND CORBETT, A.I.A ARCHITECTS.



BUSH HOUSE, ALDWYCH: VIEW LOOKING SOUTH.
HELMLE AND CORBETT, A.I.A., ARCHITECTS

Current Architecture. 187.—Bush House, Aldwych : The Aldwych Entrance Hall

Helmle and Corbett, A.I.A., Architects



Handsome ground-floor offices open directly into this hallway, which, with the portico, forms one of the most impressive architectural features in modern London. The wainscot and pilasters are of Travertine marble.

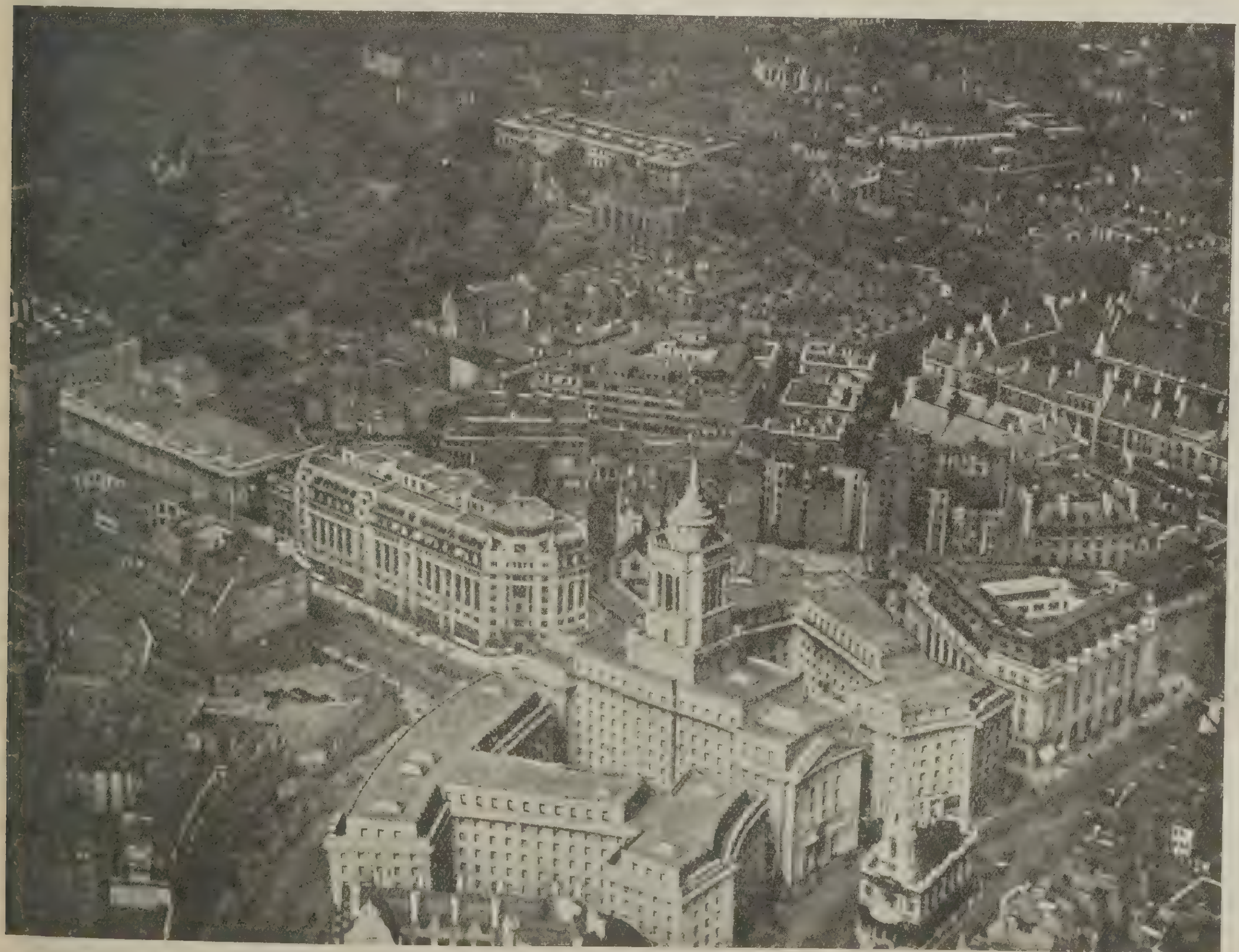
THE LIBRARY
OF THE
UNIVERSITY OF ILLINOIS

acing on it a building combining with nobility of manner
l the essentials of practical business requirements, pre-
nted a problem so unique and difficult as to be an expres-
on to the highest degree of our complex modern life;
existence calling for vast-scale compromises, and the
tisfaction of aims so divergent that their reconciliation is
metimes beyond our grasp. The fact that the difficulties
the problem have been mastered in this case is the cause
that subtler satisfaction which is given to those who can
e beyond the obvious beauty of externals.

The Press, technical and lay, has described in detail the
asons which have dictated the architectural expression
Bush House. The vicinity of Somerset House, the dainty
auty of St. Mary-le-Strand, have called for a restraint
d a polish of manner which the architect so obviously
d at his command. The splendid breadth of Kingsway,
e turbulent vigour of the assertive new buildings which
nge it, required the bold and cool strength of the single
tive which closes its axis and gathers its lines to a focus.
ationed at the foot of Kingsway, with its buildings like
growing line of traffic streaming towards the Strand,
ish House stands like an untroubled policeman with
ite raised glove. Stop! The adequacy of the different
pressions of the two main façades is not the least triumph
the whole conception.

Few persons who view the building from the axis of
ngsway will realize the difficulty which the axis of the
ilding presented, nor the fact that the main bulk of the
ntral mass, behind the block containing the great niche,
slightly *désaxé* from Kingsway. It is only a careful
amination of the parallelism of the highest portion with
at of the immediate Kingsway façade which reveals a
ght inclination of this axis towards the west. Whether
completion of the tower would make this difference marked to any sensible degree is difficult to appreciate, but the experiment will be interesting to watch. The question of the tower is a difficult one, and it requires the privilege of seeing the scale model of the whole group to judge fully of its effect. Indeed, it is absolutely necessary to try and visualize the complete scheme if the full success of the completed portion is to be appreciated.

To east and west of the central block are broad and monumental flights of steps leading down from Aldwych to broad paved walks connecting with the Strand. These may be seen, as also the commencement of the colonnades which will link up with the centre the lateral blocks, work on the western one of which has already commenced. These side blocks are in themselves magnificent buildings, planned as they are with light on all sides; here are no areas nor dingy rooms, but splendid suites of offices each enjoying an aspect either on a street front or on a spacious court greater than Aldwych in width. The erection of these wings will provide a splendid buttressing and scale contrast to the Kingsway front, and carry the restful lines and quiet detail of the Strand façade to right and left to form a background of harmony for the jewel which is St. Mary-le-Strand. It is when these important future developments have taken place that we may judge the architects' conception as a whole, and it is then that we may hope for that purely architectural feature of the central tower to be added, a peace offering to the jealous gods who see a commercial building rising up with the dignity of a mighty temple. A token also of the consideration and interest which the L.C.C. have evinced in Bush House, for we believe that æsthetic considerations have held this public body in their grasp, and that they desire the tower as much or more than Mr. Corbett, who has the crowning responsibility of designing it.



BUSH HOUSE, ALDWYCH: AN AERIAL VIEW.

At the time this photograph was taken the site of Bush House was vacant, but a photograph of a model of the building was used in conjunction with the aerial photograph in order that some idea might be formed of its general appearance.

Those persons who were fortunate enough to hear Mr. Harvey Corbett, F.A.I.A., President of the Architectural League of New York, in his address at the annual prize-giving of the Architectural Association, will have no difficulty in associating his personality with the character of this building which he has designed—clear-cut, decisive, big, and kindly, he displays in speech the quality of his work. In that, may we say without comparisons, he shows a characteristic of the best type of American man and building. Bush House has just these features, in the handling of its plan as well as in its elevations.

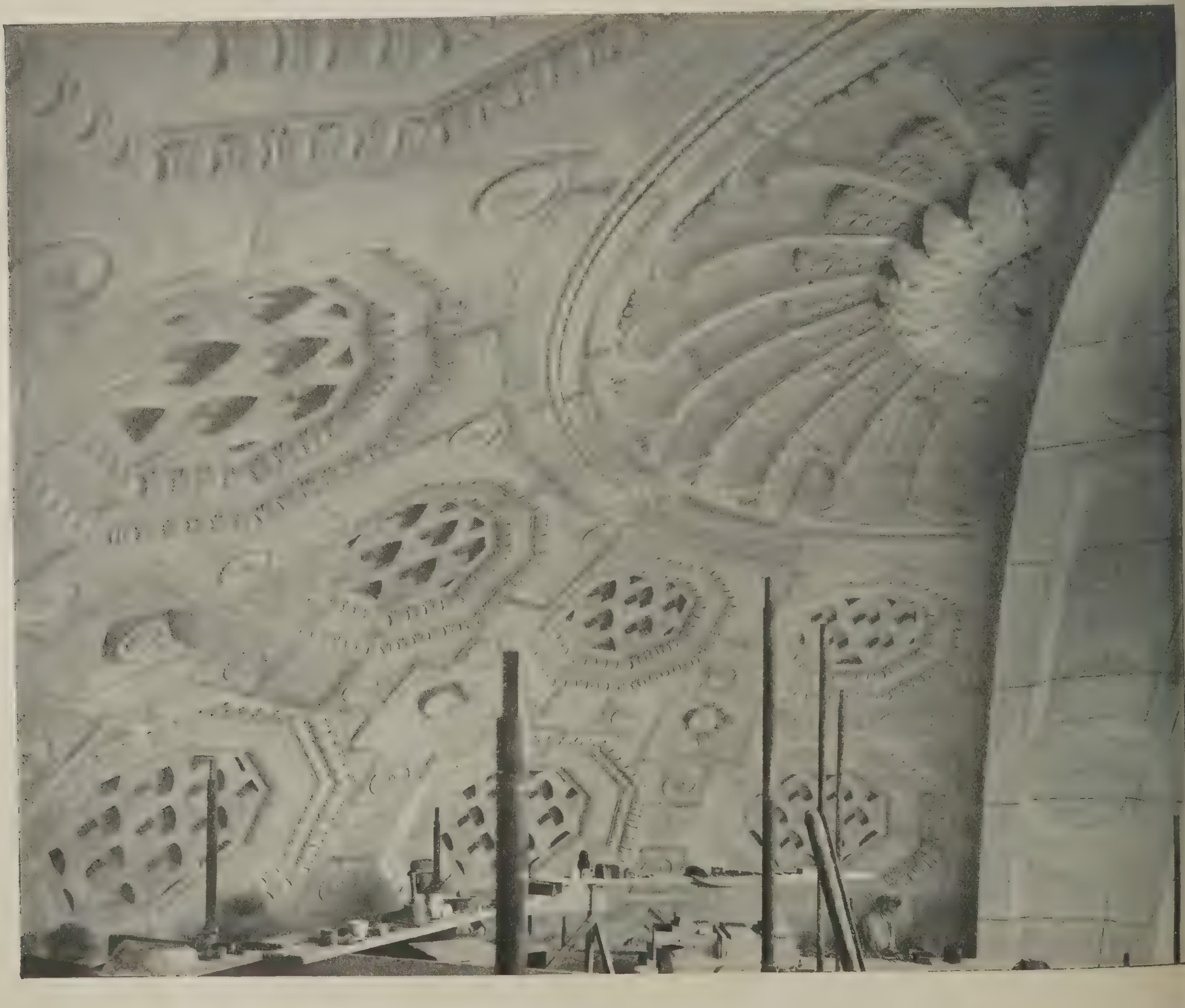
The scheme of the internal lay-out has a broad quality of simplicity which an examination of the floor plans reveals. The prime necessity of providing spacious and yet well-lighted offices, a compact and at the same time generous arrangement of vertical and horizontal circulations, the convenient location of minor accessories, the utilization of the most modern and practical devices for general services, all have been considered, worked out, and realized. The perfectly adequate lighting of the offices may come as a surprise to those who admire from the street a fenestration which allows more wall surface than window opening. The spacious Aldwych entrance hall lined with Travertine marble, the fine *escalier droit* leading up from the 12 ft. lower level of the Strand entrance to the main floor, and ample central lobby with its grouped lifts in one "transept," and its staircase *à la française* in the other, the easy and well-lit minor office corridors, reveal the competent planner. The simple and practical details of finish, the hot-water heating grilles buried out of sight in the wall thicknesses, the swift elevators with their silent sliding doors, all point to the attention of the practical technician.

It would be almost astonishing, indeed, if something approaching the ideal were not to be found realized in building of this scope. The floor space is enormous, som 110,000 sq. ft., and it must be capable of sub-division i such a way as to be completely economical; for the cost this 3-acre site, the magnitude of the commercial unde taking, make it imperative that the details should be of th character to appeal to the highest class of tenant whos business foresight will proclaim the advantage of space a building of this accessibility, situation, and repute.

The clear-cut character of the interior is maintained in th details of the exterior, and with it is combined a generosit of treatment unparalleled in most English building Where else, indeed, will one find an office building providi in both of its approaches a wide and hospitable shelteri portico, lending space to the public way instead of encroac ing on it by every possible device? The nobility of the entrances, the inviting friendliness of the stone benches the weary, are less a reproach to "a nation of shopkeeper than the revelation of a big open-handed spirit. It is in keeping with the lettered inscription of the frieze: "Th Building is dedicated to the Friendship of the Englis speaking Peoples."

A great personality is not devoid of minor weakne and in buildings the same truth applies. Criticism on sm points, unless detailed and sustained, were better left u written. Each man will judge for himself, for the diff ences of opinion are legion, and discussion of details m well obscure the finer and broader issues.

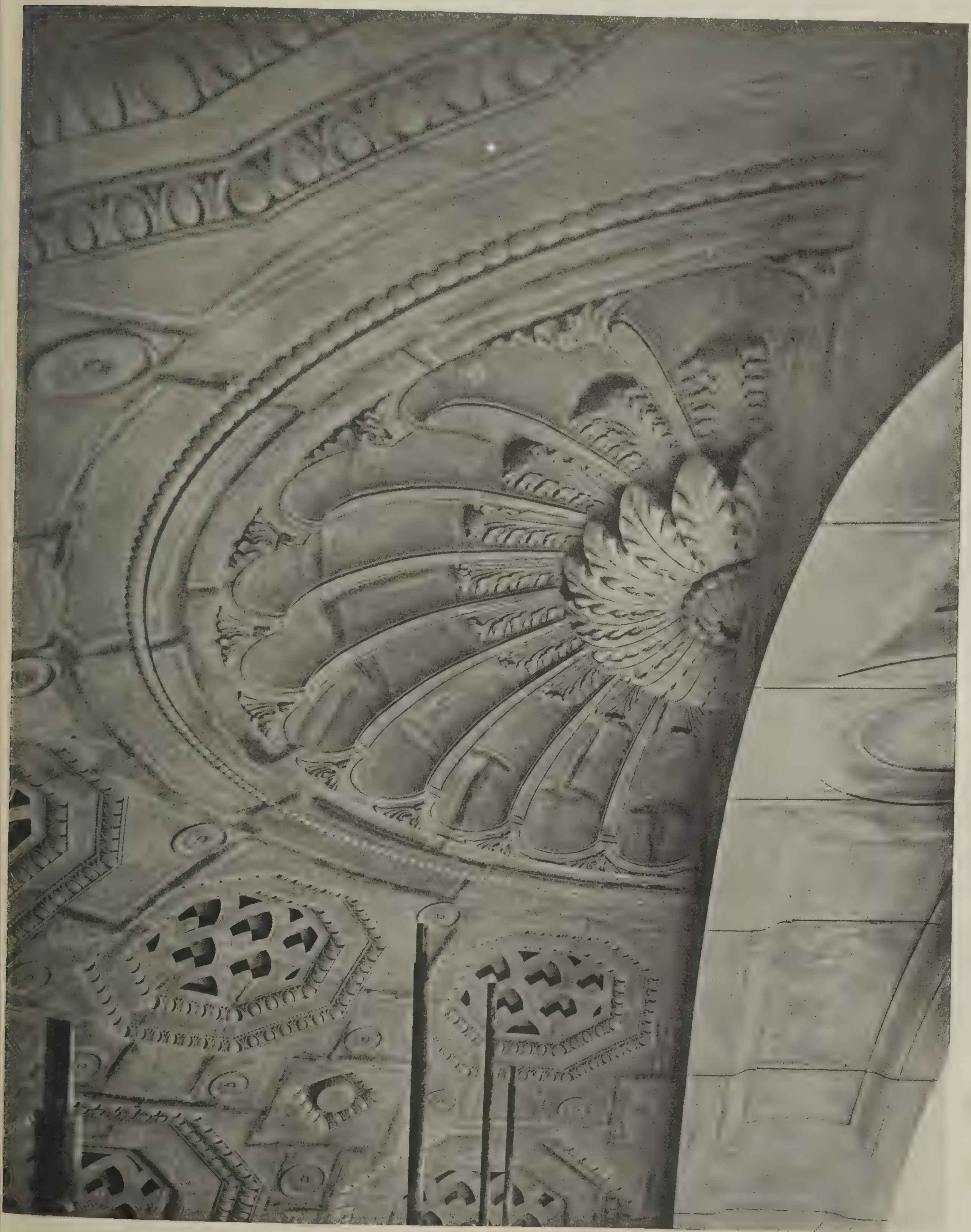
London has been the recipient of an architectural g which will influence her inhabitants, and the design of future buildings. The enterprise of the Bush Termi Company, the talent of those employed on the building Bush House have realized the first step in a great und



SOFFIT OF SEMI-DOME, ALDWYCH FRONT.

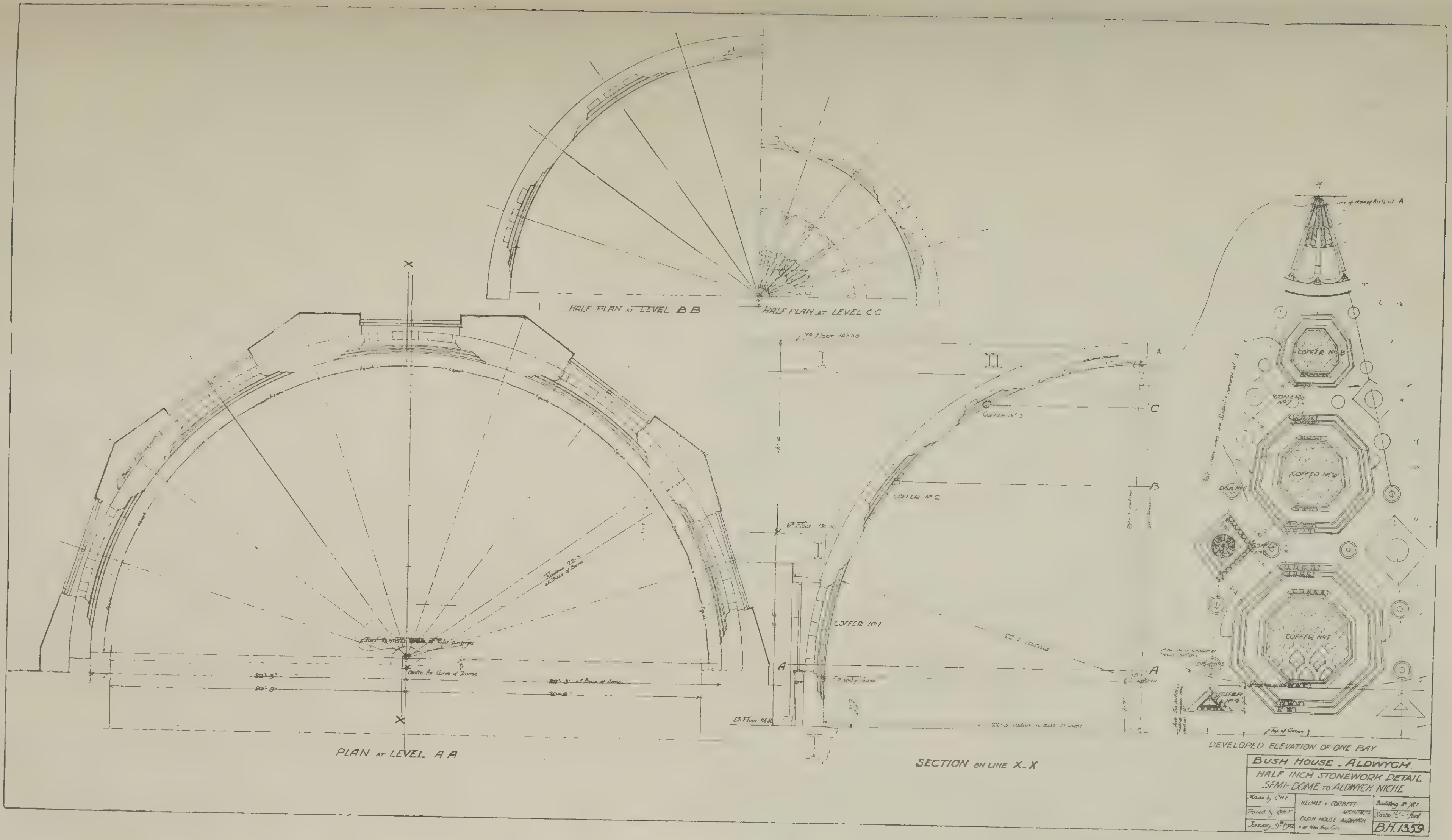
Details of Craftsmanship. 22.—Bush House: Soffit of Semi-Dome and Arch, Aldwych Front

Helmle and Corbett, A.I.A., Architects. William Fagan and Henry Poole, A.R.A., Scu'ptors

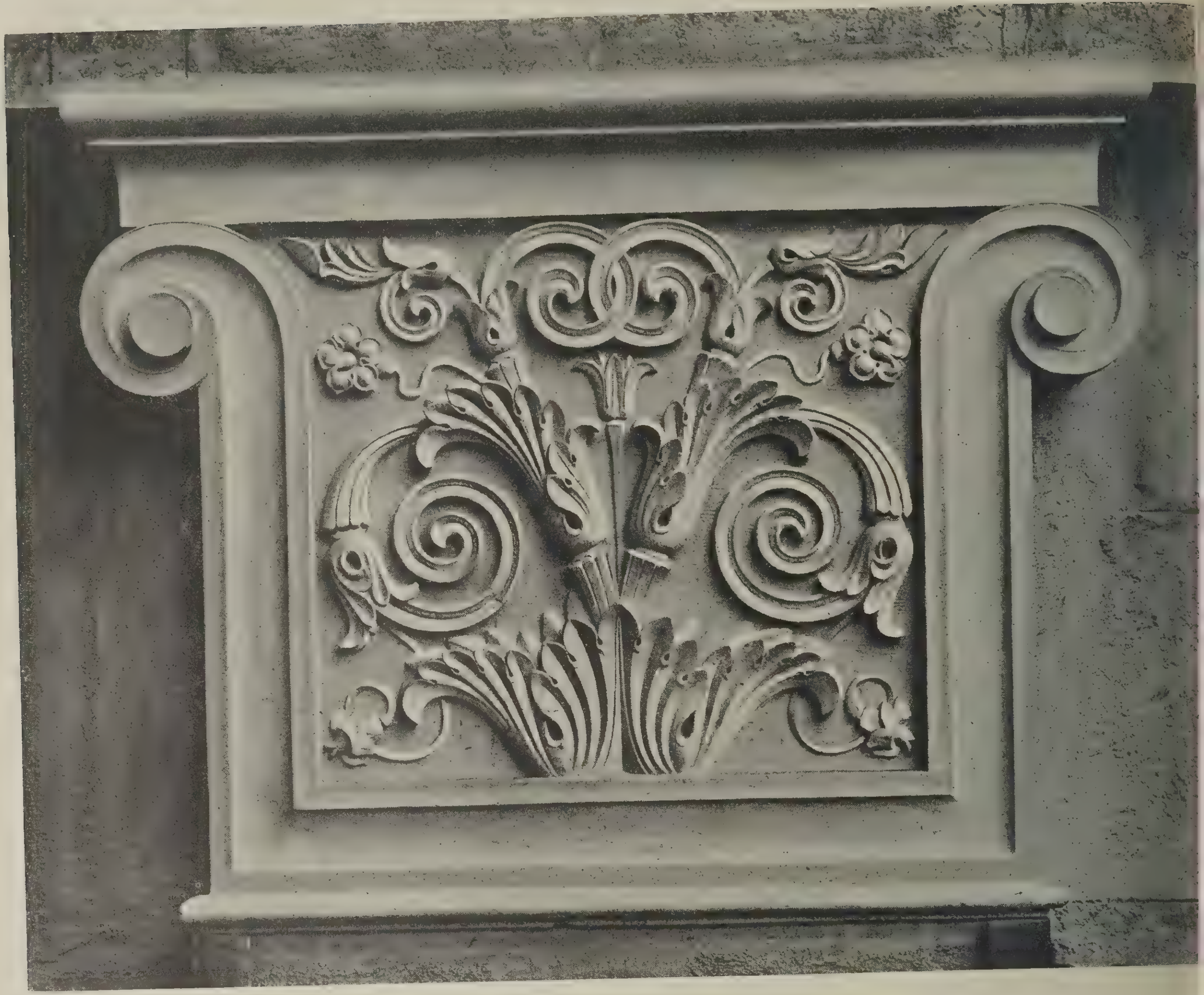


The circular loggia on the Kingsway front is finished with the half-dome illustrated above. Owing to the slight stilting of the arch—a refinement in which our American confrères frankly delight—the dome has two radii.

THE LIBRARY
OF THE
UNIVERSITY OF ILLINOIS



BUSH HOUSE, ALDWYCH: DETAILS OF STONEWORK, SEMI-DOME TO ALDWYCH NICHE.
HELMLE AND CORBETT, A.I.A., ARCHITECTS.



PILASTER CAP, SHOWING CARVING, WEST ELEVATION

taking. The initial success forces one to express the hope that the completed block will not be allowed to stand alone. That it should do so would be an unthinkable disaster.

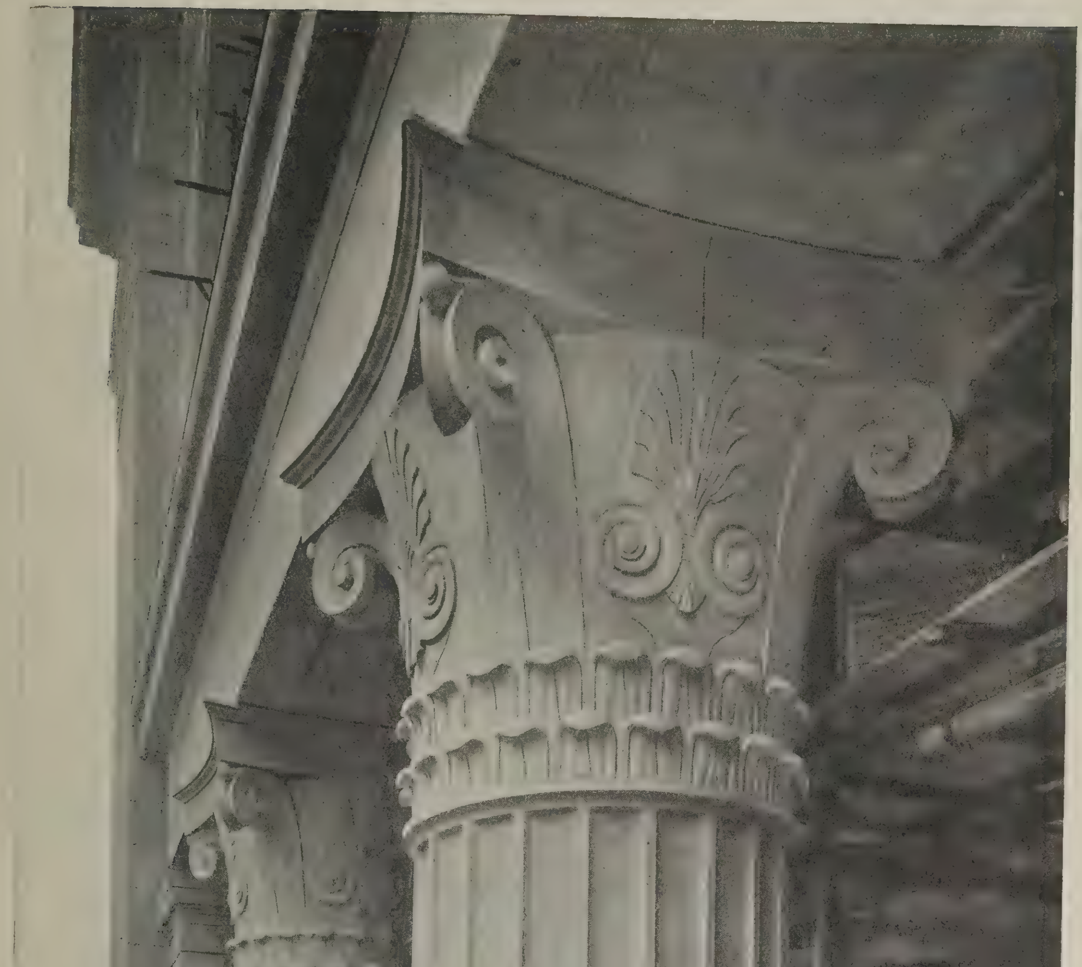
H. R.

Some Structural and Ornamental Details

The virtual completion of the centre block of the buildings and the arrival in this country of Mr. Harvey W. Corbett afforded the members of the R.I.B.A., the Architectural Association, and the Architecture Club an exceptional opportunity to inspect the building.

The northern elevation, which terminates the vista of Kingsway, is of an entirely different character from the southern end, which faces on the Strand. It has been designed as the centre feature of the whole of the northern curve of the site facing Aldwych, a length of approximately 637 ft. Its scale is very large, and until the supporting wings are erected on either flank it is not easy to judge the final effect of the design as a whole. The extreme width of the centre block to Aldwych is 86 ft., while the height to the soffit of the arch is 78 ft., and to the apex of the pediment, 97 ft. The granite bases of the columns are of a size not attempted in recent years, the overall diameter being 7 ft. 6½ in., requiring a stone 8 ft. square and 2 ft. 6 in. thick. These bases necessitated a certain amount of fine undercutting which is unusual in granite work, and owing to the weight and size of the blocks special machinery was used for their preparation. The caps surmounting these columns are also unusual in detail. The measurement across the face of the abacus is 8 ft., and 11 ft. across the diagonal. The height of the capital is 6 ft. 2 in., and was executed in three stones. The arch consists of fourteen voussoi
and the keystone; the masonry used being of
considerable weight and size. A special method was
to keep the centering rigid to receive the weight of t
which amounted to 116 tons. The architects finish
circular loggia at the top by a splendidly concei
dome. It is probably many years since such a
masonry construction has been carried out in this
The extreme diameter of the dome is 47 ft. 6 in.,
interesting feature of this is that, owing to th
stilting of the arch (a refinement in which our A
confrères frankly delight), the dome has two radii.
centering was prepared to receive the dome, the
of which weighs about 235 tons. Owing to the si
coffers, which are sunk back to three different f
which, in the lower tier, are pierced through t
thickness of the stone, special arrangements ha
made for jointing. The thickness of the masonr
dome has been made 18 in. throughout, owing
piercings, which over such a large area con
reduce its strength.

The design of the Strand façade is on a more
scale than that of the Aldwych end. This end im
faces the church of St. Mary-le-Strand, and the
of position has settled to a certain extent the cha
the entrance loggia. The treatment of the capita
pair of columns flanking the entrance is unusual,
loggia itself is roofed with a vaulted ceiling in
stone, the groins of which change their plane as
from the springing up to the crown. The who
carving is kept flat, a feature, indeed, noticeable th
the building. Circular medallions carved in stone
archway. The subject of one medallion is th
Columbus, "Santa Maria," and the other is the



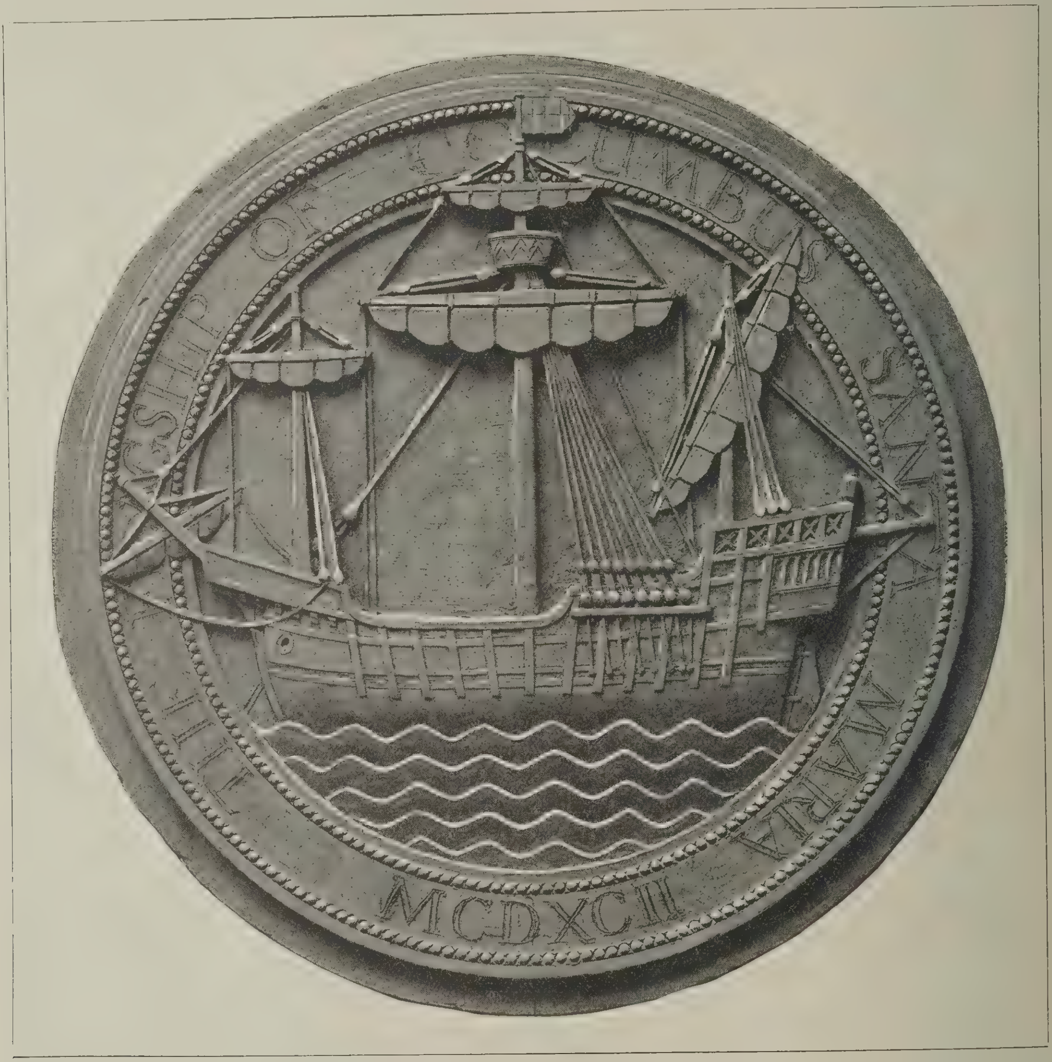
BUSH HOUSE, ALDWYCH: DETAIL OF CAPITALS TO THE ALDWYCH COLUMNS
HELMLE AND CORBETT, A.I.A., ARCHITECTS.
WILLIAM FAGAN AND HENRY POOLE, A.R.A., SCULPTORS

Erickson the Viking. The carving on the face of the arch represents the signs of the Zodiac. An interesting feature of the Strand pediment is the treatment of the tympanum. Opportunity has been taken to make a distinctive feature in this position. The idea underlying the carving shows the ship of Columbus returning from America to Europe. In low relief the continent of America is shown on one hand and the continent of Europe on the other hand. The ship is in high relief, and is true in every detail to the ship itself as shown by ancient models. On either side of the tympanum a place has been found for a scroll on which the names of five outstanding Americans and five outstanding Englishmen who have been interested in American development have been carved.

We show (on page 260) a close-up photograph taken from the scaffold the day the carving was completed. This gives some idea of the character of the work.

The building throughout, which is of a very dignified character, strikes a new note in the architecture of London. Undoubtedly the site has afforded a very fine opportunity to the architects, and they in their decision to rely very largely for their effect on simple dignity, mass and proportion, have certainly no cause to feel disappointed with the result.

The treatment of the side elevation is far more severe than is customary in England, and yet one cannot but admit that the very severity, coupled with the spacing of the windows and the interest gained by varying and by emphasizing the jointing of the stone work, is more than justified.



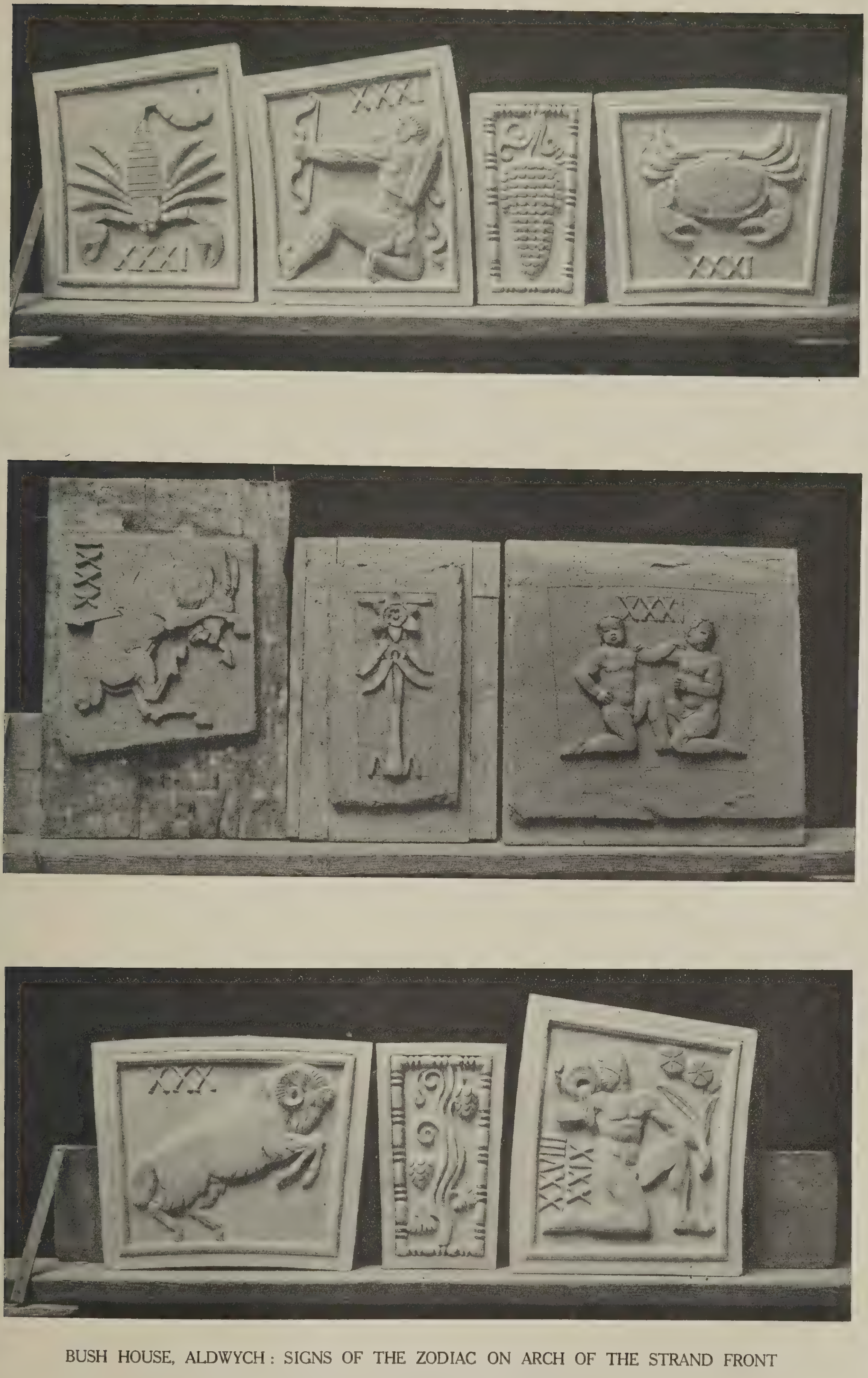
A DETAIL OF ONE OF THE MEDALLIONS ON THE STRAND FAÇADE

The flanking courtyards have been very happily tr These have been paved with a hard brick of a yellow c thus giving character and tone to a feature which term on either side of the building with a flight of granite of considerable dignity, giving access from the Stranc to the higher level of Aldwych.

The whole of the carving throughout the bu including the capitals and the dome, was carried o Messrs. William Fagan and Henry Poole, A.R.A.

Mr. W. Ingle was responsible for the photographs.

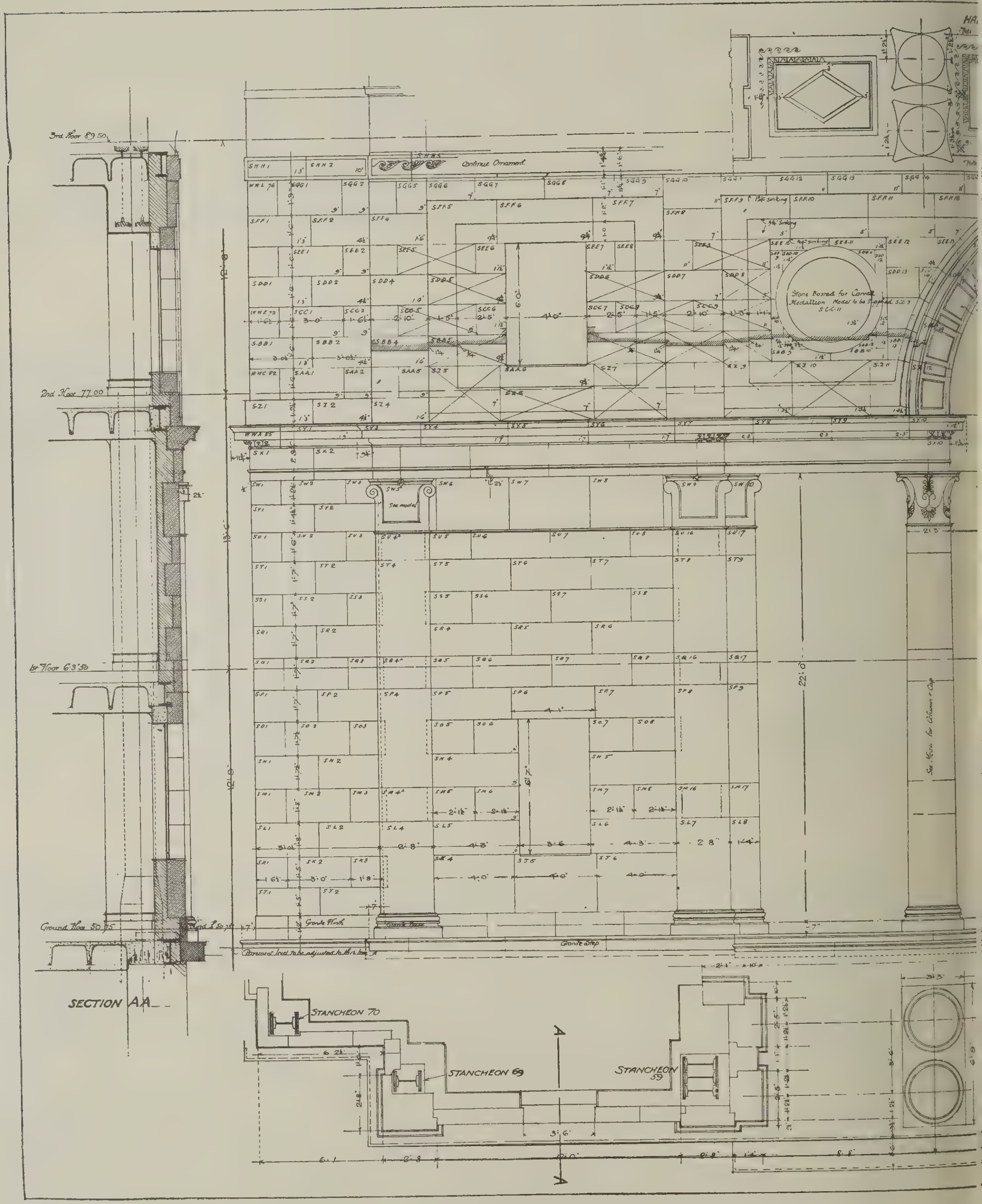
The lifts are of special character and introduce the latest features in lift manufacture. These are f number, each capable of a duty of 1,800 lbs. at a sp 400 ft. per minute. Although they run at a high owing to being fitted with patent micro-drive self-le apparatus, the stopping of the lifts at the floors is p smooth and always accurately level—irrespective skill of the operator or the load in the car on any pa journey. This effects a considerable saving in wear a of the machinery and also starting current, as th controller and motor are only operated once to bı lift to a standstill. The cars are of steel througho bronze finish collapsible gates at the entrances. The for cars and counter-balance weights are of steel s give smooth running. Special safety gear is a underneath the car operated by a governor and d to come into operation slowly and stop the lift gr in case of necessity. The entrance doors are arrai a special system and built in three panels. One fixed and the other two are operated simultaneo



BUSH HOUSE, ALDWYCH: SIGNS OF THE ZODIAC ON ARCH OF THE STRAND FRONT
HELMLE AND CORBETT, ARCHITECTS.
WILLIAM FAGAN AND HENRY POOLE, A.R.A., SCULPTORS.

Architects' Working Drawings. 66.—Bush

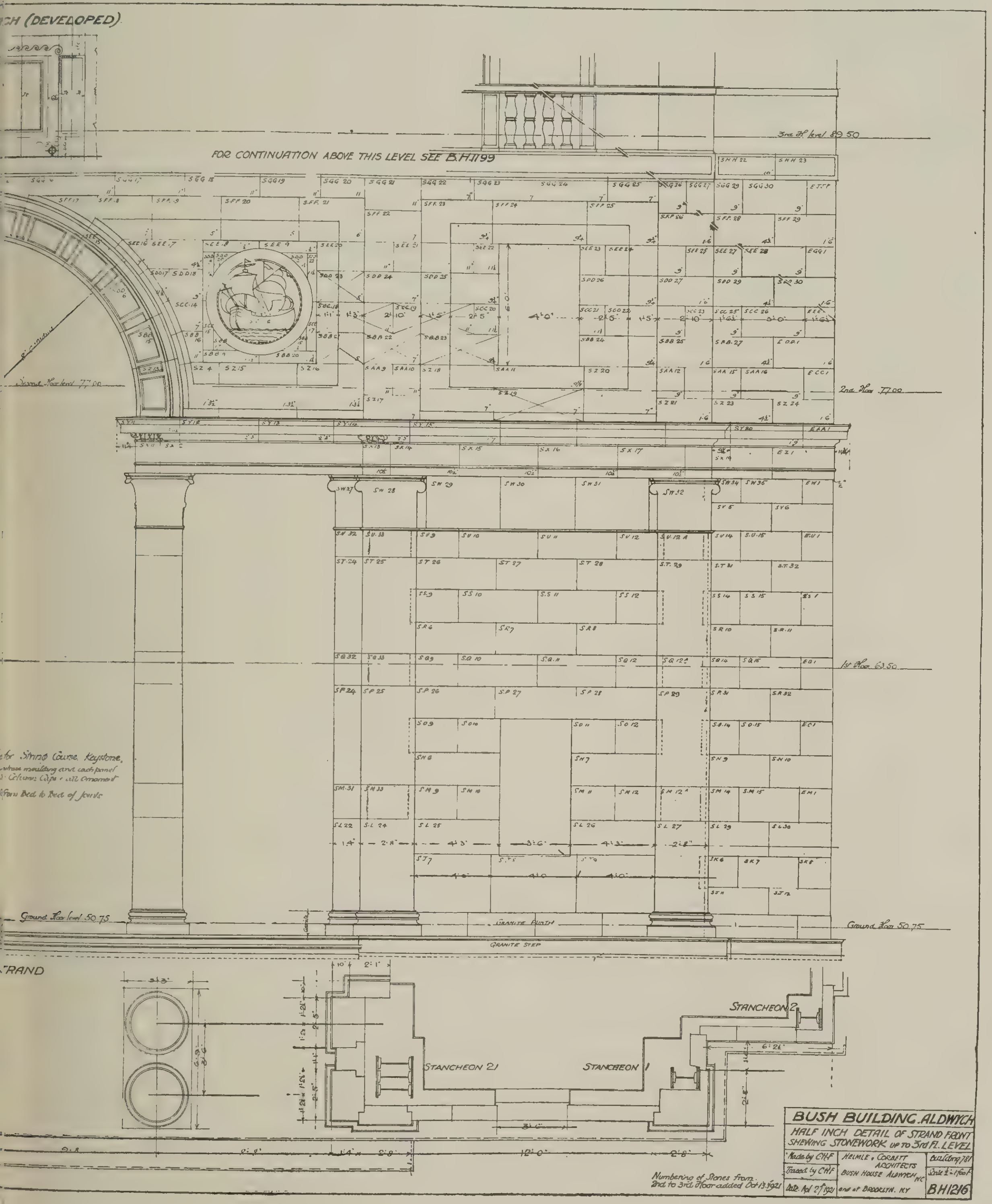
Helmle and



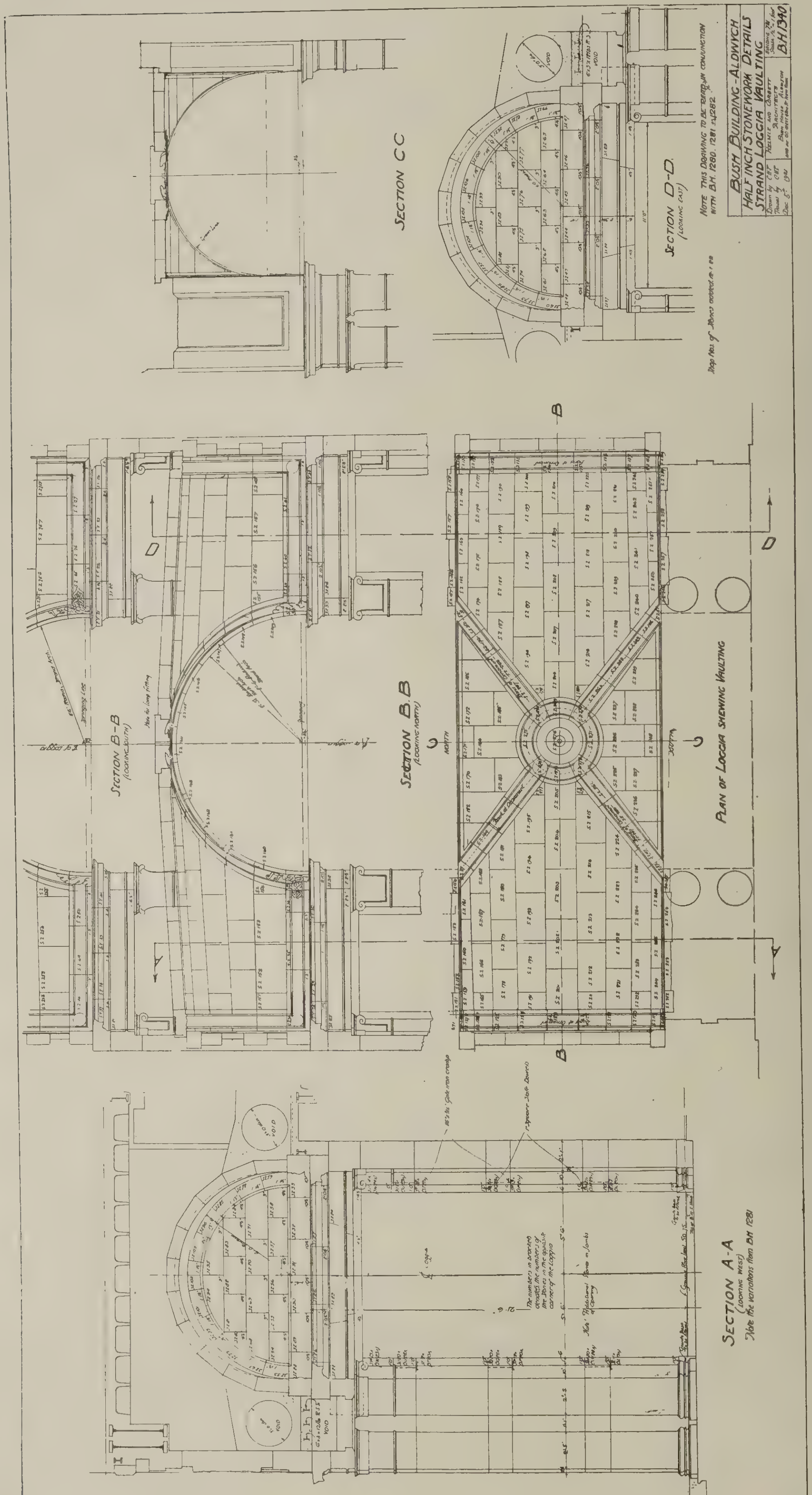
The great portal to the Strand goes up through the whole of th

wych : Detail of Entrance from the Strand

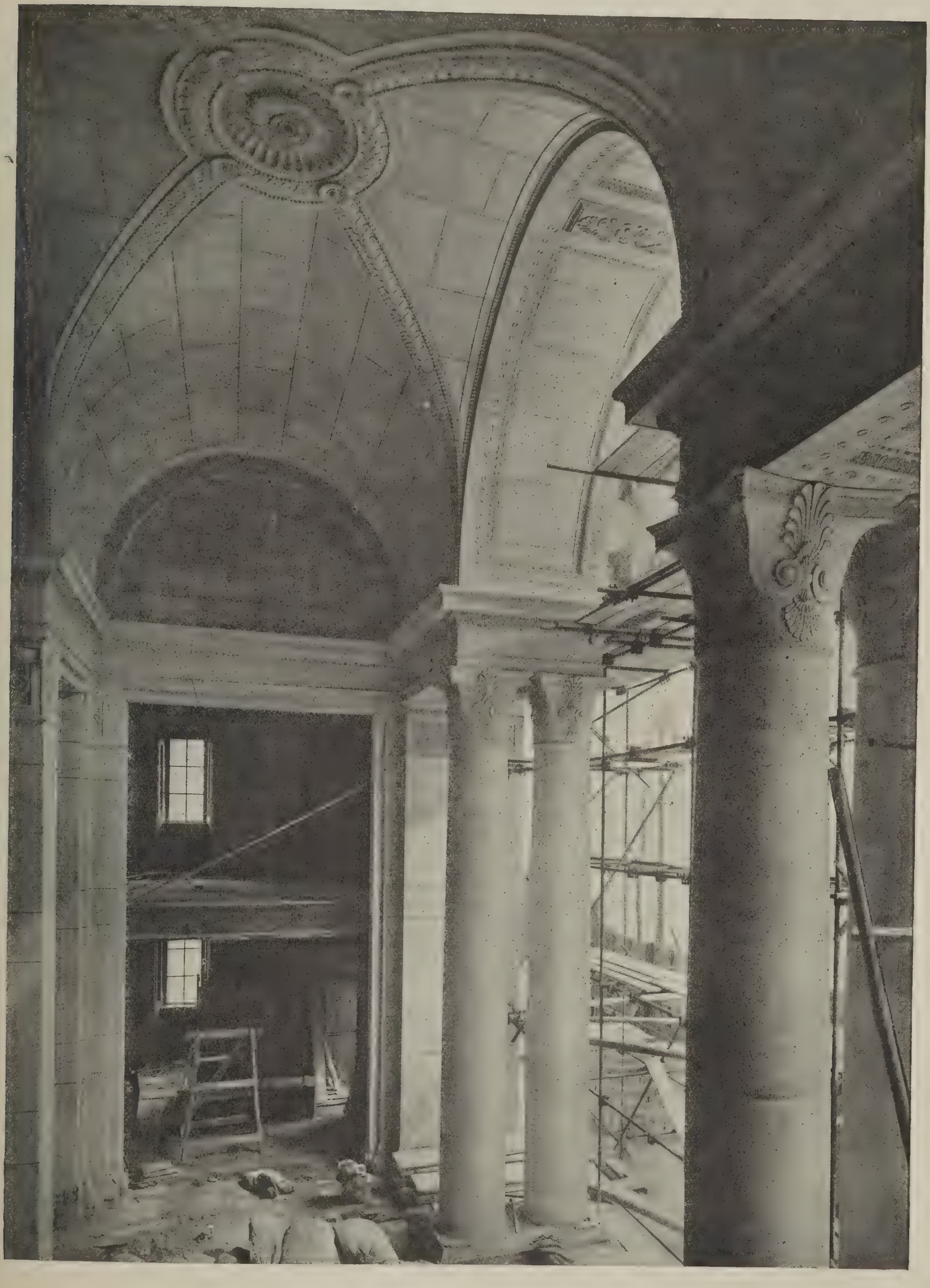
., Architects



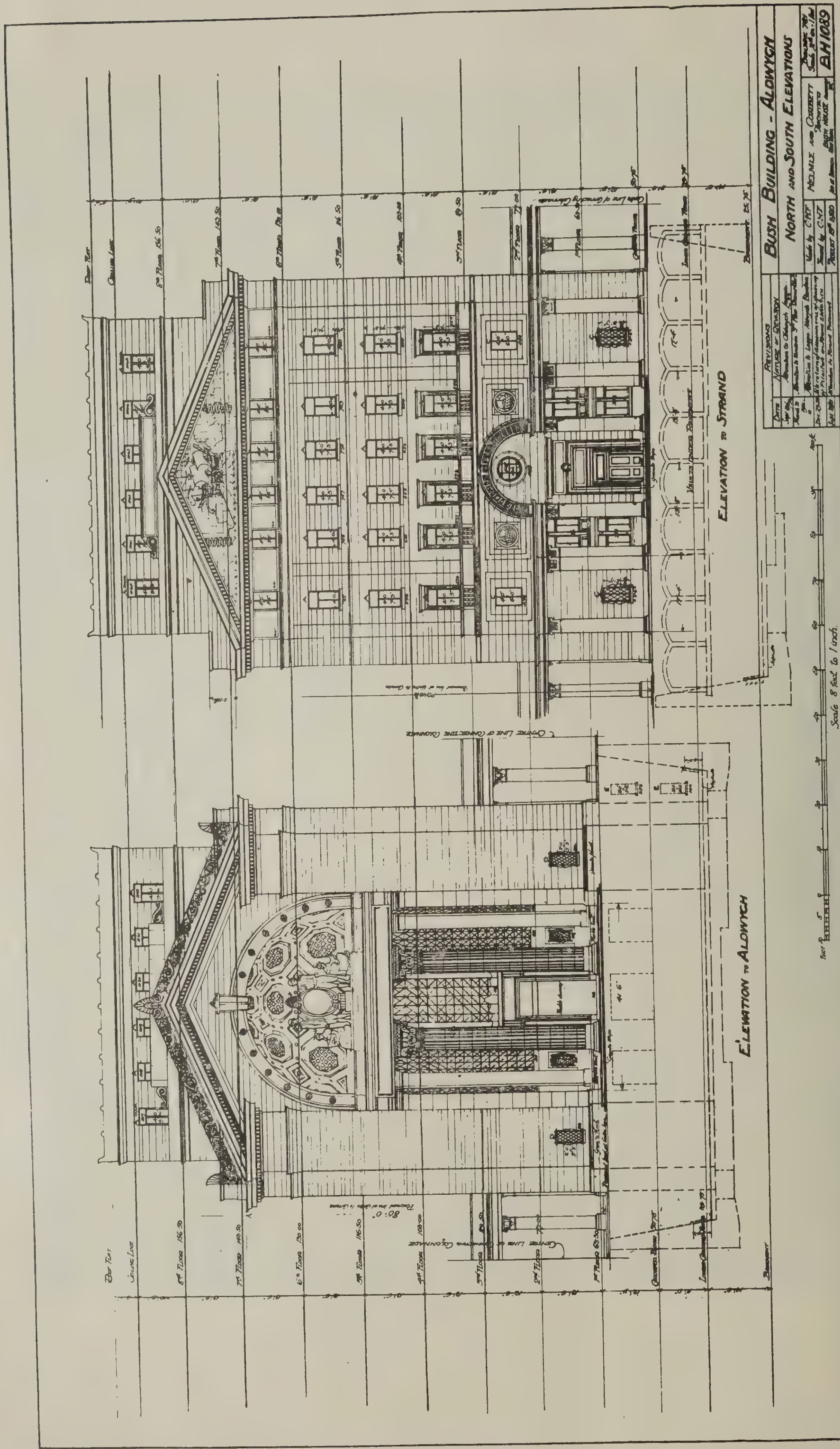
ortions are such as to keep it in scale with the rest of the façade.


SECTION C C
SECTION D-D
(LOOKING EAST)
NOTE THIS DRAWING TO BE READ IN CONJUNCTION WITH B.M. 1280. 1281 & 1282
BUSH BUILDING - ALDWYCH
HALF INCH STONEWORK DETAILS
STRAND LOGGIA VAULTING
B.H. 1340
HELMLE AND CORBETT ARCHITECTS
SECTION B-B
(LOOKING SOUTH)
SECTION B.B
(LOOKING NORTH)
NORTH
PLAN OF LOGGIA SHEWING VAULTING
B
D
A
SECTION A-A
(LOOKING WEST)
Note the variations from BM 1281
VOID

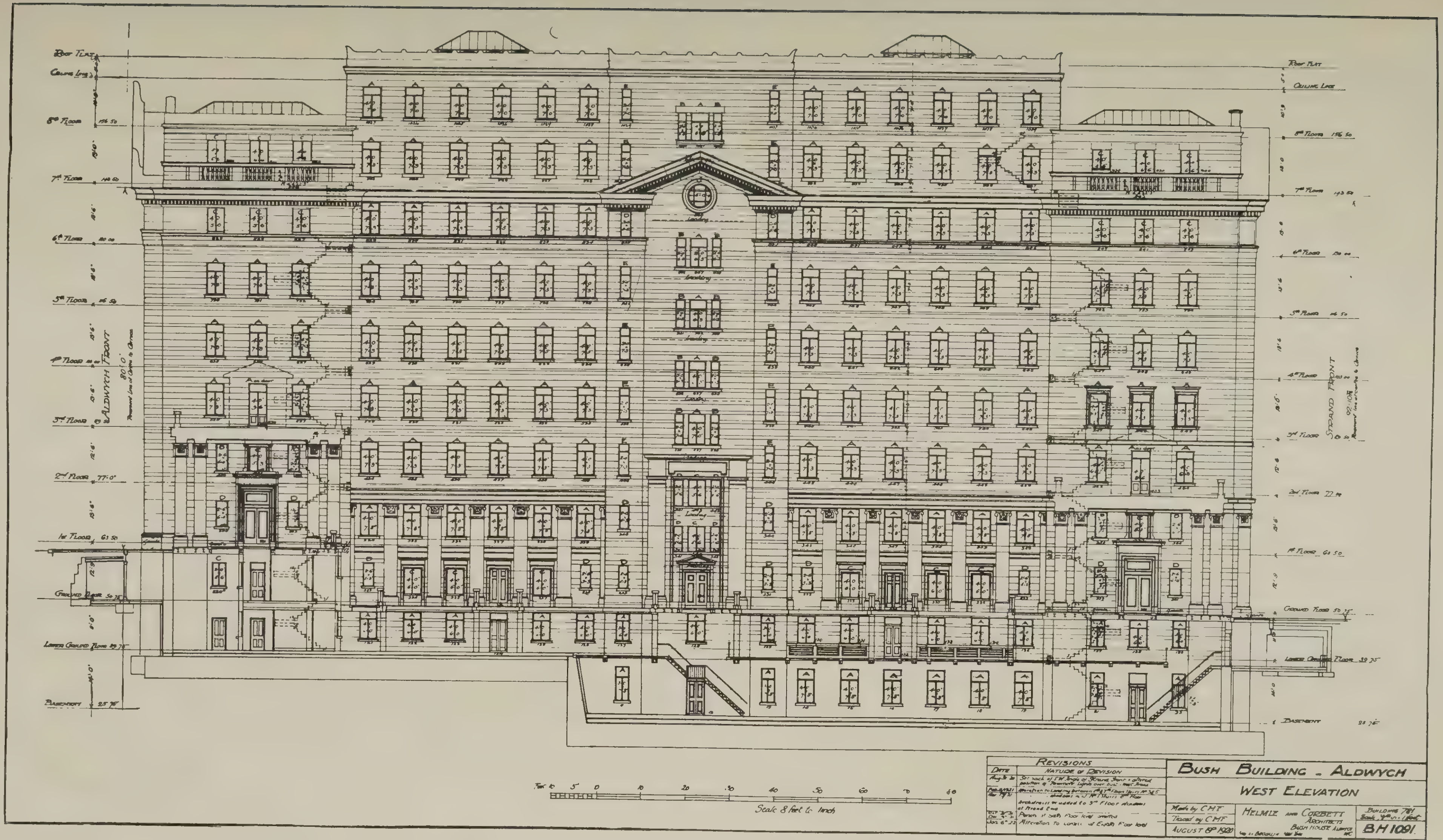
BUSH HOUSE, ALDWYCH : DETAILS OF STONEWORK, STRAND LOGGIA. HELMLE AND CORBETT, A.I.A., ARCHITECTS.



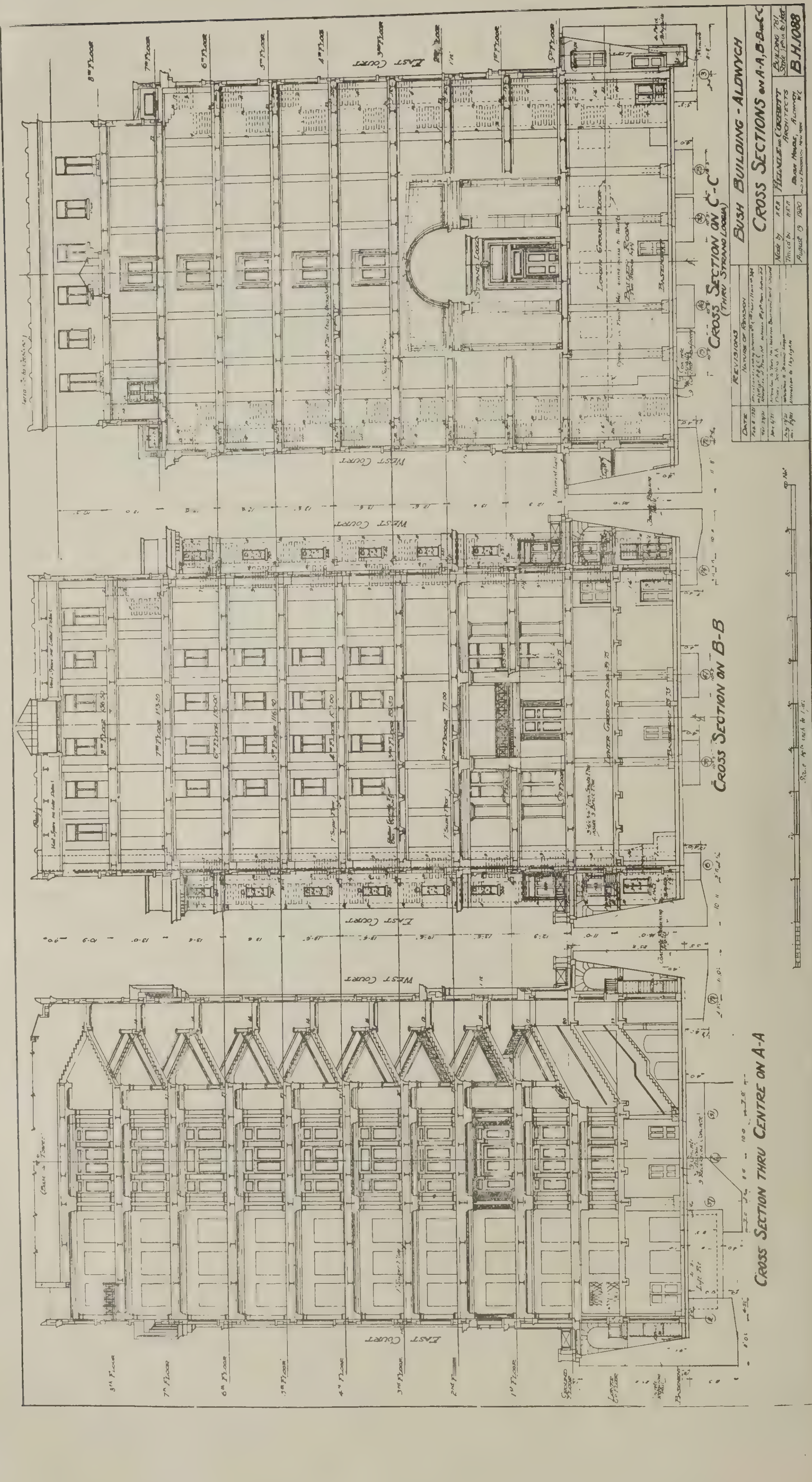
BUSH HOUSE, ALDWYCH: THE STRAND LOGGIA.
HELMLE AND CORBETT, A.I.A., ARCHITECTS



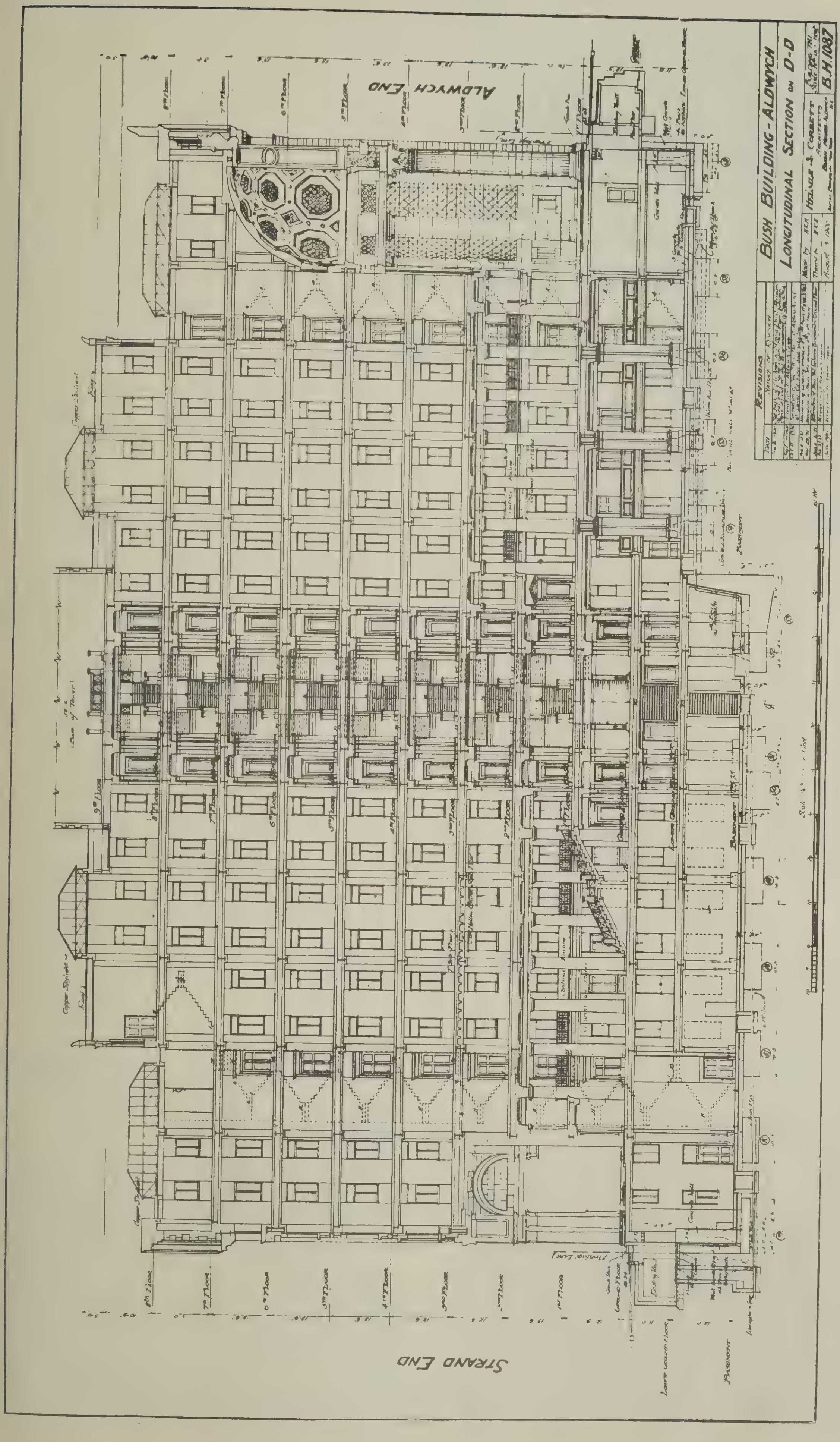
BUSH HOUSE, ALDWYCH: THE NORTH AND SOUTH ELEVATIONS.
HELMLE AND CORBETT, A.I.A., ARCHITECTS.



BUSH HOUSE, ALDWYCH: THE WEST ELEVATION. HELMLE AND CORBETT, A.I.A., ARCHITECTS.


BUSH BUILDING - ALDWYCH
CROSS SECTIONS ON A-A, B-B & C-C
HELMLE AND CORBETT ARCHITECTS
B.H.1088
REVISIONS
CROSS SECTION ON C-C (THRU STRAND LOGGIA)
CROSS SECTION ON B-B
CROSS SECTION THRU CENTRE ON A-A
EAST COURT
WEST COURT

BUSH HOUSE, ALDWYCH: CROSS SECTIONS. HELMLE AND CORBETT, A.I.A., ARCHITECTS.



BUSH HOUSE, ALDWYCH: LONGITUDINAL SECTION. HELMLE AND CORBETT, A.I.A., ARCHITECTS.

THE STRAND PEDIMENT FROM THE EAST.

two-speed hangers, so that both halves slide simultaneously in the same direction in opening and closing. The doors are closed automatically when the operating bar is released and are automatically locked, so that they can only be opened from the inside. The doors are fitted with electric contacts so that the car cannot be started unless the doors are properly closed. The doors are built with steel frames and fire-resisting glass panels. Direction light indicators are fitted over the doorways. The whole of the installation has been carried out by Messrs. Waygood-Otis Ltd.

Messrs. Mather & Platt, Ltd., supplied the "Grinnell" Automatic Sprinkler Installation throughout the building, a complete system of inside fire hydrants, and two standard plate cast-iron service tanks, each 16 ft. by 13 ft. by 8 ft., with a capacity of 10,400 gallons each.

The bronze doors and decorative metal-work were carried out by Messrs. H. H. Martyn & Co., Ltd.

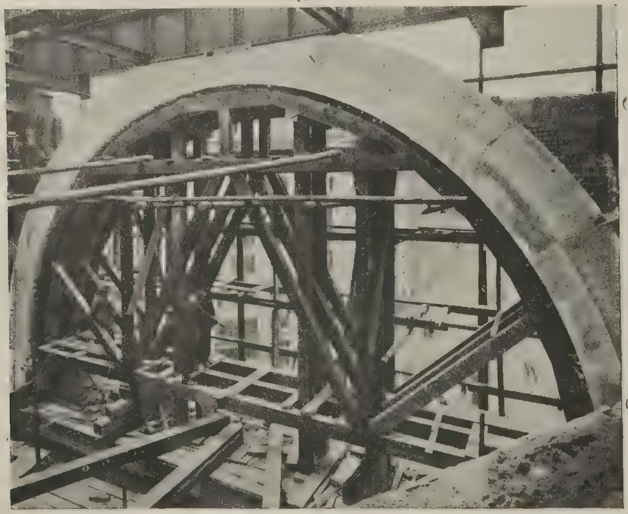
Messrs. John Mowlem & Co., Ltd., were the general contractors, the sub-contractors being as follows: Dorman Long & Co., Ltd. (steelwork); C. Isler & Co. (artesian wells); Mather and Platt, Ltd. (sprinklers, fire hydra
and service tanks); Waygood-Otis, Ltd. (lifts); Rosser
Russell, Ltd., R. Crittall & Co., Ltd., Haden and Sons, I
(heating); Henry Hope and Sons, Ltd. (windows); E
trical Installations, Ltd. (lighting); Doulton & Co., I
(sanitary ware); H. H. Martyn & Co., Ltd. (bronze d
and decorative metalwork); R. Gay & Co. (paint); Ja
Gibbons, Ltd., Wolverhampton (ironmongery); Matt
Hall & Co. (plumbers' work); Limmer and Trinidad L
Asphalte Co. (asphalte); J. Whitehead and Sons, L
Fenning & Co., Ltd., A. and F. Manuelle (marblework
granite).

The stonework for the building as a whole has been car
out by the general contractors, Messrs. John Mowlem &
The masonry and setting-out of the dome, which pro
to be an extremely intricate piece of work, was car
out by the Bath and Portland Stone Firms, Ltd., under
supervision of their chief setter-out, Mr. N. Bird.
architects were extremely satisfied with the way in w
this important feature was executed.

Preliminary Models

Much trouble and ingenuity has been displayed on
part of the architects in the attempt to obtain exact i
of how every part of the building would appear w
erected. To this end careful scale models have been m
and not only have they been regarded alone, but
some concern as to how the building would look in
junction with its surroundings. The illustration (page
shows a view of the site of the Bush building, and thou
would seem that the building, with its crowning tower
flanking wings, has been completed, the result is obta
by photographing the site from the air and then impo
upon the negative another photograph of a model of
building. Mr. John B. Thorpe was responsible for
execution of many of the models.

Unusual means, too, were taken to determine
effect of statuary, especially when it was to be pl
at a great height above the street. In the case of
group to be placed in the semi-dome on the Aldv
front, a model was designed and photographed
scale of about 15 ft. high, mounted on cardboard
wood, and set up in position. Two designs were tried,
a composition of two kneeling male figures laying
swords at the feet of a female figure of Peace. Later
two male figures in a smaller size were tried without
central figure. The quality of the sculpture in this un
feature of a great semi-dome under a still greater pedi
is, of course, of the greatest importance, as it will a
the whole character of this monumental elevation.



NORTH ARCH WITH CENTRES

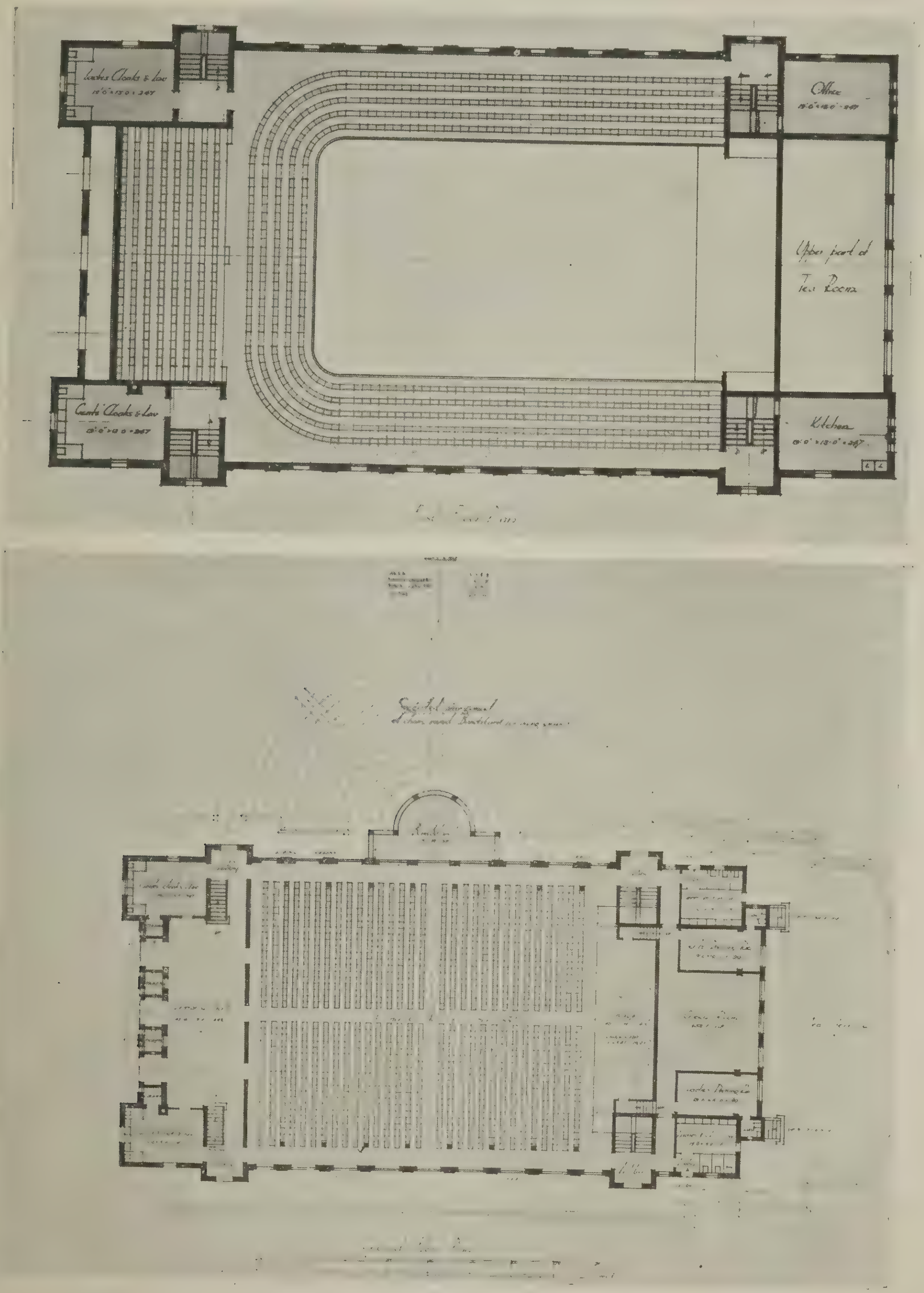
RIBBED CENTERING FOR SEMI-DOME OF ALDWYCH LO

Tunbridge Wells Pavilion Competition

The Winning Design

THE competition, promoted by the Tunbridge Wells Corporation, for designs for a pavilion in Calverley Gardens, has been won by Mr. E. Vincent Harris, F.R.I.B.A. The design placed nd was by Mr. Septimus Warwick, F.R.I.B.A., and third, by Messrs. Franklin and Deacon, of Luton. E. Guy Dawber, F.R.I.B.A., was the assessor, and three ums of £150, £100, and £50 respectively, were offered. s stated in the conditions that the design and treat- should be indicative of the purpose for which the ng is intended. Whilst it should have a bright and ome appearance, anything in the nature of over- ation or unnecessary ornament should be avoided, and it should be particularly borne in mind that, owing to the levels, it will be viewed from the rising ground around. It should be suitable both for summer and winter use, and constructed with a view to a low cost of maintenance. There should be an effective elevation viewed from the Mount Pleasant Road.

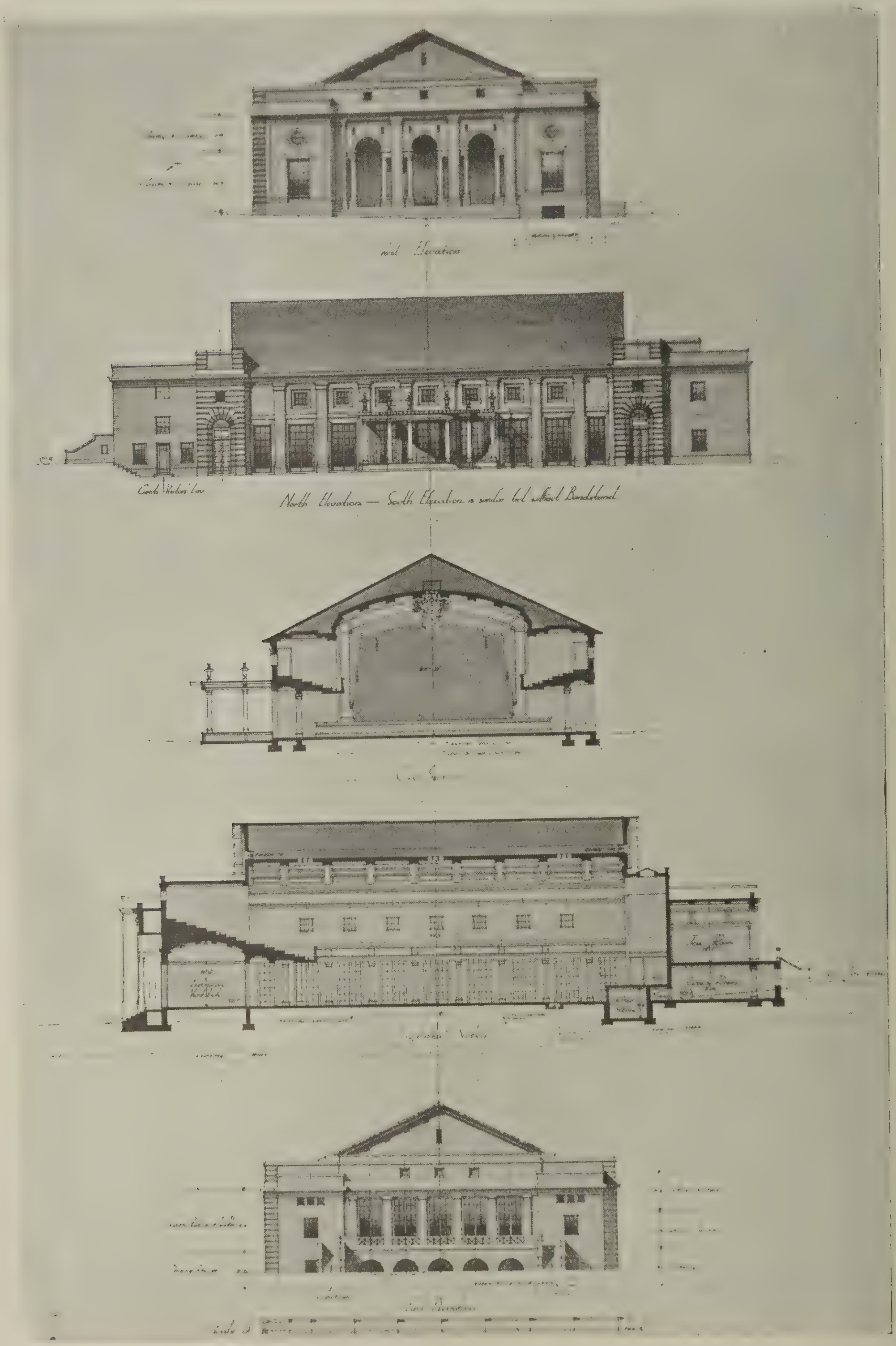
The accommodation to be provided was as follows: A commodious entrance and entrance hall, with ticket office and two staircases affording easy access to the galleries and concert hall. Cloakrooms off the entrance hall, with w.c. and lavatory accommodation. A concert hall, with galleries, to accommodate not less than 2,000 persons, the floor to be suitable for dancing. A bandstand, mainly



PLANS OF THE WINNING DESIGN. E. VINCENT HARRIS, F.R.I.B.A., ARCHITECT.

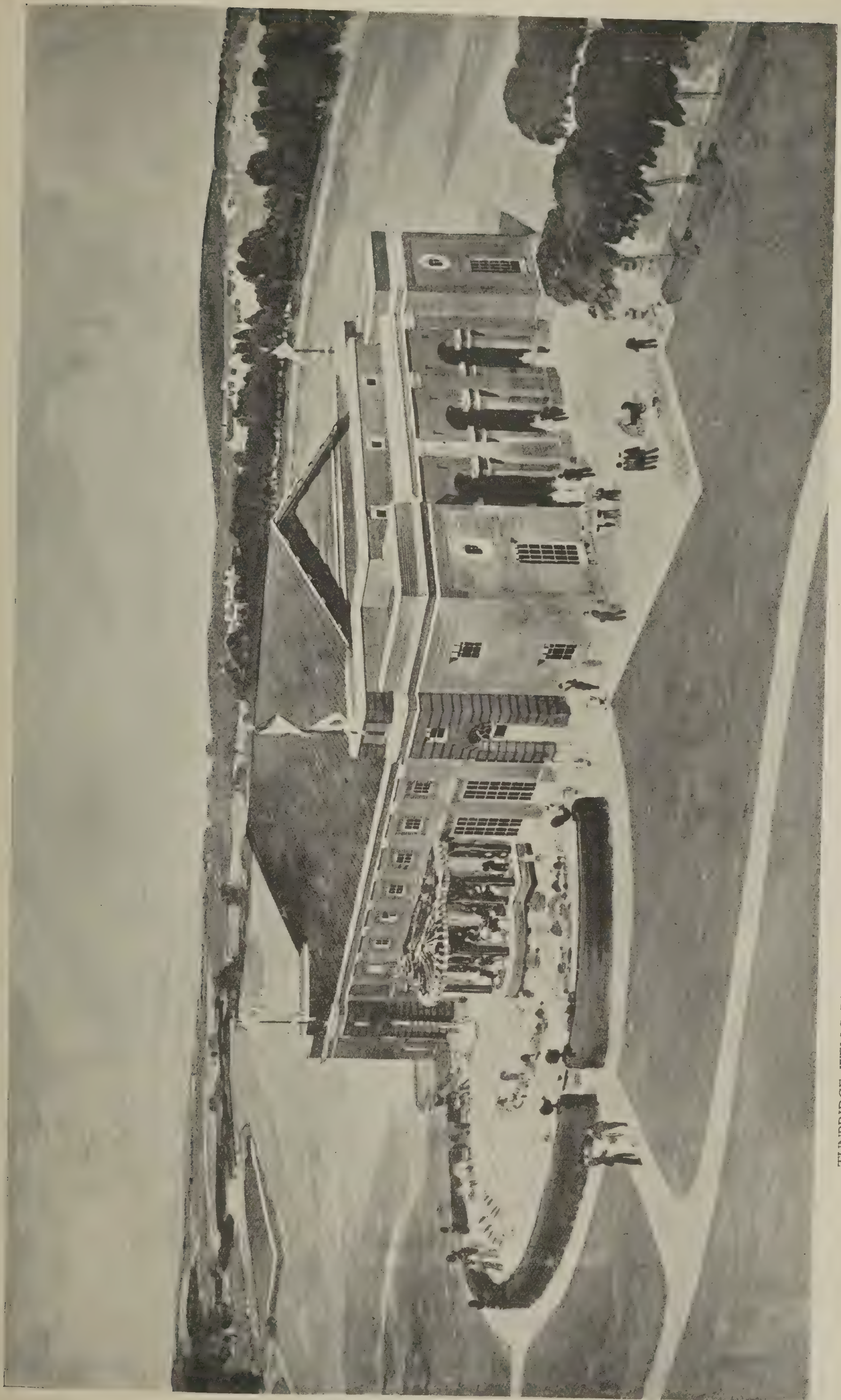
for summer use in connection with the concert hall on its northern exterior, arranged for either an inside or outside audience. A considerable portion of the northern and southern sides of the concert hall to be fitted with glazed sliding screens, so that the hall may be thrown open during suitable weather. Galleries on the first floor to be provided, and a stage at the eastern end of the hall for about sixty to eighty performers, but which need not be designed with accommodation for theatrical scenery. A green room, music store, office, and storage for chairs. A refreshment room to accommodate about 150, and kitchen with arrangements for providing teas and light refreshments.

The assessor, in his report, says : The author of the design placed first submits a well-thought-out and straig forward scheme, and I consider it the best solution of problem. The plan is economical and well arranged, there is no wasted space. The tea-room can be ente from the main hall and also from the grounds, and gallery, approached through the main hall, has an entrances and exits. The elevations have been broa treated, are simple and dignified, though perhaps s austere for an open-air pavilion and restaurant. In tion it might be advisable to increase the size of the windows lighting the hall, but these are mere detai do not affect the scheme. In my opinion, this is th one of the three selected designs that could be ex to-day within the stipulated amount of £25,000.


Elevation
North Elevation — South Elevation is similar but without Bandstand

TUNBRIDGE WELLS PAVILION COMPETITION: FIRST PREMIATED DESIGN.

E. VINCENT HARRIS, F.R.I.B.A., ARCHITECT



TUNBRIDGE WELLS PAVILION COMPETITION: FIRST PREMIATED DESIGN. E VINCENT HARRIS, F.R.I.B.A., ARCHITECT

Timber Measuring.—III

By Professor HENRY ADAMS, F.S.Arc., Etc.

(Concluded)

ROUGHLY, the prime cost of log timber at the yard in £ multiplied by 6½, with £1 added for sawing and carting, equals pence per ft. cube for the squared timber, allowing for profit and waste. The relative price of cube building timber may be taken approximately as follows :—

Memel, Dantzic, and Riga fir	2/6 per ft. cube.
Pitch pine	3/6 ,, ,,
Quebec and Dantzic oak	4/– ,, ,,
English oak	5/– ,, ,,
Teak	7/– ,, ,,
Greenheart	10/– ,, ,,

Converted timber is measured by the St. Petersburg (Petrograd) standard containing 165 cub. ft.=660 sup. ft. of 3 in. thick, 792 sup. ft. of 2½ in. thick, 990 sup. ft. of 2 in. thick, 1,320 sup. ft. of 1½ in. thick, 1,980 sup. ft. of 1 in. thick. Example : Reduce the following specification of planks and boards to exact St. Petersburg standard measurement.

Lot.	Pieces.	Sizes.
1	20	16 ft. × 7 in. × 3 in.
2	20	15 ft. × 9 in. × 3 in.
3	80	24 ft. × 5½ in. × ¾ in.
4	20	18 ft. × 8 in. × 2½ in.
5	20	16 ft. × 7 in. × 2 in.
6	20	14 ft. × 9 in. × 1¼ in.

Rule.—Multiply the number of pieces and their dimensions together (the result being incorrectly called cubic inches) and divide by 11, 18, 30, and 4, giving answer in standards, quarters, deals, and parts, thus—

$$\begin{array}{l}
20\times16\times7\ \times3 = 6720\\
20\times15\times9\ \times3 = 8100\\
80\times24\times5\tfrac{1}{2}\times\tfrac{3}{4} = 7920\\
20\times18\times8\ \times2\tfrac{1}{2} = 7200\\
20\times16\times7\ \times2 = 4480\\
20\times14\times9\ \times1\tfrac{1}{4} = 3150\\
\hline
11/37570\\
18/\ 3415\tfrac{1}{2}\\
30/189\tfrac{13\frac{1}{2}}{18}\\
4/\ 6.\ 9\ \tfrac{13\frac{1}{2}}{18}\\
1.2.9\ \tfrac{13\frac{1}{2}}{18}
\end{array}$$

Answer : 1 std. 2 qrs. 9 dls. $\frac{13\frac{1}{2}}{18}$ pts.

Then to find the cost of 1 std. 2 qrs. 9 dls. $\frac{13\frac{1}{2}}{18}$ pts. at £9 7s. 6d. per standard—

		£	s.	d.
1 std.	=	9	7	6
2 qrs.=½ std.	=	4	13	9
9 dls. (see below)	=	0	14	0¾
$\frac{13\frac{1}{2}}{18}$ pts. (see below)	=	0	1	2¼
		£14	16	6

To get the cost of deals and parts, double the price per standard in £ and call it pence ; then multiply the pence by the dls. and pts. and reduce to £ s. d. Thus £9 7s. 6d. doubled=£18¾.

$$18\tfrac{3}{4}\text{d.}\times9\text{ dls.} = 168\tfrac{3}{4}\text{d.} = 14\text{s. }0\tfrac{3}{4}\text{d. as above.}$$

$$18\tfrac{3}{4}\text{d.}\times\frac{13\frac{1}{2}}{18}\text{ pts.} = 14\frac{1}{16}\text{d.}=1\text{s. }2\tfrac{1}{4}\text{d.}\quad ,,\quad ,,$$

Note $\frac{13\frac{1}{2}}{18}$ pts. would generally be called $\frac{13}{18}$ pts.

A standard deal is 12 ft. long, 9 in. wide, and 3 in. thick Other lengths and sizes are reduced to this standard, bu a timber account is so puzzling to a novice that it will b well to give an actual example. Here is an item :—

20th.	1	23	3+9				
	9	22					
	8	21		12 ft.			
	18 p.	Yw	$\overset{\text{c}}{\parallel}$ 1.2 $\frac{5}{12}$	27.0/.	7	5	1
			22 cuts 23/22 ft. 5/6	.. ..	0	10	
			9 flat 21 ft. 189 ft. 1/– ..	..	0	1	1
			Cartage ..	..	0	5	
					£8	2	1

Which is, being interpreted :—

On June 20 were delivered the following yellow deal viz., one 23 ft. long, 3 in. thick, 9 in. wide ; nine 22 ft. long 3 in. thick, 9 in. wide ; and eight 21 ft. long, 3 in. thicl 9 in. wide, making in all eighteen pieces.

Multiplying these numbers by their respective lengtl we have 389 ft., which divided by 12 gives $32\frac{5}{12}$ as tl equivalent number of deals, supposing them all to l 12 ft. × 3 in. × 9 in. One hundred deals consist of 120, which 30 is the quarter, thus $32\frac{5}{12}$ divided by 30 giv $\overset{\text{c}}{\parallel}$ 1.2$\frac{5}{12}$, or no hundreds, 1 quarter, 2 deals and $\frac{5}{12}$ of a de The price at timber yard is £27 per hundred (12 12 ft. × 3 in. × 9 in. and $\overset{\text{c}}{\parallel}$ 1.2$\frac{5}{12}$ at £27 will be £7 5s. 11d

The 23 ft. and 22 ft. deals had between them 22 de cuts, which at 5s. 6d. per dozen cuts amounts to 10s. 1 and the 21 ft. deals had nine flat cuts, making 189 ft. sa through 3 in. thick, which at 1s. per 100 ft. run is 1s. 1 The cartage is for delivery from the timber yard to t buyer's premises.

Lath wood is stacked in a "frame" or rectangular sta 6×6 ft. with a varying length, and the cubic feet in fathom varies with the length.

One fathom of 4 ft. laths contains 144 cub. ft.
,, ,, ,, 4½ ft. ,, ,, 162 ,,
,, ,, ,, 6 ft. ,, ,, 216 ,,
,, ,, ,, 7 ft. ,, ,, 252 ,,
,, ,, ,, 8 ft. ,, ,, 288 ,,

A cubic fathom = 6×6×6 ft.=216 cub. ft. In some pa a fathom of lath wood = 6×3×4 ft.=72 cub. ft. fathom is considered to weigh 9 cwt. per ft. in leng A cord of wood = 8 ft. long × 4 ft. wide × 4 ft. h = 128 cub. ft.

[*The previous articles of this series appeared in our iss for May* 30 *and July* 11.]

Book Reviews

The Deeside

f the report on the Deeside Regional Planning scheme
ss interesting to the general reader and to the student
own planning than, let us say, the Doncaster Regional
nning scheme or Dublin of the Future, it is through no
t of the authors, neither is it any reflection upon the
ellence of the practical suggestions which the report
tains. The primary purpose of a regional planning
me is not to afford interesting reading matter, although,
dentally, every report which we have seen has done so,
her is it fair to make this quality in any sense a test of
excellence. A report of this kind is dealing with very
nite material, and although inspiration plays an impor-
part in the ultimate product, it has to be subservient
ractical needs. The material at Doncaster had greater
ntialities than the material at the Deeside. Doncaster
r the most part, an agricultural area which is to develop
a busy mining district, a repetition of the industrial
lopment of last century which will test our new en-
vours, whereas the Deeside is an area marked with the
al débris of abandoned mining activities, and whose
re is most uncertain. It contains, however, certain
ns, notably Chester and Flint, which are in themselves
reat interest to the student of town planning.

lint is one of the first of Edward I's Welsh bastide
ns, a method of development which he had learnt from
Louis and Alphonse of Poitiers, and employed with such
ess in France, notably at Montpazier and Sauveterre.
bastide, of course, is primarily arranged on purely
nsive lines; in Flint, however, there are indications that
esigner was influenced by wider considerations. Chester
unique qualities with which most will be familiar.
oint which the authors of the report bring out is its ver-
ity. Many towns are clearly dominated by certain
ents; they are military, ecclesiastical, or industrial.
hester the first two seem to merge. Although the Cathe-
assumes the position of greatest importance, the stamp
e town's Roman military origin is quite indelible, so
it still retains a military atmosphere. The outside
er will find the chapters which deal with Chester and
t perhaps the most interesting in the report.

e form of the report is very similar to others with which
essor Abercrombie has been associated, and the main
ons concern themselves with general considerations,
ral zoning recommendations, communications, the
estuary, Chester, and Flint, and finally, observations on
future growth of the surrounding towns and villages.
e seems little doubt that although there has been con-
able abandonment of mining activity in the district,
still rich, and that with further capital and proper
nization its exploitation would prove remunerative.
itherto most of the mining has been sporadic the hous-
onditions are bad. For without forethought the path
ast resistance is invariably followed, resulting in little
of ugly houses placed both dangerously and unpleas-
near the roadside in close juxtaposition both to the
s and to each other. Even where the mines have been
doned the houses are still tenanted. There is certainly
thing indescribably forlorn in the prospect of an
doned mine, sufficient, indeed, to spoil a landscape of
soever beauty. Cornwall, one of England's most
tiful counties, suffers in parts from this deplorable
ish. The Dee district, however, is fortunate in possess-
xamples of really good houses. During the war Mr.
nond Unwin designed the munition villages of Great
Little Mancot to house the workers in the Government
ry at Queensferry; these, it is hoped, will serve as
ls for any subsequent housing schemes which renewed
g activities would render imperative.

e of the most useful purposes of a regional survey is
it affords an opportunity for the co-ordination of
age, water, and electricity supplies. These three are essential for efficiency and economy. But in this report the information under these heads is scanty. Nevertheless, it is to be hoped that future action will tend towards co-ordination. In the sections dealing with zoning we find first, manufacturing areas, sub-divided into unrestricted or heavy trades, and "light trades conforming to stringent requirements as to noise, smoke, dust, smell, and size." Quarrying and mining areas are, of course, dependent on natural deposits. Definite areas are reserved for housing, and these are in all cases kept above the 50 ft. contour line. The agricultural zones comprise areas already devoted to that purpose, and land beneath the 50 ft. contour. It is naturally difficult to make, at such an early stage, definite suggestions as to recreational grounds. It is important, however, that sites be secured in advance of any development which will at once increase the value of the land. There is evidence enough of the folly and expense arising from a neglect to secure suitable land when it was to be had at agricultural prices. The authors suggest the acquisition of old houses and parks for this purpose when these can be acquired at particularly low figures. Finally, there are those tracts of land which it is impossible to earmark, which comprise the neutral zone. This area is available for any purpose except heavy factories, but its development, of course, must take place on town-planning lines.

The section dealing with communications, road, rail, and water, contains recommendations for widening and completing the existing roads and constructing certain by-pass roads, for the construction of a mid-Flintshire railway, which is considered essential, and for the formation of a channel close to the Flint shore which would provide a deep-water frontage for industrial development, facilitate the drainage, and so reclaim what is at present practically derelict land.

It will be gathered from what has been said that the future of the district is somewhat vague. Whether or no it will be ultimately redeveloped as a mining and industrial area it is at present impossible to forecast. The situation, therefore, in this particular district seems to be in the nature of a vicious circle. Industrial development, at least in part, awaits facilities of road, rail, and housing accommodation, and on the other hand, neither facilities of road, rail, or much increased housing accommodation are likely to be provided without some definite prospects of renewed industrial activity. When, or if ever, such development takes place, the report before us will afford a useful skeleton for a fuller and more detailed scheme.

"The Deeside Regional Planning Scheme." The Report prepared for the Joint Committee of Local Authorities by Patrick Abercrombie, Sydney Kelly, and Theodor Fyfe. The University Press of Liverpool, Ltd. Hodder and Stoughton, Ltd., London. 7s. 6d. net.

City Planning

The main difference between the American method of approaching town planning and our own is to be found in the fact that America was, from the outset, free from tradition and precedent, whereas in our own country the causes which dictated the adoption of certain plans, although in themselves often obsolete, have survived and must influence subsequent development even where a completely new township is in formation. For example, the ring circumferential road was the natural diversion of the city rampart into more peaceful channels, and to-day most European cities starting to plan *de novo* would plan a ring street.

Not so America. William Penn's plan for Philadelphia is typical of the unbiased common-sense approach. An approach epitomized by the declaration of the Commission of 1807, set up to consider the planning of Manhattan, that, "a city must be composed principally of the habitations of men, and that straight-sided and right-angled houses are the most cheap to build and the most convenient to live in. The effect of these plain, simple reflections was decisive." Perhaps it would have been better had the effect been less decisive. At all events, Manhattan suffers to-day from the lack of diagonal and radial roads. Nevertheless, there were those who realized that the gridiron plan, despite its obvious simplicity, was not the only method of city planning. Notable among the plans which did not adhere to its severity was that of l'Enfant for Washington, made in 1792.

However, all through the nineteenth century, when town planning activities in England were forgotten in the surging onrush of the industrial revolution, America was conscientiously planning her cities, although the modern city planning movement may be said only to have been begun by Burnham at the World's Fair in 1893. Nevertheless, from the beginning of the century until the International Conference in London of 1910, it was to America that we looked for guidance, and it is to America that we still look for terms. "Zoning," "neighbourhood parks," "use districts," are amongst the most recent of our depredations from the American city-planner's vocabulary. When, therefore, we receive a book, published in America and having the comprehensive title: "The Planning of the Modern City," we expect a work of some bulk, nor in this respect are we disappointed; the volume comprises some four thousand odd pages—of lead paper—making a book whose contents are as weighty for the mind as its form is for the body. It is in no sense an arm-chair book.

Mr. Nelson P. Lewis held an important municipal post in New York, and his book is dedicated to the municipal engineers of the United States; moreover, in his introductory chapter he makes it clear that in his opinion the municipal engineer is the person who is chiefly concerned with city planning. "Most of the literature of this subject," he writes, "has been contributed either by architects, who emphasize its architectural or artistic side and appear to consider it an architectural problem, or by students of city government, who seem to regard it as an administrative problem. This volume is just as frankly written with the idea that the fundamental problems of city planning are, and from their very nature must be, engineering problems." With this remark we cannot agree. The city plan is by no means entirely an engineering problem, neither is it an artistic or a sociological, a financial, or a trafficist problem. It is a synthesis of all these, and much more; it is, indeed, a synthesis of every human activity; and of all the parties concerned we think that the architect, standing as he does between the practical and the artistic, and with some grasp of the financial and sociological, has the most important part to play in the guidance of the city's future. To the engineer beauty in a town is a concession; it is something that can be applied as butter is applied to bread. To the architect it is not only an integral part of the city, but it is also the satisfaction of a primal craving in all mankind; but whereas the engineer has never been trained to think this, the architect has been trained to consider the practical problems of the engineer although lacking the necessary knowledge and experience to present them with all the detail necessary for their complete solution.

We do not know whether Mr. Lewis's book is to be regarded as a contribution to the history of the city-planning movement or as a text-book on the subject. It seems to endeavour to fulfil both of these purposes. It contains a mass of information, somewhat ponderously assembled, detailing relevant work which has been undertaken in various parts of the world. We feel sure, for example, that most English readers will unearth many interesting facts about London of which they are quite unaware. But interesting though these facts may be, are they of any use to the man engaged on present-day town planning? Of what use is it to be told that of the pipe subways under the control of the City of London, 75 per cent. of their total length is occupied by but one water main; 69 per cent. of the total length of water pipe is 5 in. or less in diameter, and so on? The book is full of this kind of information about London and Chicago, Paris and New York, Vienna and Philadelphia, and all quite inextricably bound up with much more useful material. Mr. Lewis seems, indeed have ransacked the municipal engineers' offices all over world, and it is a pity that he has not succeeded in putt his material into a more orderly form. The fa of which the above is an example, might well have b relegated to a series of appendices to which the reader co have been referred, and the remaining material might t have been broken up for easier reference. The value book of this kind is largely dependent upon its index, wl should be extremely full and with ample cross indi The volume is inefficient in this respect. The illustrati are numerous, but some of them are of no very great inter

However, despite these defects, the book is a valu contribution to the literature of town planning, enab comparisons to be made between various cities, and at same time containing valuable suggestions.

"The Planning of the Modern City," by Nelson P. Lewis. New York: Wiley and Sons. London: Chapman and Hall. 25s. net.

The Cost of Building in Limerick

Mr. Brian E. F. Sheehy, M.Inst.C.E.I., M.S.A., etc., compiled and published details of the cost of mate and labour in connection with building operations in Limerick district. The details are based upon Mr. Sumner Smith's ratio of percentages, and refer to ordinary economical two-story buildings erected du the years 1920 to 1923 as compared with those of 1 Mr. Sheehy has realized that the success of any bool this description depends entirely upon the speed ease with which it can be used, and he has sec these very desirable qualities in a remarkable deg His conclusions, which must have entailed the exhaustive investigations and intricate calculations, compressed into just five schedules—on five pa They are as easy to use as the simplest time-table. T are no elaborate formulæ to be learnt, and the sched can be understood in a moment. One glances at "schedule showing the analysis and relative value each material employed in the construction, together the ratio per cent. to the total cost of ordinary econon two-story buildings in 1923 as compared with 1914" learns that a hundred stock bricks cost 5s. in 1914, £1 5s. 6d. in 1923, the percentage of increase over being 410·0; the ratio to the total cost per cent. is 8·53 approximate values being £8 10s. 7·2d. in 1914, £43 10s. 0·7d. in 1923 respectively. In another col one finds that a slater in 1914 received 7·1d. per hour, 1s. 10d. per hour in 1923, a percentage of increase 1914 of 209·9; the ratio to the total cost per cent. is ·29 approximate values in 1914 and 1923 being 5s. 9·6d. 17s. 11·7d. respectively. Then again, we find that approximate value of materials was £52 in 1914, £157 17s. 4·4d. in 1923, the percentage of increase 1914 being 203·6, and that of labour, £48 in 1914, £210 18s. 7d. in 1923, an increase of 339·5. So the cedure goes on, any particular details required easily found. A schedule is also given showing the of wages paid per hour to artisans, labourers, and employees, the country allowances per day, together the variations in the number of hours worked per from August, 1914, to April, 1923. Mr. Sheehy is congratulated on the successful manner in which h compiled his data. It is also satisfactory to know Mr. Sumner Smith's ratio of percentages (which app in our columns before publication in book form) has put to such good service.

Publications Received

"Suggested Regulations regarding Density, Propo of Curtilage to be Built upon, and Height of Buildi By F. Longstreth Thompson, B.Sc., A.M.Inst.C.E. read at a meeting of the Town Planning Institut June 8 and discussion. The Town Planning Inst. 11 Arundel Street, London, W.C.

Law Reports

Right to Sink a Manhole on a Lawn

Lawson v. *Middlesex County Council.*

July 27. Chancery Division. Before Mr. Justice Lawrence.

his matter arose on an injunction which the Court had ited to Lady Alice Elizabeth de Burgh Lawson reining the defendant Council for alleged trespass in a len at Hillside, Kingsbury, Middlesex, and sinking a hole in the lawn.

laintiff was represented by Mr. Owen Thompson, K.C., the defendants by Mr. Dighton Pollock.

r. Pollock explained that the Council were not repreed when his Lordship granted the injunction, but the hole which they were not to put in the lawn was ady there. They had acted as directed by regulations. widen a street under an Unemployment Act they gave ce of entry on this land and to take a part of it. On part was a manhole which, under the regulations, had e removed to another part.

is Lordship said the defendants seemed to have placed manhole without the plaintiff's consent.

r. Pollock said that course was always taken and was omary.

is Lordship replied that it sounded correct with Mr. ock's assurance. But owners resented all high-handed luct of local authorities and local authorities thought owners did not matter.

r. Pollock said the manhole was not moved to the centre he lawn. It was sunk and carefully returfed and very itifully done, and the other side ought to be very eful.

r. Owen Thompson said the road widening was not hed and Mr. Pollock would come on more manholes he course of his excavations. It was desired that they ld not all be placed in the centre of the lawn without plaintiff's permission.

is Lordship said that was too strong a word, but a ation ought not to be found for them without at any consulting the plaintiff. The injunction would be disged.

An Estate Question

Jameson v. *Pike and another.*

July 27. Chancery Division. Before Mr. Justice Astbury.

his action raised a point as to the effect of restrictive nants on an estate developed for building purposes. aintiff, Mr. G. A. Jameson, of Sandleigh Road, Leighea, brought an action for an injunction against Mrs. A. E. Pike, of the same road, and Mr. E. Andrews, ling at Basingstoke, to restrain the breach of certain ictive covenants governing the Chalkwell Park Estate, which the plaintiff's and Mrs. Pike's property was ited.

r. Luxmoore, K.C., and Mr. Boraston appeared for itiff; Mr. Archer, K.C., and Mr. Swords for Mrs. Pike; Mr. L. Cohen for Mr. Andrews.

aintiff owned a dwelling house on the Chalkwell Park te and Mrs. Pike an adjoining plot on the estate which was using for business premises in contravention of the ictive covenants. Mr. Andrews was the father of Mrs. , and for some considerable time he led plaintiff to ve that he was the owner of the property, but when lefence was delivered Mr. Andrews for the first time d that he did not own the property but that Mrs. did. She was then joined as a defendant. The defences p were that plaintiff was not entitled to the benefit e covenants, that there had been a change in the cter of the neighbourhood and that defendants had he licence of the freeholder.

. Archer said he did not think he could rely on those ces, but he submitted that it was not a case for an ction. Mrs. Pike had started a little business of blouse and cap making, which could not possibly harm anyone, and she would undertake not to turn the place into a nuisance. She would not convert the place into a shop and she would do nothing more than make use of her sewing machines. Counsel added that nominal damages should be sufficient and that the Court ought not to grant the injunction which would ruin the business.

Mr. Luxmoore said the covenants provided that no building other than dwelling houses should be erected upon any plot except those described as shop plots. Plaintiff had spent £1,200 on his house and garden and Mr. Andrews built the shop in question with his eyes open and knowing the stipulations.

His Lordship granted the injunction but suspended it for six months, with costs against Mrs. Pike and by consent an order for twenty guineas costs against Mr. Andrews.

Non-Repair—Collapse of Building—Liability

Parkes Drug Stores, Ltd. v. *W. F. Edwards & Sons, Ltd.*

July 18. Court of Appeal. Before the Master of the Rolls and Lords Justices Warrington and Scrutton.

This was an appeal by the plaintiffs against a decision of Mr. Justice Sankey, sitting in the King's Bench Division, in favour of the defendants, and raised a nice point as to the re-building of a building which collapsed.

The action in the court below was by the plaintiffs to recover possession of premises at the rear of Upper Street, Islington, mesne profits and for damages for alleged breach of covenant to repair the premises contained in the lease which was dated April 28, 1920, under which the premises were demised to the defendants for seven years at a rent of £120 per annum. A part of the premises collapsed in May, 1922, and the substantial issue was whether or not this was occasioned by reason of the defendants' non-repair under the covenant. There was also an issue as to whether the defendants gave up possession or not. The defendants took up the position that the plaintiffs (the landlords) were bound to rebuild when the building collapsed, but the latter alleged that this was due to the building being out of repair and to the fact that the building in which the defendants had stored their goods had been overloaded. Defendants denied that they had committed any breach of the covenant to repair and that the building had been improperly loaded, and they further alleged that the building collapsed by reason of its faulty construction or inherent defects, and that it was in no way due to their (defendants') non-repair under the covenant. The premises were between sixty and eighty years old. Mr. Justice Sankey held that the defendants were wrong in asking him to decide that they had given up possession of the premises, and on that point he found in favour of the plaintiffs. He, however, came to the conclusion that the building had not been improperly loaded and that its collapse was due to faulty construction and the use of faulty materials, and further, that the defendants were not liable to comply with a notice which the plaintiffs had served under section 14 of the Conveyancing Act calling upon them to repair or make compensation. He gave judgment for the defendants, and it was from this that the plaintiffs now appealed.

Mr. Croom-Johnson for the appellants argued that in form the action was one of forfeiture, though the basis was breach of covenant. The judge in the court below had decided that the collapse was not due to overloading by the defendants. But counsel submitted that if the defendants had done the proper repairs to the floor timbers that portion of the premises would not have been brought down. It was the load placed on the floor in that particular place which brought down the premises. The learned counsel cited authorities for the purpose of showing that the word "keep" in a covenant to repair meant that the person covenanting could not keep the premises in good repair until he had put them in good repair. In the present case there was the express covenant to repair. He submitted that you could not justify non-repair by simply letting the premises fall down and then say, "If I have to do the repairs I shall be giving you something which you never had before."

The court dismissed the appeal with costs, without calling upon counsel for respondents.

The Master of the Rolls held that there was evidence on which Mr. Justice Sankey could find that if the repairs were done it would have amounted substantially to a re-erection of premises. In the circumstances the defendants were not liable.

Lords Justices Warrington and Scrutton agreed.

Building Education

It is a regrettable fact that organization in the building trades, so far as it applies to the instruction and training of lads and apprentices, has not been developed to the extent that it has in some other industries, notably that of engineering. Whatever may have been the underlying reasons for this state of affairs, the industry as a whole is awaking to the fact that if our future builders are to carry out their work with efficiency and economy, and to uphold the worthy traditions of the past, more attention will have to be given to thorough courses of technical instruction.

For various reasons it is becoming increasingly difficult to obtain such instruction in the workshop, and technical institutions throughout the country are having to deal with the problem to an increasing degree. In order to further this work over sixty teachers of building subjects, from all parts of the country, have recently been in attendance at a course in London, organized by the Board of Education, for the dual purpose of taking "refresher" courses of lectures in certain subjects by well-known specialists and of conferring together on matters affecting their teaching work. The course, which is the fifth of its kind, and is held annually, extended over a fortnight, and its benefits to the teachers, and through them it is hoped to a much wider circle, can hardly be over-estimated.

The courses of lectures have comprised: "The Design of Buildings," by Mr. T. P. Bennett, F.R.I.B.A.; "Mechanics and Structures," by Mr. F. E. Drury, M.I.Struct.E., F.I.S.E.; and "General Building Science and Laboratory Work," by Mr. A. Everett, B.Sc. (Hons. Lond.). Separate lectures were also given by Sir Frank Baines, C.B.E., M.V.O., on the "Restoration of the Roof of Westminster Hall"; by Mr. C. G. Dobson, P.A.S.I., on "Building Accountancy"; by Dr. R. E. Stradling, M.C., Ph.D., A.M.Inst.C.E., on "Materials of Construction"; and by Mr. A. S. Barnes, H.M.I., on "The Evolution of Hand Tools." In addition there have been visits to places of technical interest, such as the new buildings in Oxford Street for Messrs. Selfridge and Messrs. Peter Robinson, the research laboratories of the Building Research Board at Acton, the R.I.B.A., the Architectural Association Schools, and various museums.

One of the most important parts of the course has been the holding of two official conferences, one at the invitation of the Institute of Builders, to consider the recently devised scheme of examinations for admission to the Institute, and the other at the invitation of the Surveyors' Institution, to discuss the new standard form of quantities for building work. In both cases there is reason to hope that the frank interchange of views which took place will prove of permanent benefit to the industry as a whole, particularly as the teachers present represented the provinces to an extent which is usually difficult to obtain in London.

There can be no doubt as to the benefit of the course to the teachers themselves; particularly to those who "plough a lonely furrow" in remote and thinly-populated districts. The sense of comradeship and solidarity and the broadening of views which resulted will be a help and inspiration to all who took part.

To Mr. Hugh Davies, H.M.I., who organized the course, to his colleague, Mr. J. L. Manson, H.M.I., who assiste him, and to the authorities of the Westminster Trainin College, who provided such excellent facilities for th course, the thanks of all concerned are due. It is to b hoped that the work of this course will, if possible, b extended in the future, and that all who are interested i the provision of technical education in the building industr will appreciate the value of the work done. X.

Wales the Beautiful—and Ugly

Some interesting observations on the architecture of Wal were made at a meeting of the Cymmrodorion Society he at Mold under the presidency of Lord Justice Bankes.

Professor Patrick Abercrombie, M.A., A.R.I.B.A., sa that the only ugly things he had seen in Wales were t handiwork of man. The Welsh people, he believed, we neither town nor village dwellers, and the great feature Wales was the isolated cottages and farmhouses dott about the country, most of them with ugly exteriors b full of charming and picturesque furniture and potte Too often, he said, the fine scenery was spoiled by t buildings and the absence of neatness, especially in t villages. The Rhondda Valley he condemned as a mon ment of monstrosity. The ribbon-like development Connah's Quay was without a suggestion of a commu life; in fact, was preventive of all the higher forms of ci life. Even in many of their seaside resorts the We people had failed to produce the beautiful results tl should have done, and, in connection with indust development, defacement, especially by tips and smo had not been controlled as it might have been. As c structive suggestions for an improvement he advoca regional civic surveys for the study of natural and artifi features. Wales also needed a school of town and coun planning, and he hoped the University of Wales would t the matter up and give facilities for the training of stud in the art of artistic development. One Welsh tow Cardiff—showed signs of progress, and it was a plea to mention that progressive Welsh centre as an exan to both England and Wales.

Mr. T. Taliesin Rees, F.R.I.B.A., said that many of architectural faults of Wales had not been committed Welshmen. Speaking of the spoliation at Bethesda, I beris, and the Wrexham district, he asked why could not agitate against the planting of the ugly dumps so they might become beautiful again. Much of the ugl of Welsh buildings was a legacy of Puritanism, but a deal of it was due to the poverty of the country.

Artistic Roof Treatment

Mr. F. G. Dawson, in reading a paper before the Workers' Guild on the origin of "Slate and the Maki Tiles, Stone, and Tile Lamination," said: I often won we are sufficiently artistic in our dealings with ro Continental folk make some of their roofs "works of by their architectural treatment, and to a certain exte can learn of them. To see streets of uniform stereo houses with one unbroken stretch of slate is enough to the eye of even the most inartistic; but the same would be produced whatever was used if no breaki was resorted to. There is no need for this. The va of slates, colours, sizes, thicknesses in existence is suc a little forethought and treatment in connection wi cheapest building will result in the obliteration reproach that we are a drab people in our artistic ide

After all is said, however, there is no questioni fact that a slate as a material for roofing, if pr selected, leaves nothing to be desired on the score liability and durability as its age may be counted i turies. It would be invidious on my part to m particular quarries as possessing slate having r qualities, or the reverse, but I may say that British stand paramount, and with but few exceptions are r nd satisfactory. Experience, however, is the best teacher, nd as it rarely happens that those upon whom it devolves use and specify slate can afford the time, or have the chnical knowledge necessary for a scientific investigation, ey are more or less bound to rely upon the guidance those who have acquired the information by extended ractical experience.

To those who love a charming old-world effect for a roof, nd who are not prohibited in the matter of cost, what more eautiful material can be used for roofing than stone? ompared with slate, the quantity quarried suitable for ofing is exceedingly small. There are many kinds in xistence, and several old worked quarries are coming to an nd. Stone unfortunately has no cleavage planes like slate, nd most of that quarried has to be exposed to vigorous osts to split it. A frostless winter, therefore, reduces its ield for roofing.

During the last decade the use of tiles has enormously ncreased giving birth to many tileries which had no existnce ten years ago. "Here is some clay, let us make tiles," ppears to have been the motto of some. It were better hat many tiles had never been born!

Take a journey around the outskirts of London, and see he miles of buildings covered with tiles good, bad, and ndifferent. There is a theory that houses will sell better f they possess a nice tiled roof! In advertising houses for ale you can often read the magic words "tiled roof," as if here were some virtue in it.

Many beautiful buildings, designed so that a good tiled oof shall blend and conform to the whole architectural reatment of form and colour, which have been erected in nodern times, together with some charming old mansions, vith their lovely old tiled roofs mellowed with age, have loubtless inspired (save the mark!) the builder of serried rows of houses to have his roofs tiled. "Imitation," we are told, "is the sincerest form of flattery," but imitation combined with cheapness and a disregard for quality, taste, and architecture, is fatal. Of the two roof coverings, slates and tiles, there is more danger in the indiscriminate use of the latter than the former. Nature formed the slate, man the tile. The use of the right kind of tile is perfectly legitimate, but no article calls for greater watchfulness and greater knowledge in the building world than roof tiles. Herein again lies the value of experience based on years of observation and use.

With all tiling, as a measure of precaution, provide air spaces by battening and counter-lathing. Avoid flat pitches and the so commonly used bell eave, which receives the greatest amount of water from the slopes, and retains on its concave surface a deal of wet. Trouble comes sooner or later.

The tiles on the north side of a roof very often perish quickly, owing to the small amount of sun which it receives and the consequential retention of damp. There is no remedy, if tiles must be used, beyond having a sharp pitch and using the best tile, hand-made, produced.

After all, a roof is one of the most important parts of the building and should receive a great amount of consideration, avoiding anything cheap and nasty and ultimate disaster. To obtain an artistic weathering use hard-fired, dark hand-made tiles; then you will get tone.

There is an Eastern legend that a stone column was built of the finest material procurable, so that it should last for ever. Once every hundred years an angel descended from heaven to earth, lightly brushing the column with its wings as it passed, and by so doing, in course of time, gradually wore it to the ground. What, then, is everlasting?

Parliamentary Notes

[BY OUR SPECIAL REPRESENTATIVE.]

New Houses.

Mr. N. Chamberlain informed Mr. Bennett that under the new Housing Bill approval had been given to date in respect of 21,052 houses.

Parliament rose for the summer recess on August 2, and will re-assemble on November 13.

Housing Costs

"From £1,000 to £400 in Two and a Half Years"—says Sir Charles Ruthen

Some figures about the progress of housing were given at the Ministry of Health by Sir Charles Ruthen, Director-General of Housing, in an interview with a correspondent of "The Manchester Guardian" last week. (The figures put forward by him were, at a later date, criticised by members of the building trade in Manchester.)

"The position roughly to-day," he said, "is that there are about 7,000 houses yet remaining to be completed and actually in course of erection under the old State-aided scheme. Under the new Act, 228 local authorities are operating under sanctions which have been given by the Ministry for some time past. Under the Act the number of houses in course of erection by these local authorities—and coming under the provisions of the new Act—is 4,500. In addition, 2,463 are being proceeded with in those areas by private enterprise under the subsidy provisions of the Act. In all there are 7,031 in course of erection under the new scheme.

"As to the question of the recovery of private enterprise, unaided by State or local authority in the country recently, the following figures, I think, bear out that private enterprise has recovered to an amazing extent. Up to the end of May, 1923, information received from over 1,000 local authorities reveals the position that 14,763 houses have been entered upon the rate books of the country since September 30, 1922. That means that these houses have been built, finished, and tenanted. Then 17,693 houses are actually in course of erection. In other words, over 32,000 houses have been and are being produced by private enterprise.

Greatly Increased Output

"Obviously the recovery of private enterprise has been due to the rapid decline in building costs. The great fall in the cost of building has been due in the main to the enormous increase in the output of the operatives in the building industry and to some lesser extent to the fall in the costs of building materials. The position to-day compared with that, say, of two and a half years ago is that a house which was costing £1,000 is now being built for approximately £400.

"This bald statement does not, perhaps, indicate the enormous change in the general outlook of the housing problem and that of the building industry. To put it in another form—and one in which you will be able to appreciate what a great effect the change in the position is having and will continue to have upon that most serious of social problems—as near as possible two and a half houses are being produced for the price of one, and again, as near as possible, two and a half houses are being produced in the time it took to produce one.

"The important point is that the cost of house building is absolutely and irrevocably married to the speed of production. When you have low costs you get hand in hand rapid production. You will see that the assistance private enterprise is giving towards the solution of the housing problem in the country is considerable—that with private enterprise operating in the direction of the production of houses mainly for sale, and private enterprise aided by State and local authorities in the production of the smaller type of house, very many of which it will be possible to rent, the annual output of houses throughout the country is likely to reach a very encouraging figure.

"The recovery of private enterprise, strange to say, is not evenly spread throughout the country. In many towns private enterprise has scarcely recovered. On the other hand, in others private enterprise has recovered to a very large extent. In the large towns of Wales, for instance, private enterprise has recovered to a wonderful extent."

The Cricket Match

At the annual cricket match at Elstree the A.A. beat the R.I.B.A. by 106 runs. Appended are the scores :—

R.I.B.A. FIRST INNINGS.

	Runs.
Mr. Coleridge, b Parker	5
Mr. Allen, b Parker	18
Mr. Wheddon, b Musgrave	41
Mr. Doll, c Lay, b Parker	3
Mr. Brockesby, c Pakington, b Parker	1
Mr. Bailey, c Fisher, b Musgrave	30
Mr. Howard Baker, b Musgrave	5
Mr. Jessup, c and b Parker	1
Mr. Pearce, not out	2
Mr. Hadfield, c Knott, b Buckland	4
Mr. Caulfield, c Lay, b Buckland	1
Extras	10
Total	121

BOWLING.

Parker	5	wickets	for	15	runs.
Musgrave	3	,,	,,	25	,,
Buckland	2	,,	,,	1	,,
Saunders	0	,,	,,	39	,,

A.A. FIRST INNINGS.

	Runs.
Mr. Pakington, b Jessup	8
Mr. Knott, b Jessup	9
Mr. Saunders, c Pearce, b Jessup	49
Mr. Crickmay, lbw, b Jessup	35
Mr. Lay, b Jessup	2
Mr. Parker, c Bailey, b Brockesby	72
Mr. Napolitano, c Jessup, b Pearce	32
Mr. Buckland, lbw, b Brockesby	3
Mr. Bertram, st Wheddon, b Pearce	0
Mr. Fisher, not out	8
Mr. Musgrave, c and b Brockesby	4
Extras	5
Total	227

BOWLING.

Jessup	5	wickets	for	67	runs.
Brockesby	3	,,	,,	50	,,
Pearce	2	,,	,,	42	,,

Model Clauses in Town Planning

A series of model clauses for use in submitting town planning schemes for the approval of the Minister of Health have been prepared by the Ministry and issued in pamphlet form. The clauses deal with streets, buildings, and building lines, primary zoning, supplementary zoning, reservation of lands, general convenience and amenity, and, under the heading miscellaneous, such subjects as agreements, adjustment of boundaries, disposal and appropriation of lands. Every town planner, town clerk and borough surveyor should be in possession of a copy. It is published by H.M. Stationery Office, price 1s. 6d., and can be purchased through any bookseller.

Competition News

Ellesmore Street Wesleyan New Church and Schools, Warrington.

The following notice has been issued by the R.I.B.A. : "Members and Licentiates must not take part in the above competition because the conditions are not in accordance with the published regulations of the Royal Institute for Architectural Competitions."

Bull Green Site Lay-out, Halifax.

The following notice has been issued by the R.I.B.A. : "The Competitions Committee desire to call the attention of members and Licentiates to the fact that the conditions of the above competition are not in accordance with the regulations of the R.I.B.A. The Competitions Committee are in negotiation with the promoters in the hope of securing an amendment. In the meantime members and Licentiates are advised to take no part in the competition." The Society of Architects have also issued a notice requesting their members not to compete at the moment.

List of Competitions Open

Date of Delivery.	COMPETITION.
Aug. 25	Public Swimming Baths and Washhouses, East Greenwich. Assessor, Mr Henry V. Ashley, F.R.I.B.A. Premiums: £300, £200, £100. Apply Mr. Frederick J. Simpson, Town Clerk, Town Hall, Greenwich
Sept. 12	Masonic Temple in Broad Street, Birmingham. Premiums: £500, £300, and £200. Sir Banister Fletcher, F.R.I.B.A., is the assessor. The competition is restricted to architects who are masons subscribing to Lodges in the Province of Warwickshire. Apply Mr. J. P. P. Dutfield, 65 Temple Row, Birmingham.
Sept. 30	Designs for a series of plaquettes in bronze illustrative of London as the capital city of the Empire, or of one or more of her main architectural features. Designs should be submitted in the form of models in plaster. The following prizes are offered:—One prize of 100 guineas, two prizes of 50 guineas, three prizes of 25 guineas. Apply Deputy Master of the Royal Mint, London, E.C.1.
Sept. 30	The best colouring of a design for the vestibule connecting 315–317 Oxford Street with 17–19–21 Dering Street, Messrs. Thomas Parsons and Sons' new offices and showrooms. Prizes: 100 guineas, 50 guineas, 25 guineas, and five consolation prizes of 10 guineas each. Assessors—Sir Edwin Lutyens, R.A., F.R.I.B.A., Sir David Murray, R.A., P.R.I., H.R.S.A., Sir John Lavery, R.A., Mr. Frank Brangwyn, R.A., and Mr. E. Guy Dawber, F.R.I.B.A. Apply Competition Department, Messrs. Thomas Parsons and Sons, 315–317 Oxford Street, London, W.1.
Oct. 1	The Student Welfare Committee, University of Glasgow, invite Competitive Designs (limited to architects having an office in and practising within the Municipal Boundaries of the City of Glasgow) for a pavilion to be erected on the University Athletic Ground at Westerlands, Anniesland, at a cost of £10,000. Assessor Mr. Alexander N. Paterson, A.R.S.A. Apply Honorary Secretary, Student Welfare Committee, The University, Glasgow.
Oct. 1	Lay-out of the Bull Green Site and part of the centre of the Town of Halifax. Premium £50. Apply, with deposit of £1 1s., to Mr. Percy Saunders, Town Clerk, Town Hall, Halifax.
Nov. 5	Art Gallery for Hull. Assessor, Mr. John W. Simpson, PP.R.I.B.A. Apply (with cheque for £2 2s.) to Mr. H. A. Learoyd, Town Clerk, Guildhall, Hull.
Jan. 1	The Imperial War Graves Commission invite architects who served during the war as members of the Military, Naval, or Air Forces raised in any part of the British Empire to send in their names for admission to a competition for the designing of the undermentioned memorials to the missing to be erected in France by the Imperial War Graves Commission. The memorials to the missing proposed are to commemorate those who fell in the war in France and Belgium but have no known grave, and will be in the neighbourhood of the following places, and will have inscribed on them the following number of names:—At Bethune, 20,000 names; at Armentieres, 15,000 names; at Cambrai, 6,000 names; at Soissons, 5,000 names. Applications for particulars of premiums and other regulations from those desiring to compete are to be addressed to the Secretary (Works Branch), Imperial War Graves Commission, 82, Baker Street, London, W. 1, and must be received there not later than 1st January, 1924, and must be accompanied by a statement giving particulars of the war service and professional career of the applicant and clearly stating which of the memorials it is desired to compete for. Deposit, two guineas for each set of plans. The Assessor is Sir Aston Webb, K.C.V.O., P.R.A.
No date	Extensions to the Poor Law Institution, Premium £50. Apply Clerk to the Wirral Board of Guardians.

The Town Planning Institute Conference

The fifth annual country meeting of the Town Planning Institute will be held at York from October 5 to 7, inclusive. Members will travel down on the evening of October 4. The following items of the programme are already arranged : The City Corporation has most kindly invited the Institute to hold its meetings at the Guildhall, and there will be a reception in the State Room at the Mansion House. The city engineer will describe the town planning proposals of the city, and the winning design of the town planning competition, held just prior to the war, will be on view. Messrs. Rowntree have invited the members to visit the Earswick Garden Village, and its plan and method will be explained. Mr. F. C. Mears (Member) will read a paper entitled : "The Planning of Mediæval Cities," illustrated by lantern slides. Hotel accommodation can be arranged at the Royal Station Hotel, York, if early application is made to the Secretary, Mr. Alfred R. Potter, 11 Arundel Street, Strand, W.C.2. Delegates will pay their own hotel bills. The meeting is not confined to men or members of the Institute only—friends are invited.

New Inventions

Latest Patent Applications.

19334.—Brown, R. W.—Brick, &c., walls. July 27.

19116.—Ferrand, J. B.—Precast concrete slabs. July 25.

19096.—Hume Pipe and Concrete Construction Co., Ltd.—Centrifugally-moulded products. July 25.

19056.—Morton, B.—Reinforced brick walls, &c. July 25.

19064.—Parkes, S. R.—Roofs, &c., for buildings. July 25.

19408.—Smith, E. A.—Building concrete walls. July 28.

Specifications Published.

200561.—Lynn, A.—Method of forming ceilings in halls and other buildings.

200564.—Hartgrove, F.—Concrete block waterproof dressing.

200703.—British Fibrocement Works, Ltd., and Buxton, G. H.—Roofing sheets, tiles, and the like.

200728.—Morton, F.—Floors.

Abstract Published.

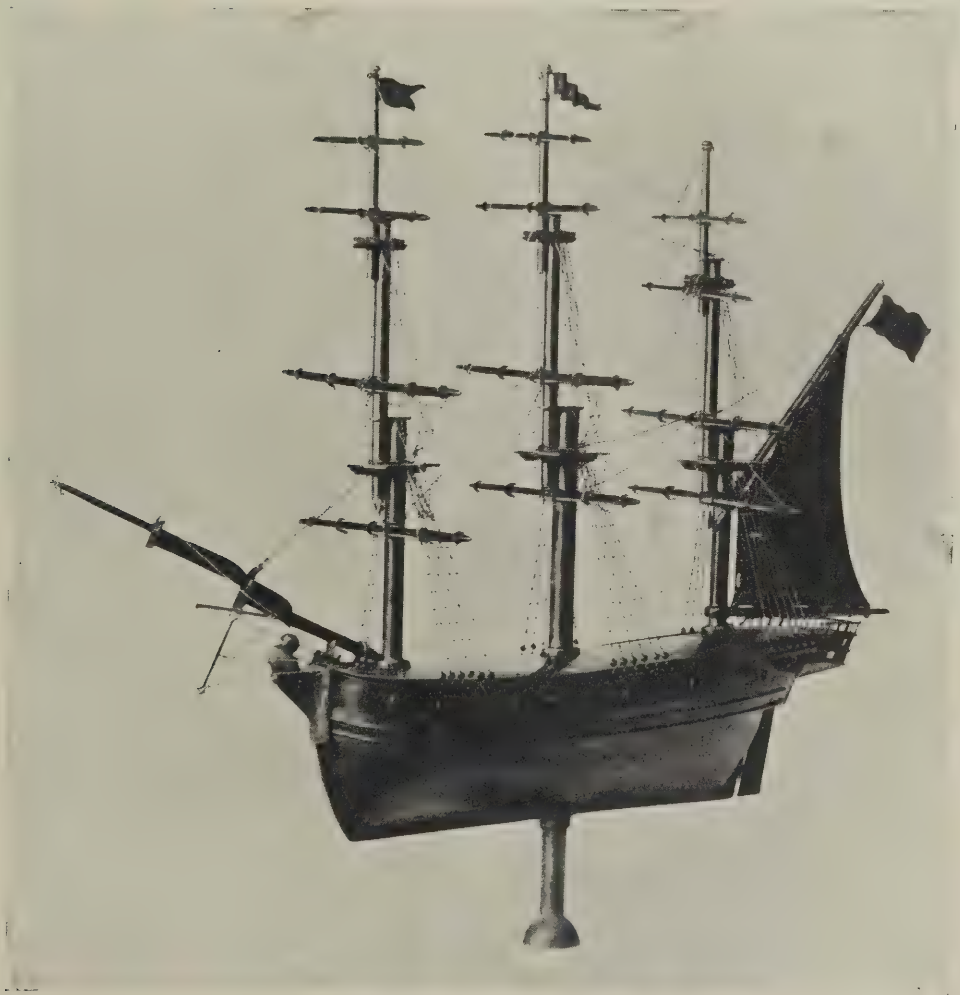
198618.—Paving-blocks. — Gaisman, L., Chatham Street, Hooley Hill, near Manchester.—In the paving blocks the upper wearing surface of each block consists of two or more rubber slabs, each having segmental projections around the edges adapted to engage corresponding recesses in the base block. The base block when formed of concrete may be moulded to the rubber slab. The projections are usually of a harder or tougher quality rubber than the slab proper.

The above particulars are specially prepared by Messrs. Rayner & Co., registered patent agents, of 5 Chancery Lane, London, W.C.2, from whom readers of the JOURNAL may obtain all information free relating to patents, trade marks, and designs. Messrs. Rayner & Co. will obtain printed copies of the published specifications and abstract only, and forward on post free for the price of 1/6 each.

ednesday, August 22, 1923. Vol. LVIII. No. 1494

THE ARCHITECTS' JOURNAL & Architectural Engineer

With which is incorporated "The Builders' Journal."



H.M.S. "RESOLUTION."

The famous "Resolution," in which Captain James Cook, R.N., sailed the Southern Seas, has been reproduced in copper in exact detail by Mr. J. Starkie Gardner. The model is a weather vane, and has been erected on a 46-foot high mast at Whitby, in front of the memorial statue to the great navigator.

27-29 Tothill Street, Westminster, S.W.1.

Amsterdam : House in Hurensgracht

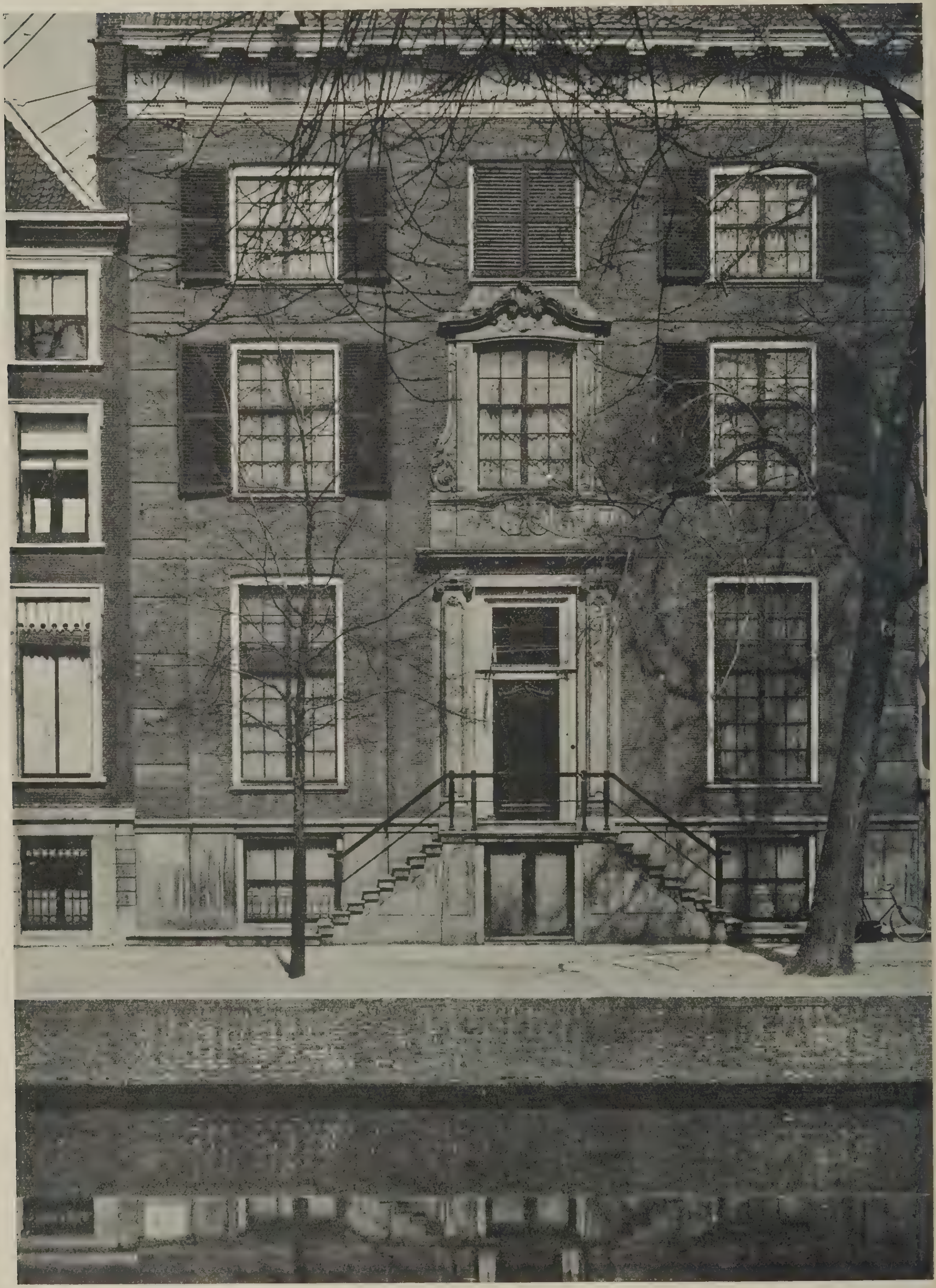


Photo: F. R. Yerbury.

This is a fine example of one of the 18th century houses in Amsterdam. Like most of these old houses of the aristocracy it stands on one of the canals.

THE
ARCHITECTS' JOURNAL
27-29 Tothill Street, Westminster, S.W.1.

Wednesday, August 22, 1923

Volume LVIII. No. 1494

A New Use for Temporary Buildings

IT has for long been accepted as inevitable that a battleship, wrought with all the infinite care of which mankind is capable—perfect, according to contemporary ideas, in workmanship, in equipment, and in design, s, nevertheless, doomed to be scrapped or superseded when ts effectual life has barely begun. Considered dispassionately and philosophically such a fact must give rise to thoughts of sadness. To expend so much care, skill, and energy as might guarantee it a long life of usefulness upon the construction of something which will shortly be cast aside as useless, is stultifying, and seems, in the light of sober contemplation, to be a waste of human gifts and Nature's resources.

In architecture, at any rate, man builds for permanency. Buildings come down to us through the ages, many almost ntact, and many tenderly preserved. And yet can the and architect afford to cast a stone at his maritime brother? Look at Regent Street. Built a hundred years ago and acclaimed, in its day, the finest street in Europe, its buildngs are now razed to the ground while yet in their prime. But the worst examples of buildings becoming obsolete while yet solid in structure occur with those which in their planning depend largely upon current ideas of hygiene: schools, hospitals, and the like. A writer recently pointed out that ince the formation of the School Board in 1870 no less than nine types of plans have been issued. That is to say, that on an average each school built during the last fifty years has become out of date in about six years. We have before us no such figures for hospitals, but we are convinced that he changes here have been no less drastic. Medical science s it advances discovers new treatments and new appliances. To take only one malady, that of tuberculosis, scarcely a year passes without bringing some change in the treatment f this devastating disease, which is reflected in the arrangement of any new buildings designed to deal with it.

Such happenings must make the architect pause and wonder if there be no possible method of building which will llow of some ready adaptation to the changing demands f science and hygiene. One of the most interesting experiments in this connection is being carried out by the London ounty Council, which, since it is one of the largest educaional bodies in the kingdom, will be watched with great interest. The idea is simple. Around a permanent nucleus omprising a hall, cloak-rooms, and administration, he class-rooms themselves are constructed in a semiermanent fashion, so arranged that they can, at little cost, e adapted to changing needs or, indeed, be scrapped in heir entirety after a few years at little loss. Moreover, hey are so designed that in the summer they can be so hrown open as to form open-air class-rooms. As the value f sunshine and fresh air is becoming ever better realized, specially for children and especially for those whose home urroundings, by reason of their urbanity, cannot provide hem to the full, such an adaptability to the seasons is mmensely valuable. Such an arrangement has so far nly been found practicable where land is readily available o that a large site can be acquired and the building degned on a ground floor only. Superimposed stories would, f course, demand a more permanent form of structure, and consequently lessen adaptability to subsequent requirements.

The same principle could be applied with almost greater justification to hospitals. Around a permanent nucleus comprising staff quarters, administration offices, and kitchens, would be ranged the wards and other departments, built on the ground floor only and constructed in such a manner that alteration, amendment, or even total demolition would not be an expensive affair. Moreover, like the schools, these buildings could be designed so that the wards could be thrown open to the air during the summer months, for the curative value of sunshine for every human ailment is being more and more emphasized by medical opinion. A few years ago both school and hospital ventilation had become immensely complicated, so complicated, indeed, and delicately balanced, that a promiscuously opened window was sufficient to throw the whole scheme out of gear. Now, fortunately, there is a return to simpler and more natural methods. The complications of the past can probably be traced to a fear of a draught, and these systems were devised to change and circulate the air without producing this terrifying phenomenon. Nowadays it is realized that the draught is, after all, responsible for few ills; that an immunity to slight exposure is easily acquired; and that the free circulation of fresh air and abundance of sunshine are all important. It is realized, for example, that it is not the sudden change of temperature from a hot place of entertainment to the fresh night air that is so much responsible for colds and suchlike complaints as that the lowered vitality engendered by the impure atmosphere of the building is unable to resist the attacks of bacilli carried by persons definitely affected by some minor complaint.

The possibilities of this method of building were scarcely realized before the war made its adoption imperative; but as the war went on, both at home and all over the world, in the train of the diverse armies temporary buildings were erected for the accommodation of men and stores, for hospitals and offices, for purposes of manufacture and recreation. Even in our largest cities every available piece of ground was utilized for some temporary building; less temporary, indeed, than many would wish, since their removal is even yet scarce altogether accomplished.

Architects may, perhaps, look with disfavour upon perpetuating such methods. Yet architecture's prime duty is to serve the needs of humanity. At the present time certain of these needs are in a state of flux, or, to state the matter somewhat differently, the need of the Western civilizations is for buildings that shall have the maximum flexibility, and that can be readily adapted to fulfil the latest requirements of hygiene and medical science. There is no disputing the fact that a fine permanent school or hospital building, costing some hundred thousand pounds, will be a nobler and finer building than a low spreading mass composed of temporary erections around some small brick or stone structure, costing, say, some ten thousand pounds. But such considerations are beside the purpose. What matters is that in five years' time the one building would already be obsolescent in its arrangement, whereas the other could always meet whatsoever demands were made upon it.

And if these buildings cannot have the beauty which is the outcome of finely wrought masonry and massive brickwork, they can possess a beauty of their own, albeit of an altogether different kind. In the design of even the simplest structure there is scope for artistry. The building must have doors and windows and a roof; the proportion of these and their just relation to each other is the matter from which beauty can be made. In the colour of the paintwork, too, which should be bright and cheerful, is further opportunity. So much of our admiration is a matter of convention. We think a school, a hospital, should be this or that. But human needs come first. How can they best be served to-day? The answer is by building cheaply and flexibly (and here the land architect is more fortunate than his naval colleague, who must build everything for equal permanence, while knowing that his work will soon be relegated to the breaker's yard). For this reason we watch the London County Council's experiments in school building with particular interest.

London Street Repairs

At last it would seem, judging by the papers, the public have been forced to take a serious interest in the traffic problem. The City is "up" as it has never been before. Cheapside is closed for asphalting, and the operations are expected to last over about three weeks. Edgware Road, Whitehall, and Pall Mall are closed to traffic, the delay to which has in some cases been noted to last for three-quarters of an hour. Perhaps the most pressing of the many traffic problems is that of the Strand at Wellington Street, where the traffic from east and west meets the traffic from north and south. The traffic is mixed in quality, and the slowest vehicle governs the rate at which it moves. The delay to omnibus traffic is serious, and there seems no possible way of improving it, for there is no street by which part of the traffic can be diverted to Waterloo Bridge, and the opening of Kingsway has greatly increased the assembly at this point. The necessity for the proposed Charing Cross Bridge grows clearer every day.

Spoiling Fine Places

During the past week, the "Times" has given considerable space to correspondence upon the disfiguring of beauty spots by careless citizens. Professor Flinders Petrie points out that, in England, we inherit the greatest monuments of prehistoric ages that are known, but we seem strangely ignorant of how to treat them. Stonehenge has been wantonly spoiled by planting an immense aerodrome shed near by, while there are hundreds of square miles of downland available, and now Avebury and Silbury Hill, unrivalled elsewhere, are wantonly threatened with a crowd of modern buildings and a gigantic tower. "Are not all the Wiltshire and Dorset and Sussex Downs available?" he asks, "without planting such an establishment beside one of our greatest monuments?" The same kind of official disregard for values is seen in the attempt to take in Dorset one of the finest bays for official use, for which many an unused piece of coast would be equally good. The root of the trouble, he declares, is the separation of modern education into two branches, historic and scientific—each equally ignorant of the values of the other. "We do not think," continues the Professor, "of taking the verdict of the historian or archæologist on scientific matters for which they are untrained, and equally, we do not intend to take the verdict of men of science who are similarly ignorant of historic subjects." We have at last placed our monuments under registration and inspection, and the opinion of those who are competent to preserve them must be final as to all changes that will affect our heritage. Very often, the gateway to a town of rare appeal is disfigured by a makeshift or garish garage, which is not only built without any sense of proper design, but is also plastered over with offensive enamelled plates. A particularly sad instance of this is to be seen at Godalming, in Surrey. The destruction of ancient and lovely buildings is now usually forestalled by the better citizens of the place they adorn. With regard to the advertisers' assault on the countryside, we shal surely have recourse before long to some national legislation which will establish an effective and general defence

A Poor Academy for the Artists

The Royal Academy of 1923 is said by art dealers t have been one of the worst Academies on record. Not onl have particularly few pictures been sold, but these hav been mainly small pictures. There are no new town mansions, and the rich people who are not tied to one prefe to live in flats designed by architects who, according to th London correspondent of "The Manchester Guardian," d their best to abolish pictures as spoiling the lines and ligh and shade of their neo-Georgian rooms. "True," he remarks, "they will make special concessions and design setting for a Gainsborough or El Greco, but, unless th client takes a strong line, he will find," declares their correspondent, "that only a water-colour or a dry-point can b hung with honour on a modern wall. Many country house have been built in the last ten years, but now there is serious decline in the business, and even our smartest an grandest architects are turning their art to smaller example of the class. But, large or small, they have this in commo —good-sized oil paintings are not encouraged, but hav an alien look on the walls."

The Annual "Architects' Week"

Although the three days' meeting of the R.I.B.A. to b held in London in November is in the nature of an exper ment its success is assured. It has been convened on th recommendation of the Allied Societies' Conference, a will include some of the annual functions at present he on separate dates during the year. If the meeting is effe tive it is hoped in future to arrange an annual "architect week" in London in which will be included the presentati of the Gold Medal, the President's inaugural address, a perhaps other functions. In the past provincial membe have rightly complained of the disadvantages of t present system. To attend only the more promine meetings means several visits to London, and each time many cases the expense of a long railway journey and night in town, and at the least a two days' neglect of th practice. An annual architects' week would overco these difficulties, and those members would have the c portunity to attend the most important events of the ye by making a single journey only to London.

The New Housing Subsidy

Information that has just been received by the Met politan Borough Councils makes it clear that the Minist of Health intends to exercise strict control before appro will be given to any proposed housing schemes. Accordi to Mr. E. R. Forbes, the chief administration official of t Housing Department, all schemes will have to be appro by the Minister, and in order to do this he will require exact statement of the number of applications on t waiting list of the local authority, together with statist of overcrowding. In Dr. Addison's day there was c siderable overlapping in estimating the need of houses any particular district owing to applications being recei from persons living in other districts. Now, the lo authority is asked to distinguish in its list those who actually resident in its district from those who live e where. Nor is it enough now for a council to state tha cannot meet the demand for houses without Governm assistance. It must supply detailed evidence on this poi Consequently, the Ministry ask for full information ab the house-building already going on in a district, and want to know what steps the local authority has taken ascertain that the amount of the assistance proposed is minimum required to tempt a builder to build. F experience of delays has also made the Ministry wary allowing the approval to continue for an unlimited len of time, and it is now proposed that the undertakings a local authority shall be strictly limited to such a num of houses as can be completed within, say, nine months

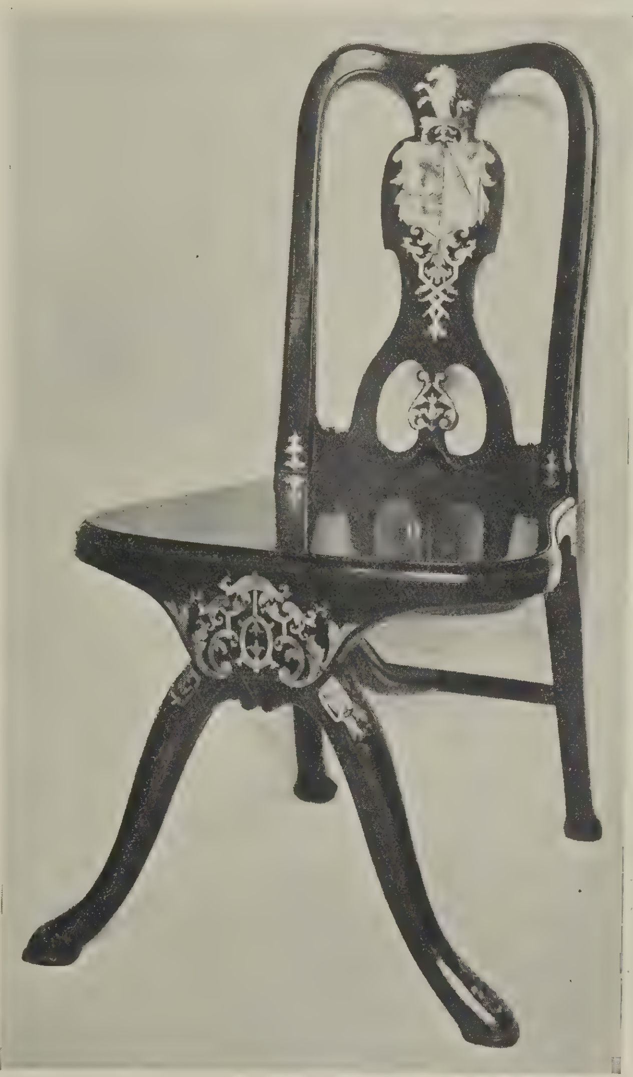
The Furniture of Sir John Soane

By ARTHUR T. BOLTON, F.S.A., F.R.I.B.A., Curator of the Soane Museum

FROM Chippendale and Sheraton, with a possible hint of Hepplewhite, the popular fancy passes direct to Empire and so to Early Victorian. Consequently, the furniture of the house of Sir John Soane in Lincoln's Inn Fields has been rather easily disposed of. Some wag, it is true, has invented the "Trafalgar chair" for a type which turns up regularly in Soane houses.

It may appear probable, however, on reflection, that an architect of Soane's ingenuity, individuality, and special aculty for minute attention o detail, would have a good deal to do with the design of he furniture of his interiors. It is quite true that in his R.A. lectures (after 1812) Soane spoke semi-apologetically for Robert Adam's devotion to uch matters, but these are official utterances, more or less uned to the Greek Revival dea of the time, and, as in the well-known instance of Sir Joshua Reynolds, the practice of the artist is of far superior authority.

There are roughly four periods in Soane's furnishngs: 1780, when, on his return from Italy, he spent about £100 on his first house in Margaret Street; 1792–4, when he built No. 12 Lincoln's Inn Fields; 1800, the date of Pitzhanger, and 1812–14, the time when No. 13 Lincoln's Inn Fields, the present Museum, was erected. There was an important extension later on in 1824, when No. 14 was ebuilt, and as late as 1835, only two years before his death, alterations were made at No. 13. To the 1780 period may belong a set of modified stuffed wheel-back armhairs, decorated with detail of a semi-Adam type, and wo half-circle satinwood old-up card tables with taperng legs and oval pateræ. It is possible the mahogany and horsehair furniture may be of the 1792–4 period, though he bulk of it probably belongs to the period 1812–14. From he tradesmen's bills for the Bank of England important evidence has been obtained, and some details are given here. Thus: In May, 1804, John Robins, of Warwick Street, Golden Square, supplies a library table for £33 18s. This is the friend for whom Soane later on built a house in Park Lane, and a large block of business premises in the New Regent Street. At the same time, Kent, Luck & Kent supply mahogany chairs stuffed and covered satin hair," at 42s. Library desk at £61 15s., and "commode chest of drawers," 13 14s. This furniture was often, if not always, directly made for the Bank and has the Soane character. The counters, stools, desks, bookcases, cupboards, etc., were all so made and often appear in the bills priced and checked in detail. Thus, in 1806, Robins executes the counting-house desks in "Jamaica mahogany" to a total bill of £335 13s. 6d. David Bruce, cabinet-maker, supplies a library table for £14 14s. In the year following, Jamaica, Spanish and Honduras mahogany are used, the amount for counters, desks, etc., being no less than £1,745 4s. 5d. The prices of Spanish are 1¼ in. 5s., 1⅛ in. 4s. 6d., 1 in. 4s. Wainscot, 3 in. 3s. 6d., 2 in. 2s. 4d., 1¼ in. 1s. 6d., 1 in. 1s. 3d., ¾ in. 11d. per ft. super. Deal in comparison is 1 in. 5d., ½ in. 3d. In 1811, Robins is paid 7s. 6d. a foot for 2 in. Spanish, 2s. for ¾ in. Honduras, and 1s. for ½ in. Canary wood.



INLAID MOTHER-OF-PEARL DUTCH CHAIR (ABOUT 1730).

(Now in the Library of the Soane Museum.)

A bill of Kent & Sons, upholsterers, of 1804–6, mentions:

	£	s.	d.
12 mahogany chairs, covered black leather to pattern	21	0	0
A stained beech coachtop bedstead, sacking, caps, and castors	5	15	6
A mahogany Pembroke Table, fine wood	4	14	6
A mahogany Chamber Table	2	8	0
A mahogany box Dressing Glass ..	2	5	0
A mahogany Chest of Drawers ..	6	6	0
6 black matted chairs (7s. each)	2	2	0
2 green canvas Curtains	1	14	0

There are a number of black chairs with cane backs and seats at the Soane, no doubt the same as the above, and these were very probably supplied for Pitzhanger in the first instance.

There is mention of the so-called "Trafalgar chair" in 1808, when David Bruce supplies "baluster back chairs, 63s. each," "with elbows, 75s." There are a number of these in the Museum and they are usual in Soane houses. In September, 1809, the same upholsterer supplies "12 neat mahogany banister back chairs, French stuffed seats, covered best Spanish leather, welted and finished with brass beads, 63s.," and "with elbows, 75s." While for the governor's room, "20 mahogany trellis chairs, the backs and legs reeded and fluted, seats covered with best leather, red Morocco welts, 84s.," and "elbows, 98s. each." There can be little doubt that these are the same chairs as those in the Soane, which are so persistently ascribed to Sheraton. The name of the last-named maker has not been met with in any Soane records up to the present.

In 1810 is an entry "Carving a mahogany ballotting box, richly ornamented on the roof and models of honeysuckles on both sides, £5 16s. 10d."—an item most certainly made to some detail drawing of Soane's. At this time he was building five houses in the newly-laid-out Princes Street, to be occupied by bank officials, and at No. 5 house, James Bate, paperhanger, is paid for "grey-green satin papers with velvet borders and gilt mouldings" (142 yds. of the latter)—a departure from Soane's usual painted walls. Wm. Watson, glazier, supplies "red ground and fret border in fanlight, 9s., and No. 8 ornamental roses on blue ground, £3 13s. 6d." and "ornamented centre to fanlight, £1 1s."

There was a great deal of this coloured glass in Soane's own house, combined with plain wall colours. It became a custom for perhaps forty or fifty years. The glass is a "flash glass" and not "pot metal."

One of these Bank houses in Princes Street had "a peach satin paper at 12s. per piece, with broad flock-style border with light and shade lines, 12s. a dozen." Bowen & Morant were the paperhangers. In 1812, "Damask blossom satin paper for drawing room, 12s. Rich antique ornament, greys etc., on pink, same," also "Sunflower damask peach satin for dining room, and black mouldings" in place of the previous gilt. These are valuable indications of the character of the finishings in the houses built by Soane at this period.

In 1816, Robins is supplying "6 lyre-back chairs, neatly japanned bamboo cane seats, 14s. each." A 4 ft. 6 in. "4-post bedstead with plain mahogany feet pillars, sacking bottom, brass cap castors, £5 18s." (These castors can be seen on the tables in the Soane.) Drab morine for the above bed costs £1 15s.

An important 3 ft. 10 in. writing table is described as of "East-India Rosewood, tray top to rise. Pediment fixed at back. 8 turned legs fluted, with pedestals each end. Brass bead mouldings inlaid, £34 16s."

In 1817, Thos. Blaxland, upholsterer, supplies "ninety-six yards seasoned floor cloth, at 6s. a yard, for the secretary's office." After this such early linoleums occur frequently, as in 1832, "best painted oak floor cloth, 4s. 9d. a yard." Brussels carpets by Kent, Tomkins & Williams cost 6s. 6d. and 7s. 6d. a yard, and 6d. for making up.

In 1818, "Marbled porphyry" (as may be seen in the Hall of the Soane) "varnished, 68 yards at 3s. 6d." occurs as an item of internal finish.

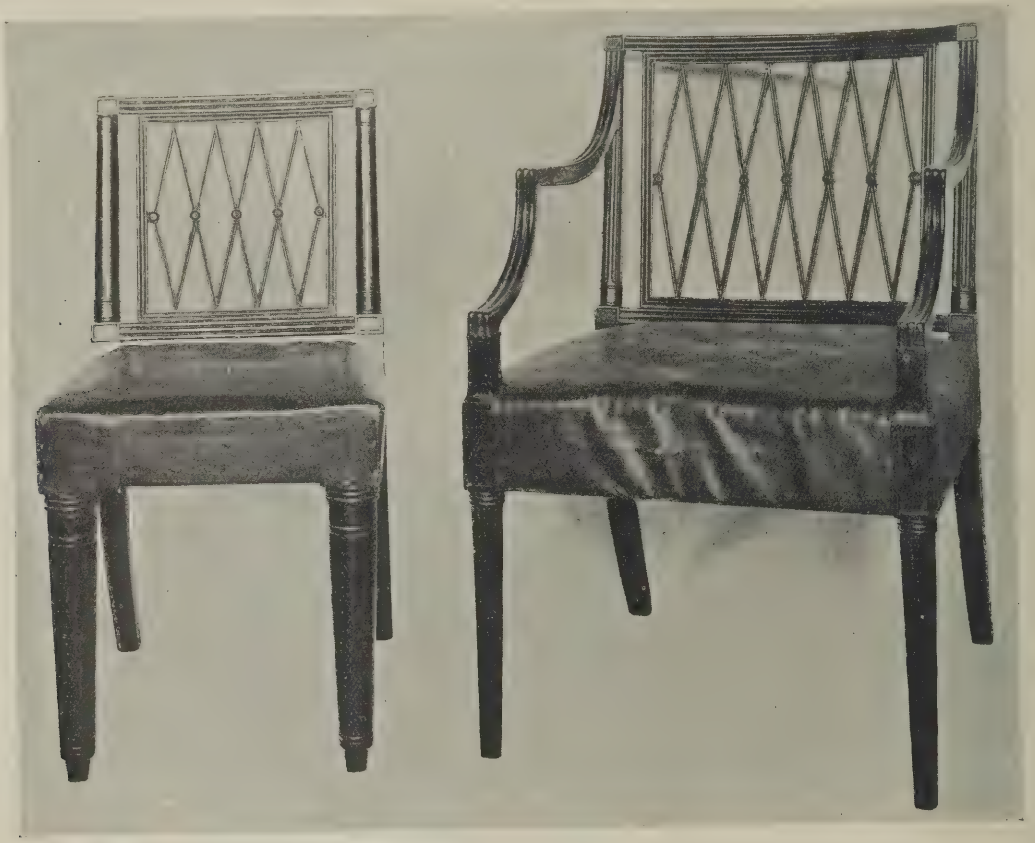
In 1820, the price for a dining table for the directors' room is dissected as follows: Materials, £8 9s. 3d. Hinges, castor etc., £2 12s. Labour, £2 8s. Total, £13 9s. 3d.

In 1824, the court room of the Bank seems to hav been overhauled and refurnished, and "Crimson drugge 5s. a yard. Blue cloth 16s. and lace 2s. for table cover and scarlet morine curtains" are supplied as part of th new scheme.

In 1826, Robins repairs the twenty-four mahogany trelli back chairs in the governor's room, covering them wit mazarine blue morocco leather, welted, 30s. each.

A mahogany bookcase is supplied at £16 18s., and th porters' chairs, still to be seen at the Bank, are priced a 9 guineas each.

In 1832, "4 mahogany sweeped-back chairs, covere black leather, 30s." are supplied. Illustrating the successiv phases of the furniture provided for the Bank.



MAHOGANY TRELLIS-BACK AND LEATHER COVERED CHAIRS MADE BY ROBINS.

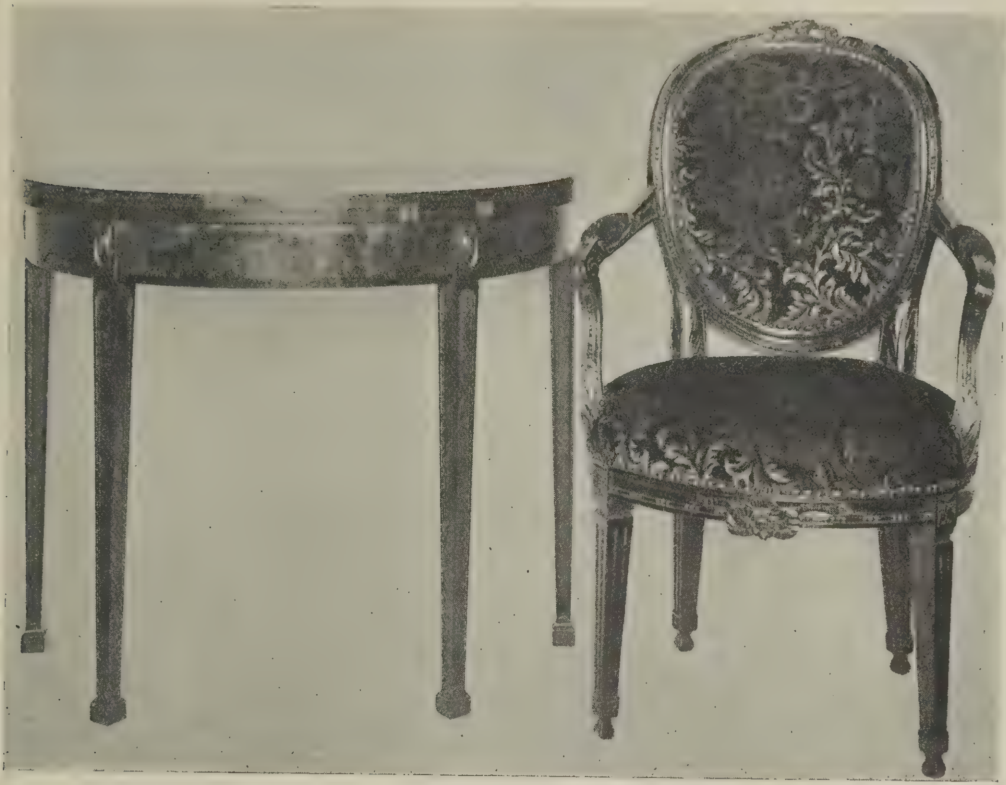
(Now in the Soane Museum.)

Returning to the Pitzhanger period, 1801–2, Rob supplies and fits up bookcases, furniture, carpets, curtai etc. A few items may be given, as "Feb. 1802, a mahoga gouty stool and cushion, £1 18s." There are a pair of these rest stools now at the Soane. "March, 1803. A 3 ft. wains pillar and claw table, £1 1s." "April, 1804. 20 square bl reed spindle-back chairs with cane seats, £10," and mahogany Pembroke table with rounded corners, reec edge, a drawer, lock, etc., and on socket castors, £3 15 A similar table but with taper legs in 1808 costs £4.

The account for the fine carpet still in the library a dining room of the Sir John Soane Museum, has b preserved as follows:—

1823. Saml. Luck Kent. "The original carpet warehous Carpenters Hall, 68 London Wall.

A fine Axminster Carpet for front dining-room ..	£36	0
Do. do. for back dining-room	29	10
A piece of do. for doors (i.e., space between the 2 rooms)	6	18
A small piece do.	3	10
2 hearth rugs to match	5	16
	81	15

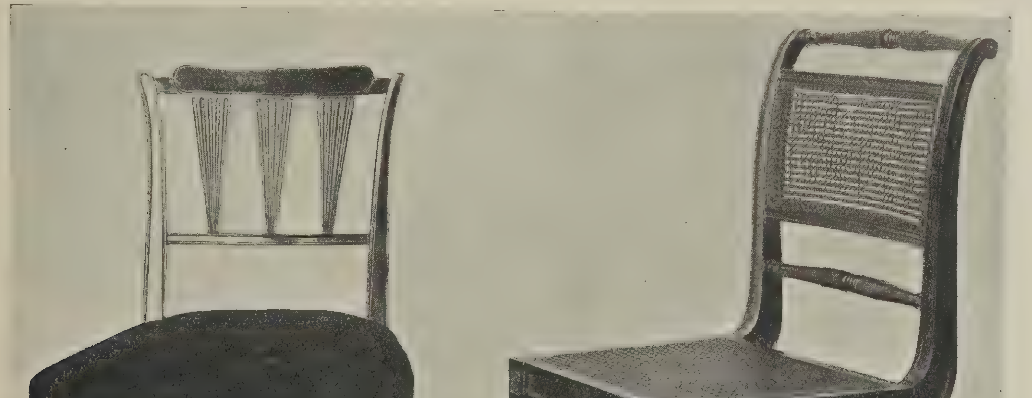


MAHOGANY WHEEL-STUFFED-BACK CHAIR OF LATE ADAM TYPE, WITH SATIN-WOOD CARD TABLE.

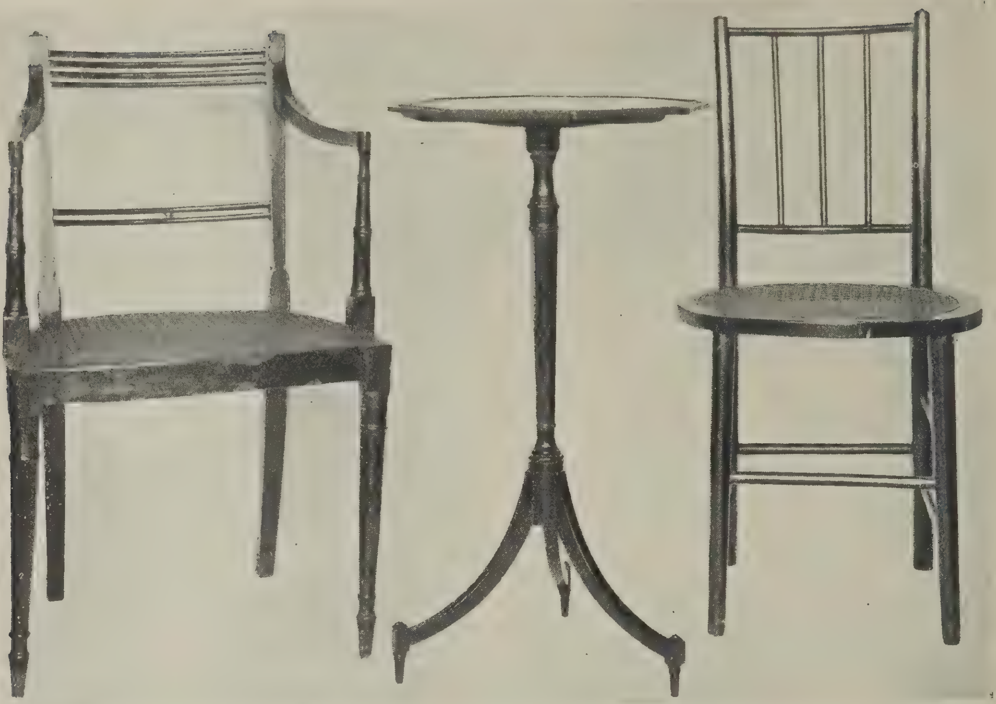
Flavel of Leamington has still the patterns of the steel rates in this room.

The general fitting-up of the room with its characteristic ookcases was carried out by Robins, together with the ookcases in the wall recesses of the first floor back drawing oom, and those in the breakfast parlour.

The account March, 1813, to October, 1816, is 416 11s. 11d. About £300 of this is for bookcases in brary, breakfast parlour, and drawing room first floor. The rest is for curtains, etc., and some items of furniture. The exact details cannot be made out now as the account is in very general terms and some of the bookcases were brought from No. 12 next door. Further, between this date and his death, Soane made various alterations to keep pace with his ever-increasing library and some of the work described in the bill does not appear to exist. Apparently, the four double-tier cases forming the west wall of the front library cost £103 12s., exclusive of glazing and locks, and



SINGLE CHAIR IN MAHOGANY WITH FLUTED SLATS, AND BALUSTER-BACK CHAIR OF ABOUT 1810, WITH CANE SEAT AND BACK.



BLACK MATTED AND CANE SEAT CHAIRS WITH MAHOGANY COFFEE TABLE.

the cases on the east wall of front and back rooms about £89 6s. The cases either side of fireplace in breakfast parlour are priced at £25, each 3 ft. wide by 7 ft. 7 in. high. To the back drawing room £42 is allotted but four cases are mentioned of which only two remain as described. The window curtains appear to have been of scarlet morine, as :—

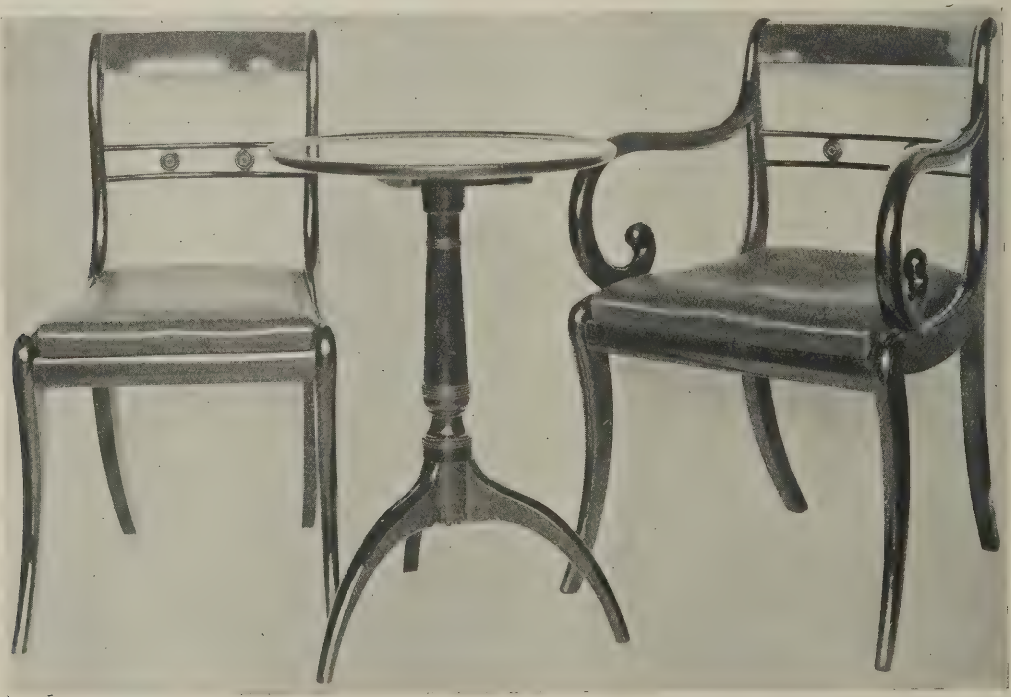
November 15, 1814.

32 yds. of super scarlet morine, 4s. 9d.	£7	12	0
36 yds. of 1½ in. black velvet ribbands, 8d. ..	1	4	0
Brass rings, tapes, thread and materials	0	7	0
Cutting out and making up 2 pair of scarlet morine window curtains with gauged heads bound with black velvet for the front parlour	1	5	0

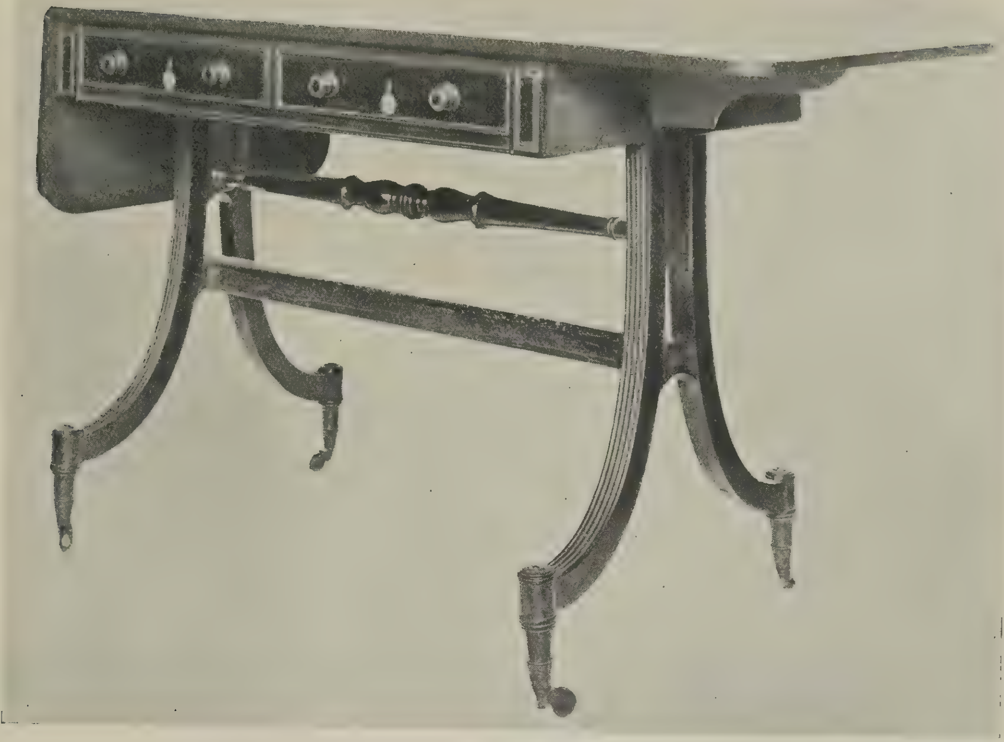
The drawing room floor was as follows :—

Front Drawing Room. March 11, 1815.

37 yds. of ¾ yellow sarsenet silk, 6s. 10d. ..	£12	12	10
100 yds. of yellow taminy, 2s. 6d...	12	10	0
60 yds. of sup. scarlet silk lace, 6d.	1	10	0
8 yds. of black velvet ornamented border on yellow silk valens, 8s.	3	4	0
4 black velvet ornaments	0	15	0
4 yds. of 4/4 stout white buckram..	0	10	0
Cutting out and making your own yellow silk into 4 pair of french window curtains with straight buckram valens lined with yellow taminy, ornamented with black velvet bound with your own fringe for front drawing room	3	3	0



MAHOGANY AND HORSE-HAIR SINGLE AND ARM-CHAIRS; AND COFFEE TABLE 20 INCHES DIAMETER



MAHOGANY PEMBROKE TABLE WITH FLAPS AND DRAWERS

(Now in the Library of the Soane Museum.)

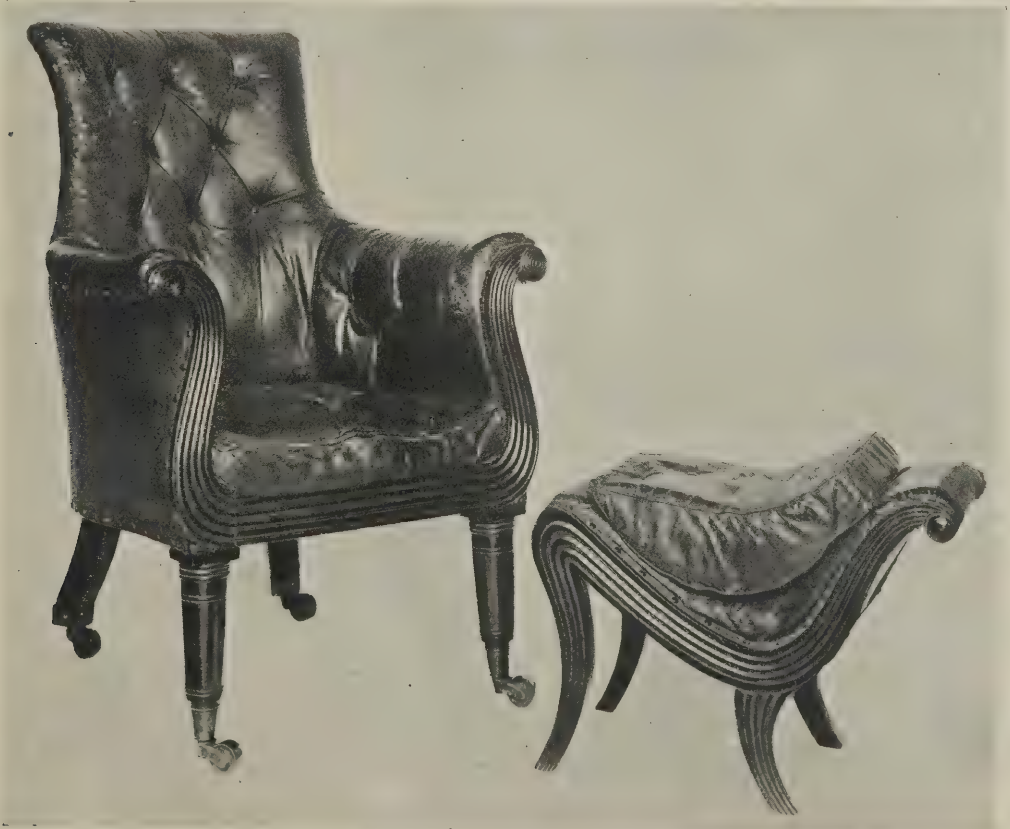
The back drawing room was slightly different, as :—

35 yds. of yellow morine, at 4s. 6d.	£7	17	6
3 yds. of black velvet fancy ornamented border on morine valen, 7s. 2d.	1	1	6
30 yds. of super scarlet satin guard lace, 8d. ..	1	0	0
A black velvet ornament	0	5	0
3¼ yds. scarlet silk and worsted parisian fringe, 6s.	0	19	6
Cutting out and making up a pair of yellow morine french window curtains with valen bound and fringed for back drawing room	1	0	0

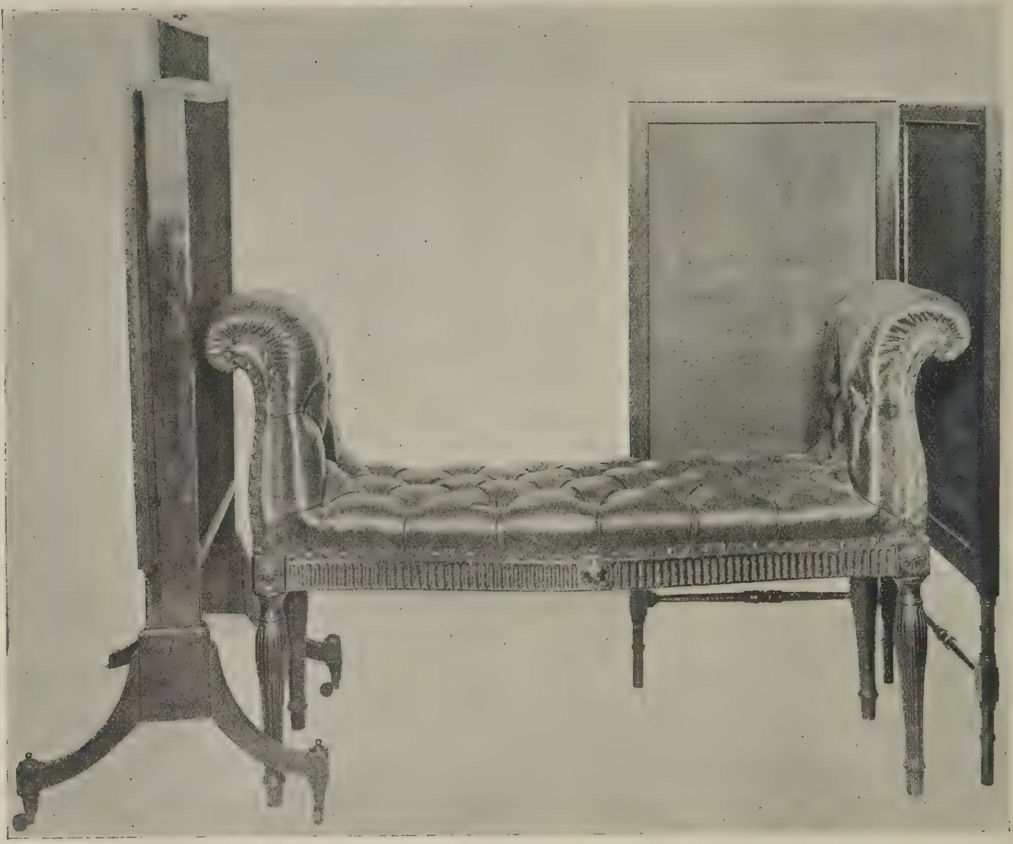
Carpets and curtains disappeared long ago from the first floor of the museum, and only the carpet remains on the ground floor. These accounts are very valuable as they give an idea of the original colour scheme of the Soane interiors of this date, which had no lack of definite colour.

From a bill of 1817 it would appear that the library had, in addition, spring blinds of Holland pink glazing.

In this year there is an item which seems to refer to the couch still in the library. "A 4 ft. mahogany couch, with



LIBRARY CHAIR, MAHOGANY AND LEATHER COVERED AND GOUTY STOOL



MAHOGANY SETTEE, LEATHER COVERED, LATE ADAM TYPE, AND TWO MAHOGANY FIRE-SCREENS, ONE FOLDING AND THE OTHER EXPANDING.

scrole end stuffed in fine brown linen bordered hair-squab, and feather pillow covered with satin hair cloth, welted and stuffed, turned legs on brass socket castors, £11 11s."

In 1818 occurs a larger couch which is illustrated. "A 5 ft. 6 in. mahogany Grecian couch with scrole end and seat, french stuffed, covered with satin hair cloth, welted and strong turned legs on brass socket castors, £10."

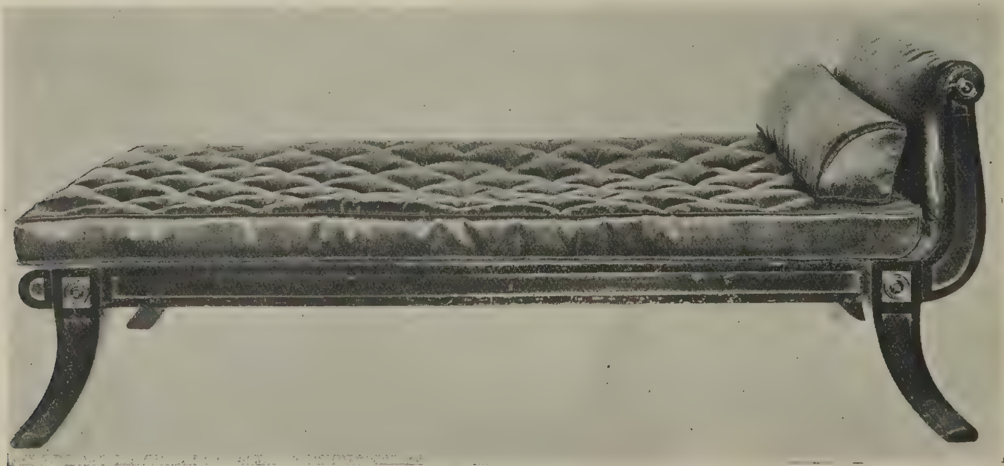
As regards the clocks, B. L. Vulliamy writes from Pall Mall, November 4, 1826, to Sir John Soane :—

> Sir,—I trouble you with this note in consequence of the death of Mr. Thwaites. Mr. Thwaites possessed a large share of practical knowledge of his profession, the result of many years practice. His nephew and partner, Mr. Reid, is as worthy a man I believe, as ever lived, but I do not consider him at all equal to his uncle as a clock maker. It has occurred to me that possibly the situation of Clock Maker to the Bank may become vacant, should that come to pass, I shall feel exceedingly obliged to you, if you be so good, (always provided you consider me to be a proper and competent person) as to recommend me to the Directors to replace Mr. Thwaites.

In 1829, he writes to Soane to invite him to call and see a very large public clock to strike the hours and quarters for Windsor Castle. He says that it in some respects resembles the large clocks at Paris. "I consider this construction for a public clock to be very preferable to the old one, because it combines great simplicity with extreme durability, and possesses the essential properties to insure the most accurate measurement of time. Moreover it unites economy with utility, all superfluous work being omitted."

The Vulliamy clocks are still in good working order at the museum—two of them have characteristic Soane cases.

Besides this furniture of a definite Soane character, there are

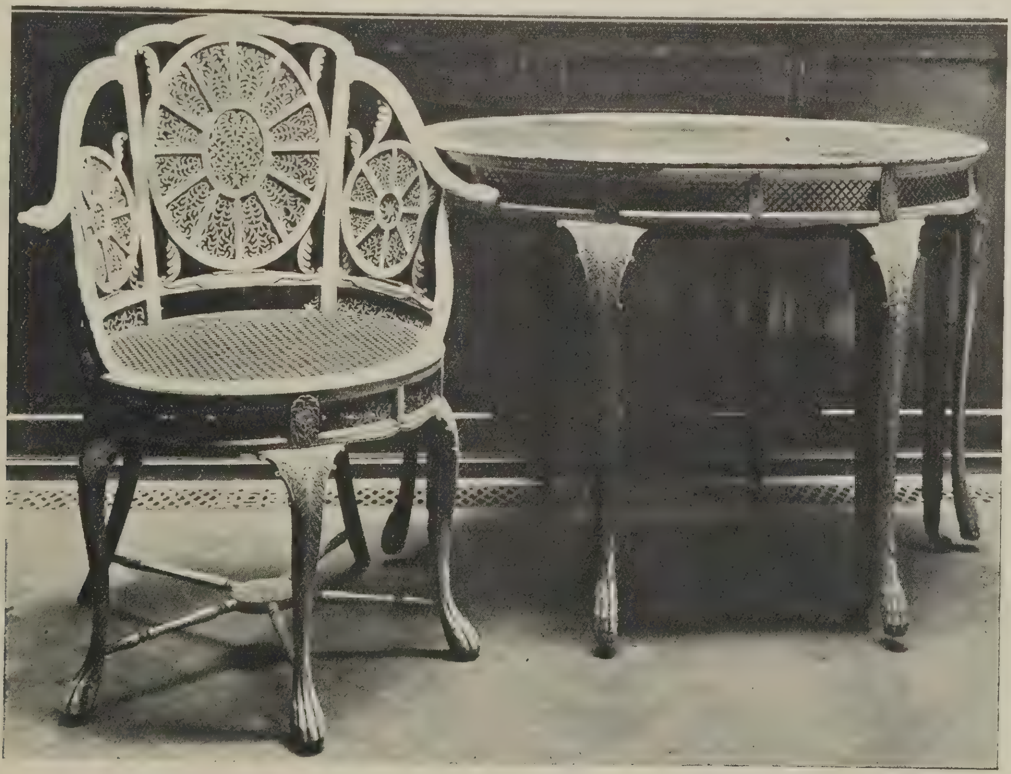


GRECIAN COUCH, MADE BY ROBINS.

MAHOGANY DRESSING-TABLE WITH MIRROR BACK AND FLAP, AND WORK-TABLE, BELIEVED TO HAVE BEEN MRS. SOANE'S.

MAHOGANY PEMBROKE TABLE, WITH LIFTING TOP.

the Chippendale chair, for which no account exists, the Dutch inlaid mother-of-pearl chairs from Sir Gregory Page's house at Blackheath, and the set of Chinese ivory chairs and table which were originally in the Hogarth room. It is obvious that the latter are a native interpretation of an English wheel-back chair. One of the most ingenious of the various tables at the Soane is the little fold-up circular table which draws out of the pedestal of the Apollo Belvedere statue. W. P. Frith, R.A., in his memoirs, mentions that in his early days he visited the house and saw Sir John Soane engaged in writing in his museum. It is practically certain that it was at this table, as at that time the opening of the new students' room behind the statue was closed in with a bookcase, forming a recess surrounded by bookcases on three sides. The contents of the cases indicate that this was one of the working places of the ever industrious architect, who after his retirement in 1833 devoted much of his time and remaining energies to literary work.



IVORY CHAIR AND TABLE, PART OF SET CAPTURED AT SERINGAPATAM. ENGLISH WHEEL-BACK TYPE, COPIED BY NATIVE ARTIST—PART GOLD LINES.

The National Bank, Liverpool

T. ARNOLD ASHWORTH and SON, Architects

THIS building forms an imposing background to Lord Street—the main thoroughfare of Liverpool. It is nine stories high, of steel-frame construction. The main elevations to James Street and Fenwick Street are of Portland stone and have been designed generally in the Greek style.

The architects, taking full advantage of the site conditions, have relied upon line and proportion for effect rather than a free use of ornament. The enrichments which have been employed are well distributed and, while possessing the Greek inspiration, they are strongly characterized by an individual interpretation.

The ground floor and basement are occupied by the bank, the upper seven floors being devoted to offices, with sanitary accommodation on the eighth floor. On the flat roof are the motor rooms, fan chambers, and water storage tanks.

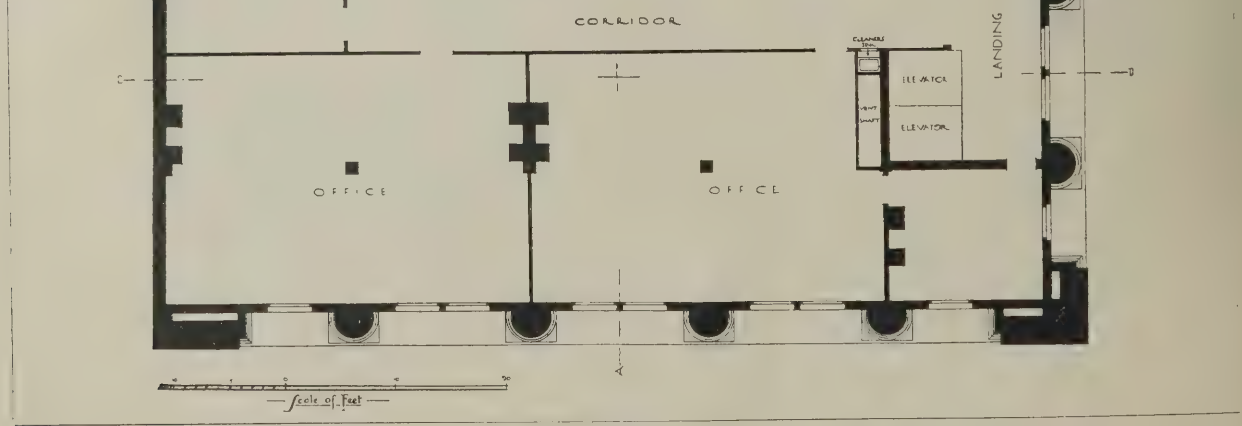
The banking hall is about 70 ft. by 50 ft. by 17 ft. high, and is adjoined by the manager's and sub-manager's room and the waiting room. It is entered through revolving doors from James Street. For the public space and the counter a semicircular plan has been adopted, and compartments are provided for the transaction of business between the bank and its customers. These compartments are divided by glazed screens and bronze grilles. In planning the building space has been arranged for future extensions. The banking hall has a dado of polished Hopton Wood stone with black marble skirting; the walls are of Hopton Wood "stuc"; and the frieze, cornice, beam casing, and ceilings are in enriched fibrous plaster. The columns and pilasters are of green "Scagliola" marble on black marble bases, and terminate with richly modelled fibrous plaster capitals. In the public space the floor is paved with black and cream marble in bold, radiating "key" pattern. Counter, screens, and desks are in selected Cuban mahogany polished to a dark colour and dull gloss, with carton-pierre ornament. The large windows on the front and back elevations extend up to ceiling, and no artificial light is needed in daytime. In the basement the bank's portion is occupied by strong-rooms and accommodation for staff, stores, etc., and direct access is obtained from the banking hall by a private staircase and a bullion and book lift. In the basement there are also ample storage compartments and fuel lockers for each of the other tenants.

Access to the various floors is obtained by two electric elevators and a reinforced concrete fireproof staircase.

All the floors are of fireproof construction, and those in the offices and corridors are covered with oak wood-blocks. The fireplaces are of the most modern construction, the smoke being extracted by induced draught through electrical fan chambers on the roof, and the building is ventilated by means of specially designed ducts connected up to extractor fans which draw up all vitiated air. Natural ventilation is obtained by means of vertical, pivot-hung opening casements. The system of ventilation and the method by which all smoke from fires is expelled from the building are of particular interest. The only other building in Liverpool which has the same method of smoke expulsion is the Cunard building. Two ventilation fans, two fans for smoke expulsion, and two motors to each lift have been installed. Should anything go wrong with any of these it is a few minutes' work to remove the damaged fan or motor and slide the second one into place. Central heating is on the low-pressure, hot-water system, the radiators being situated under the windows on each floor. Electricity is supplied throughout the building, and gas is laid on.

The total area of the concrete floors carried out by Messrs. J. Gerrard and Sons, Ltd., was about 3,800 super. yards, in addition to the staircase extending from the basement to the roof. The whole of the floor construction is carried out in the firm's rapid and economical system of long span floors. This type of flooring has the advantages of a large span and load-carrying capacity, thereby permitting great unbroken areas of flat ceiling. There is a great saving in dead weight by the use of this type of floor, and the consequent saving in the structural steelwork required for the building. The simple character of the steel centerings calls for a minimum of temporary supports, and this, combined with the ease with which the steel troughs may be withdrawn and re-used, facilitates rapid construction. Among the advantages claimed for the system

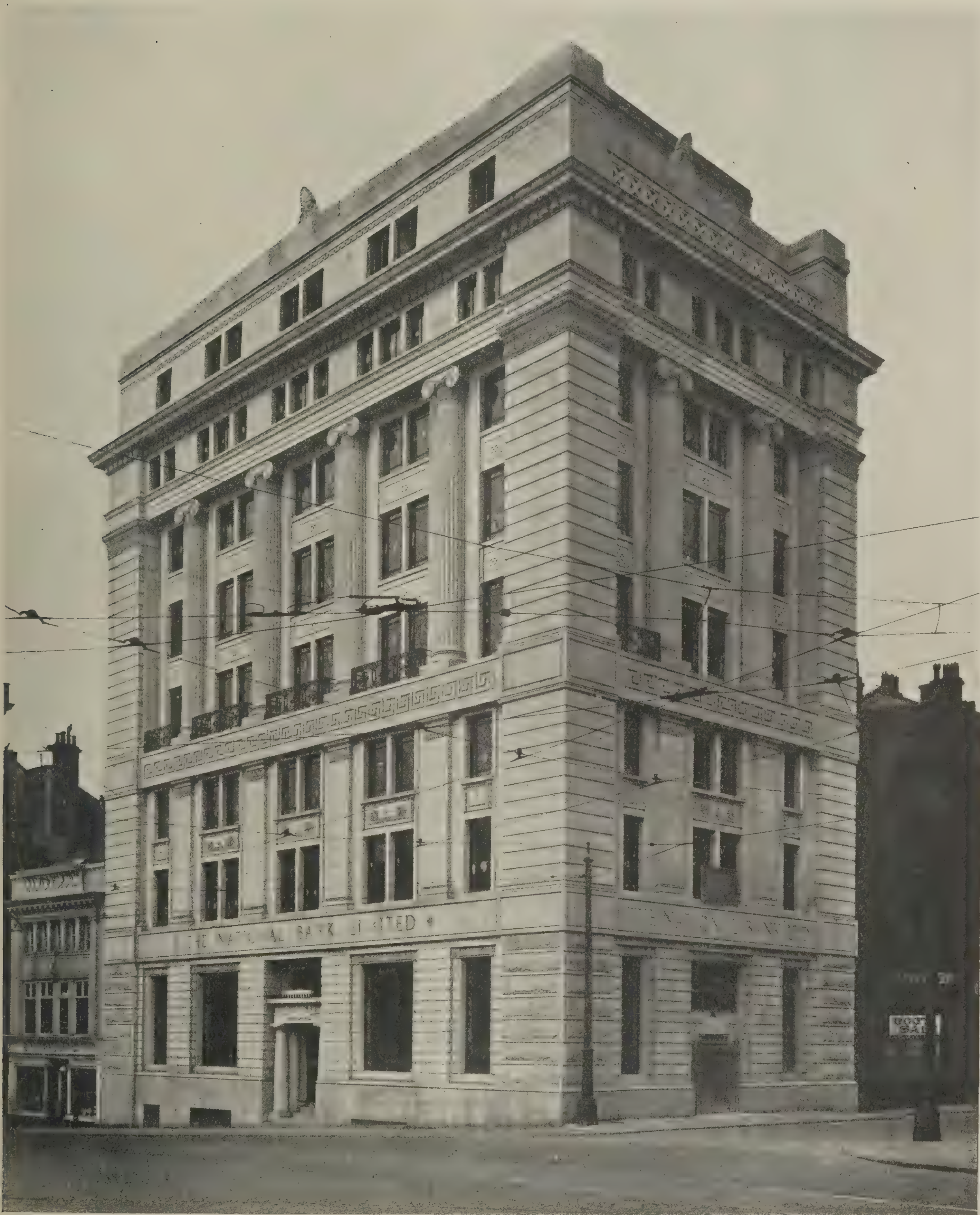
(*Concluded on page 293.*)



PLAN OF THIRD FLOOR

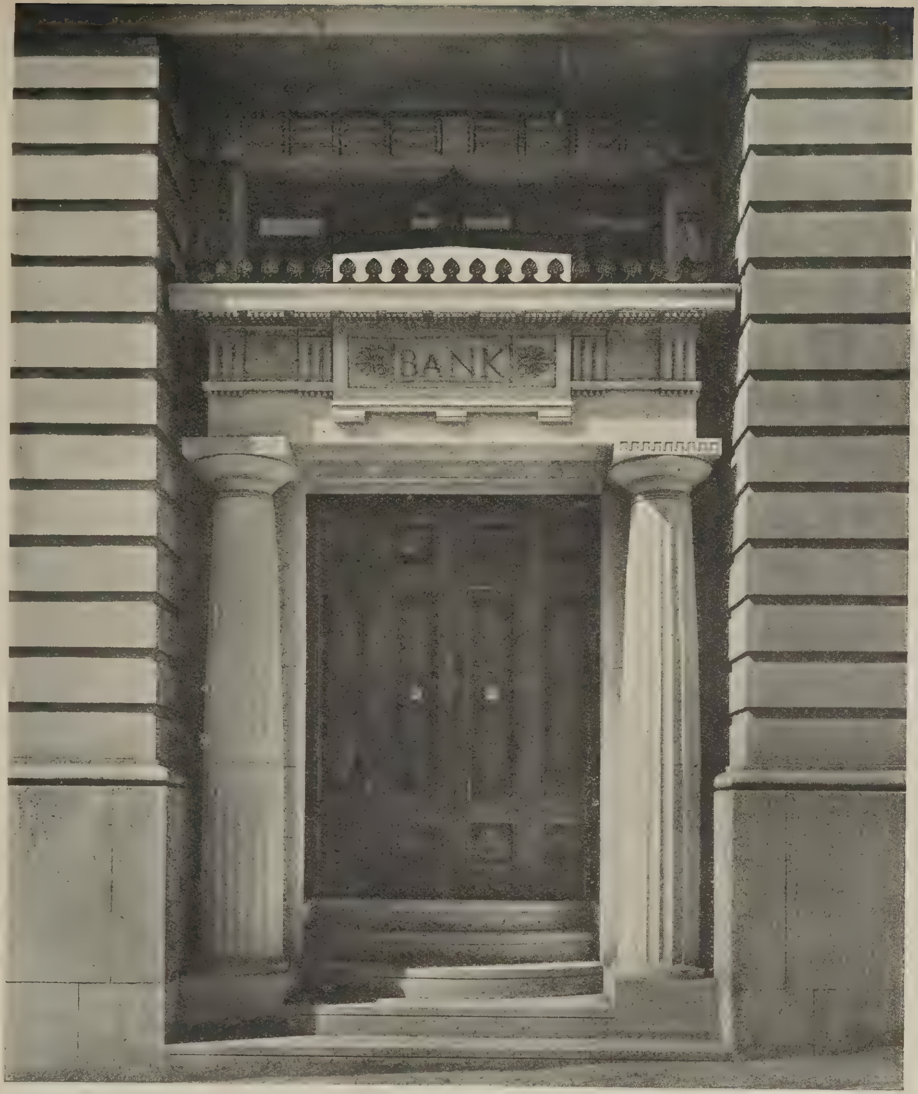
Current Architecture. 188.—The National Bank, Liverpool

T. Arnold Ashworth and Son, Architects

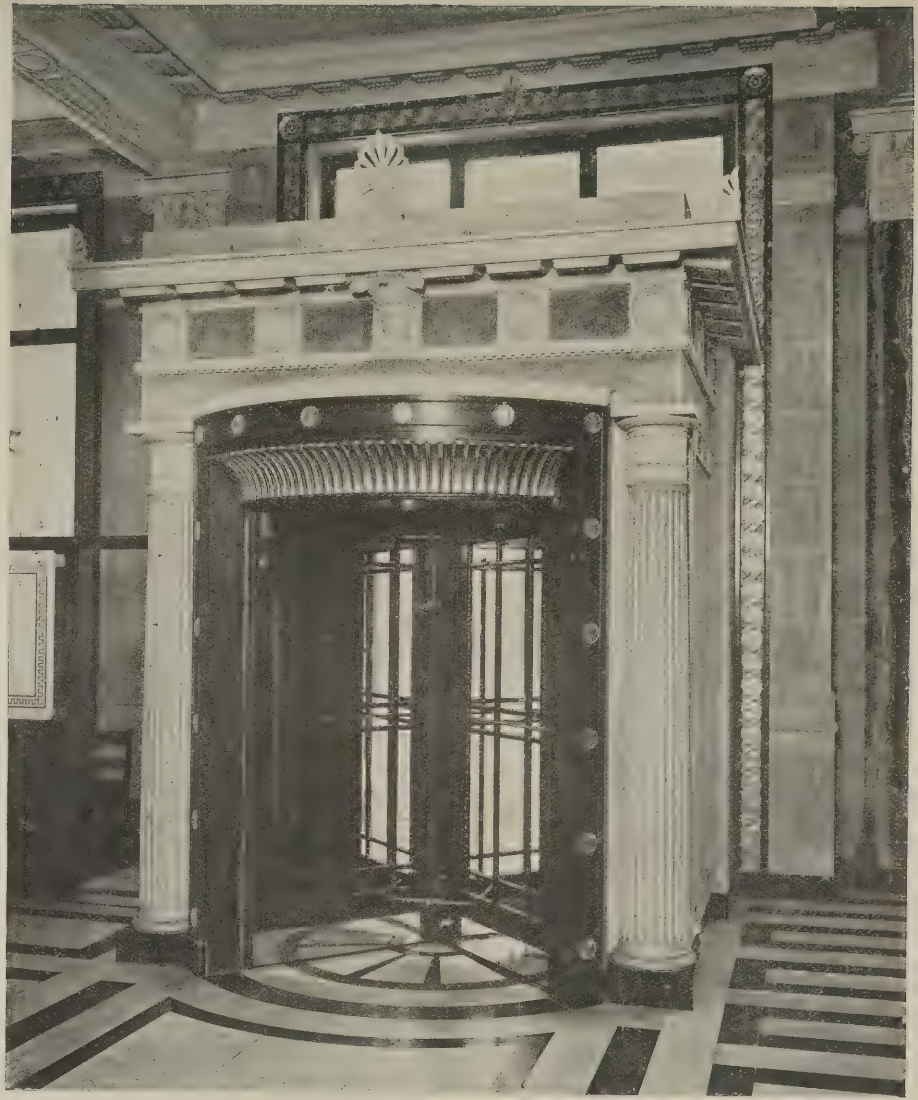


In their design the architects have relied upon line and proportion for effect rather than upon a free use of ornament. The enrichments, while possessing the Greek inspiration, are strongly characterized by an individual interpretation.

THE LIBRARY
OF THE
UNIVERSITY OF ILLINOIS



DETAIL OF ENTRANCE—EXTERIOR.



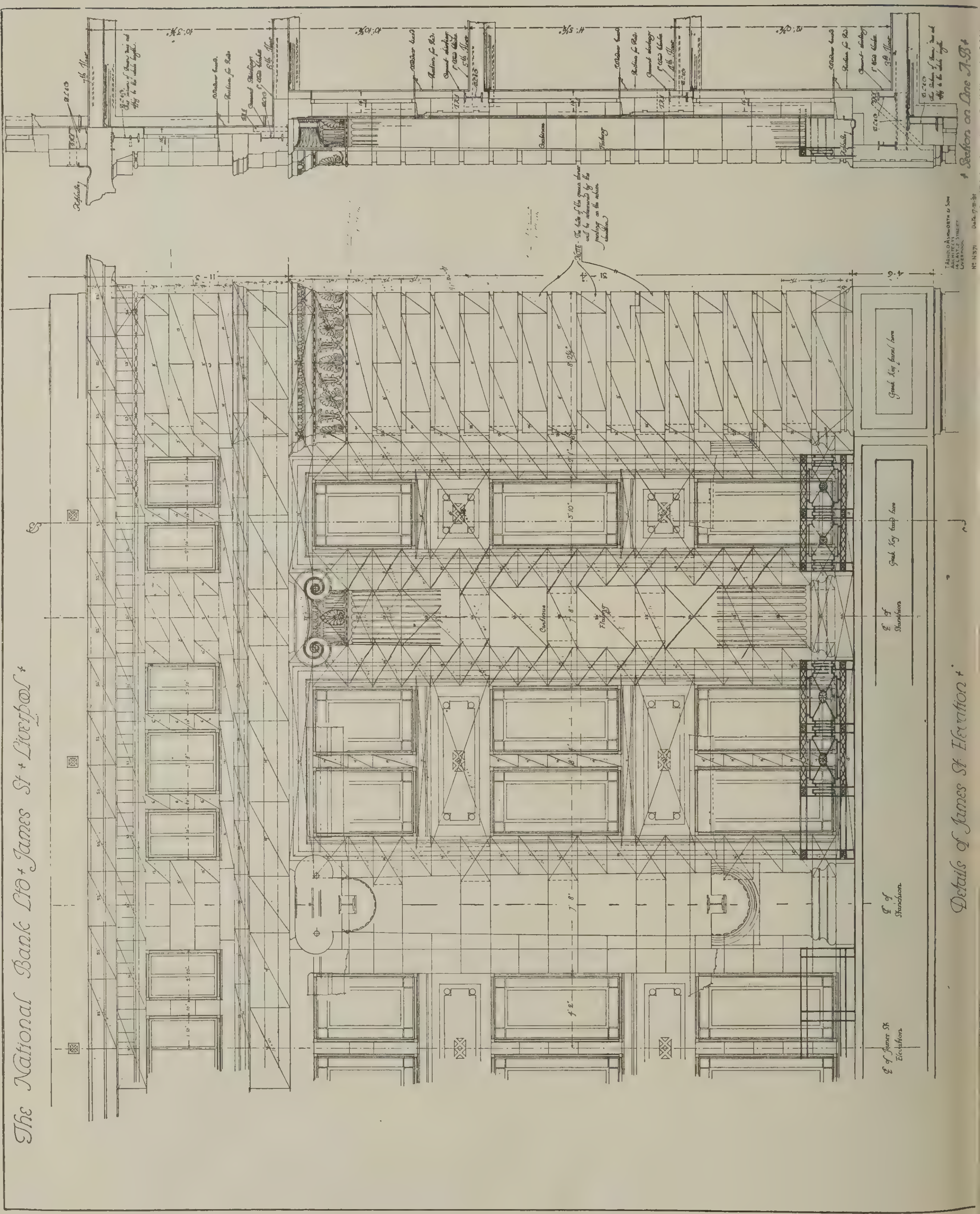
DETAIL OF ENTRANCE—INTERIOR.

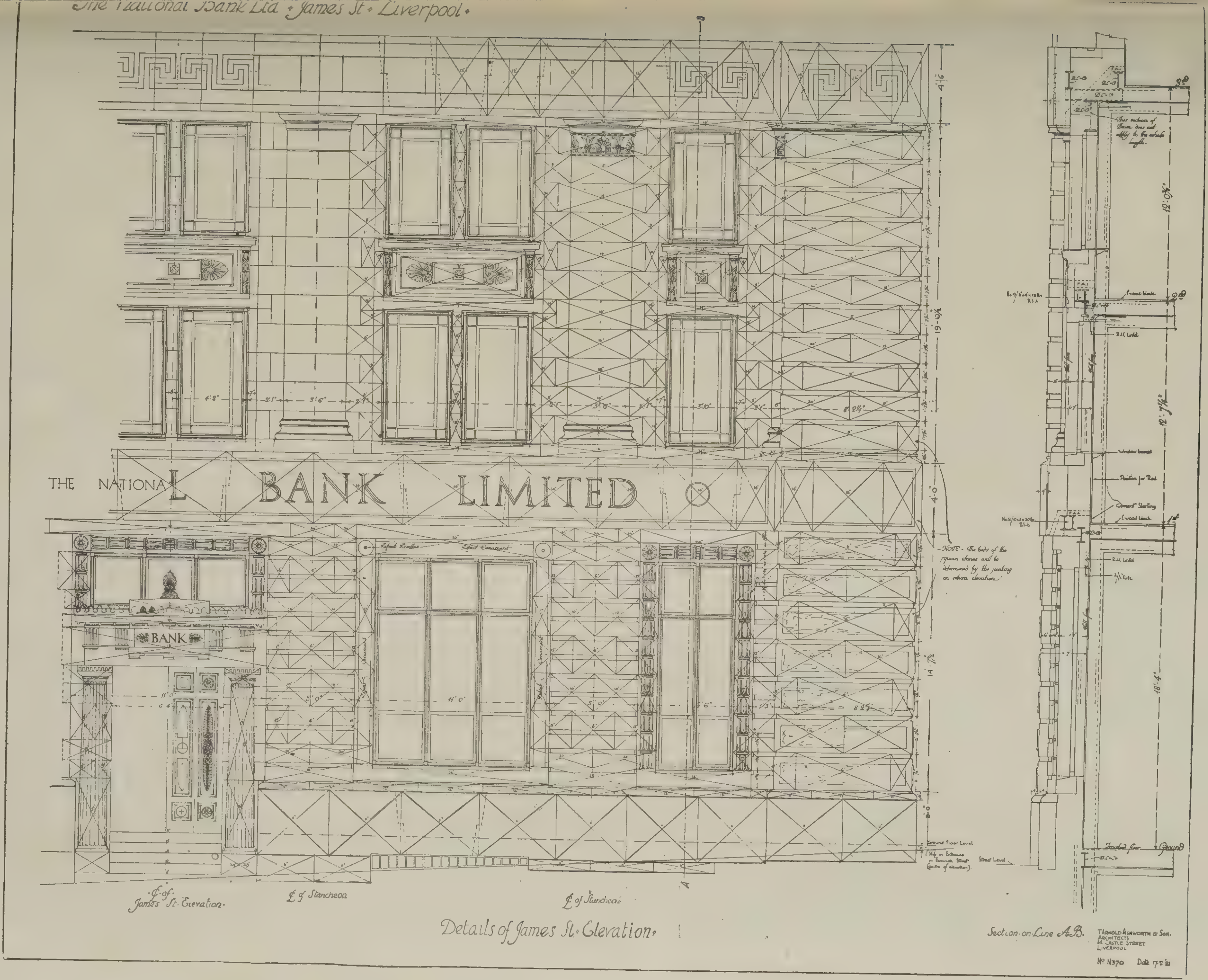
THE NATIONAL BANK, LIVERPOOL.

T. ARNOLD ASHWORTH AND SON, ARCHITECTS.

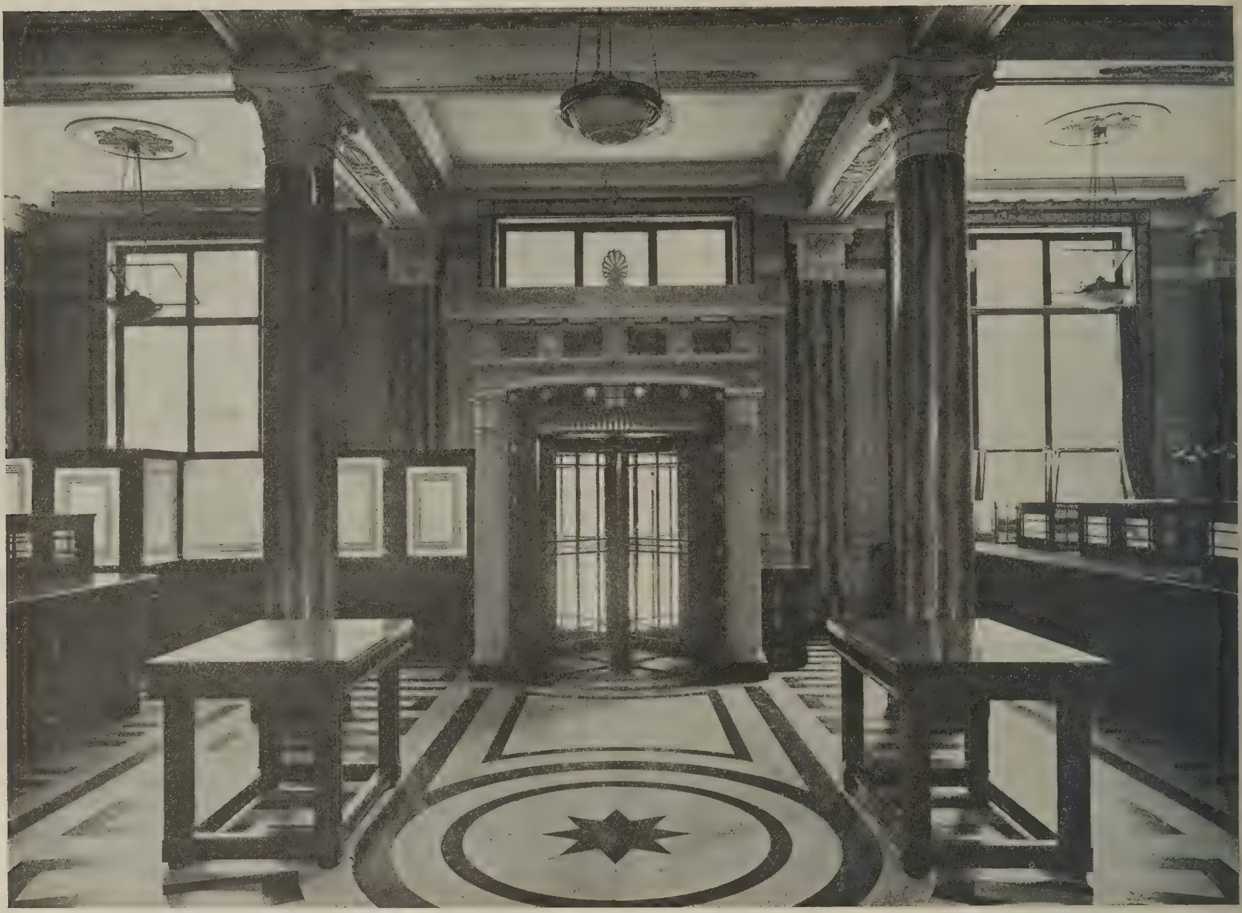
Architects' Working Drawings. 67.—The National Bank, Liverpool: Details of James St. Facade

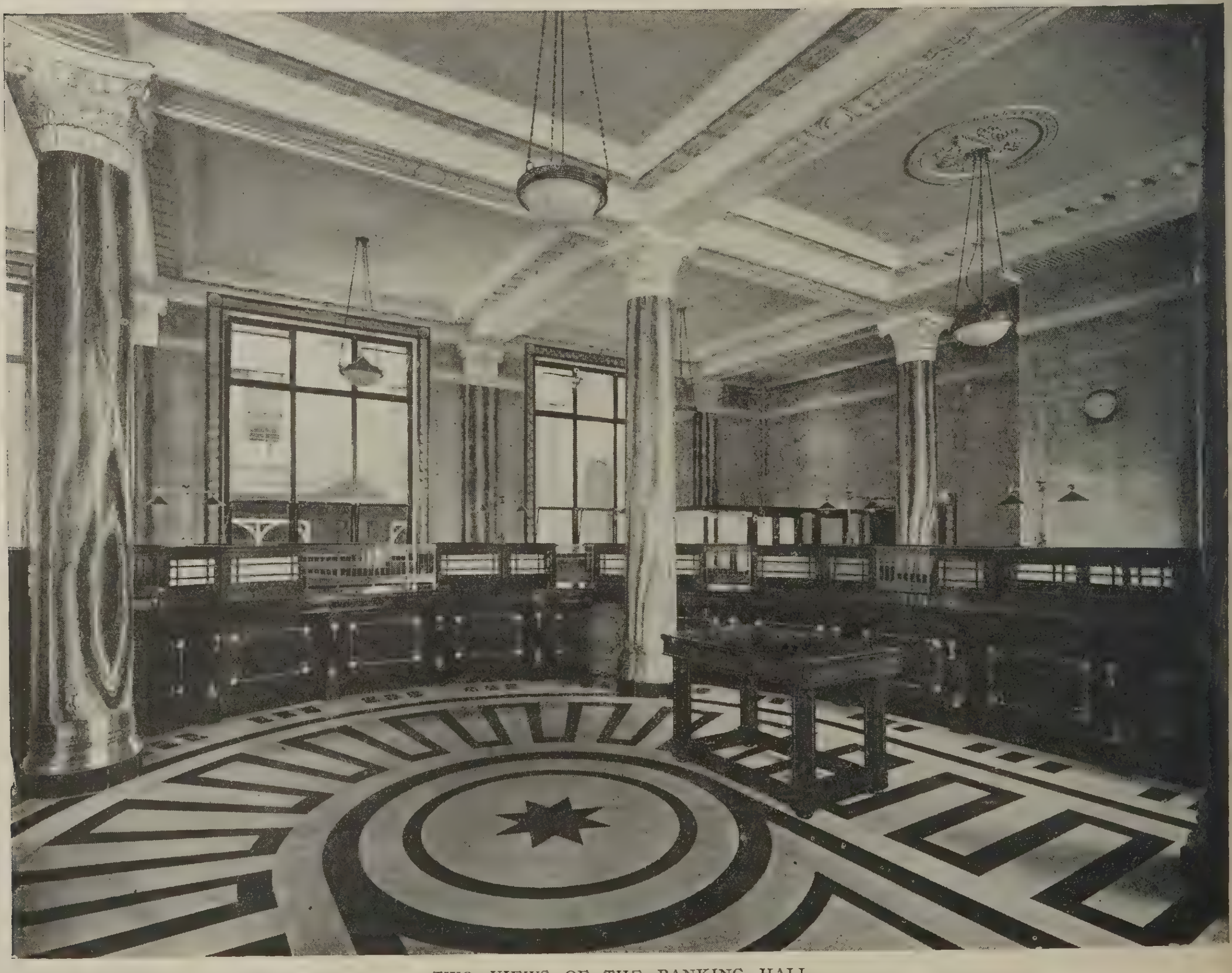
T. Arnold Ashworth and Son, Architects




The National Bank Ltd • James St • Liverpool •
THE NATIONAL BANK LIMITED
BANK
NOTE - The beds of the rusticated stones will be determined by the jointing on return elevation
Ground Floor Level
Step in Entrance on Fenwick Street (centre of elevation).
Street Level
℄ of James St. Elevation.
℄ of Stancheon
℄ of Stanchions
Details of James St. Elevation.
This section of Beam does not apply to the whole length.
No 9/8"x4"x18lbs R.S.J.
Wood block
R.C. Lintol
Window board
Position for Rod
Cement Skirting
No 2/10"x5"x30lbs R.S.J.
2/½" Rods
Finished floor
Ground
3rd
2nd
1st
19'-0¼"
12'-7½"
18'-4"
4'-6"
19'-0¾"
4'-0"
14'-7½"
Section on Line A.B.
T. ARNOLD ASHWORTH & SON.
ARCHITECTS
14 CASTLE STREET
LIVERPOOL
No N370 Date 17.5.'21

Above are details of half the main front from the ground to the seventh-floor level. An exterior view of the bank appears on page 283.



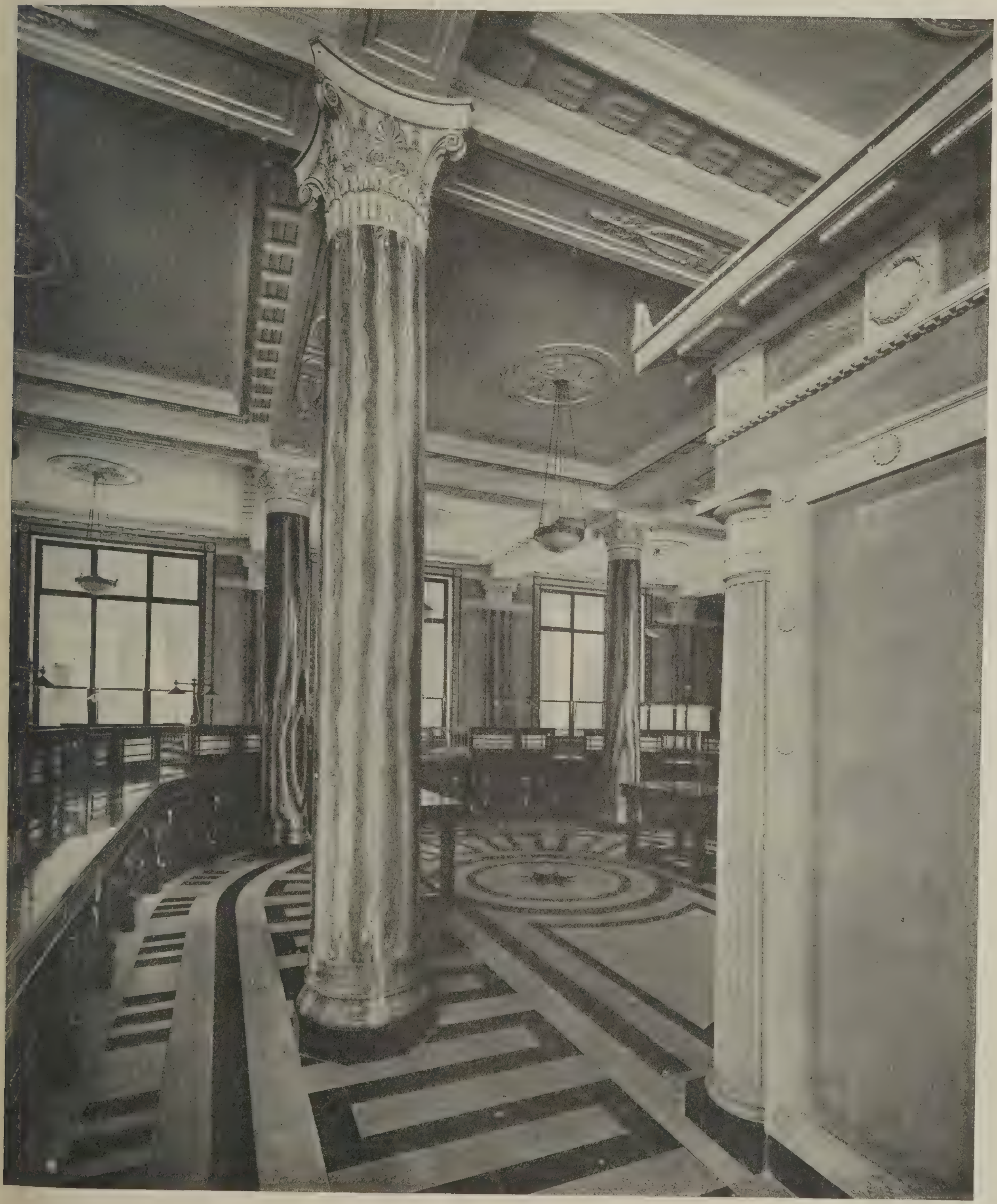


TWO VIEWS OF THE BANKING HALL.

THE NATIONAL BANK, LIVERPOOL. T. ARNOLD ASHWORTH AND SON, ARCHITECTS.

Current Architecture. 189.—The National Bank, Liverpool: A View in the Banking Hall

T. Arnold Ashworth and Son, Architects

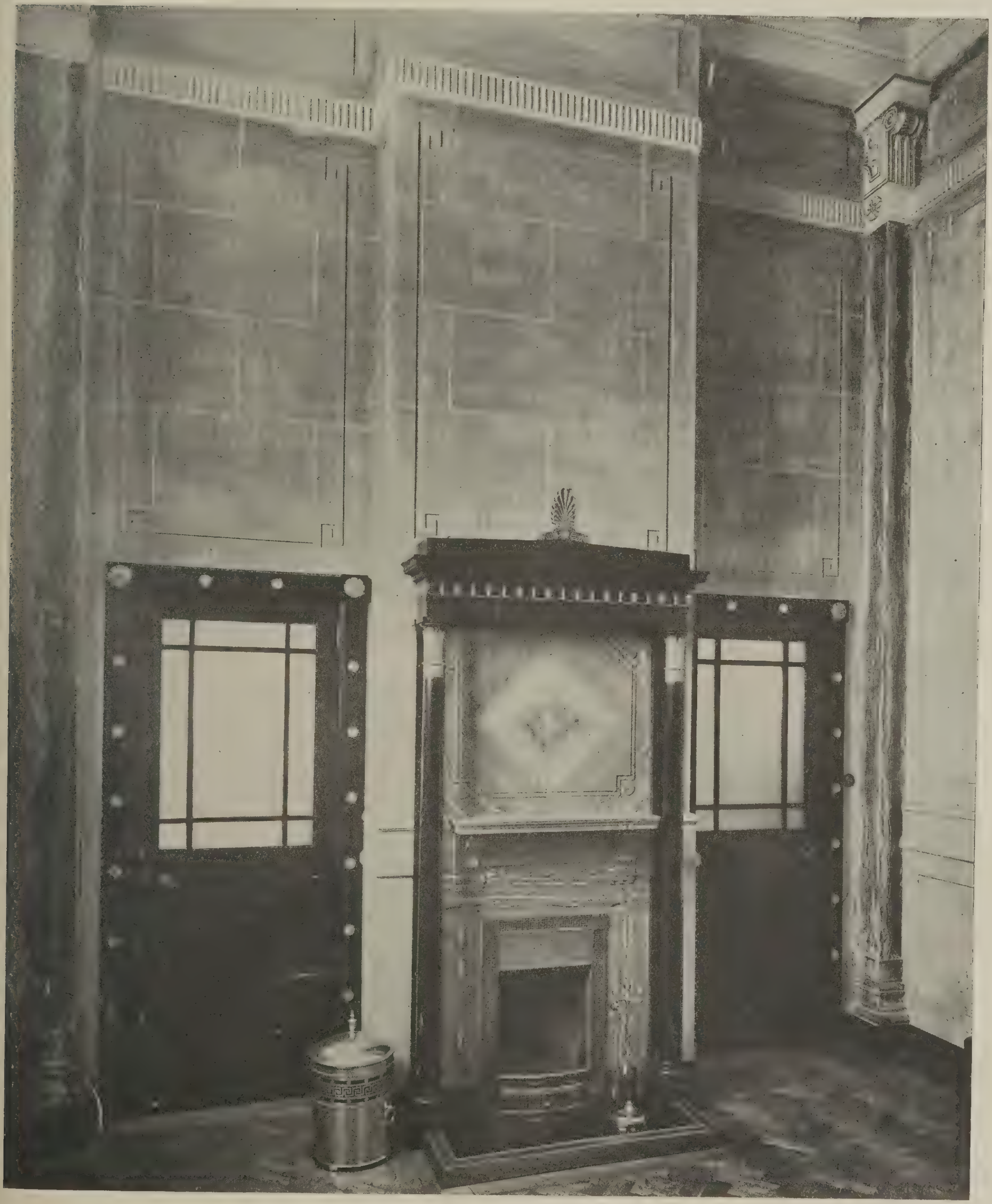


For the public space and the counter of the banking hall a semi-circular plan was adopted. The materials selected for the decoration combine in giving an effect of rich though restful colouring.

THE LIBRARY
OF THE
UNIVERSITY OF ILLINOIS

Current Architecture. 190.—The National Bank, Liverpool: Fireplace in the Manager's Room

T. Arnold Ashworth and Son, Architects



The manager's room directly adjoins the banking hall, and like it has walls of Hopton Wood stone and "stuc," with the frieze and cornice in fibrous plaster.

THE LIBRARY
OF THE
UNIVERSITY OF ILLINOIS

re that the steel centerings can be re-used many times ver, that useless floor weight is completely eliminated, and hat it ensures a considerable saving in labour and aterials.

The general contractors were Messrs. William Moss and ons, Ltd., the sub-contractors being as follows :—

Dorman, Long & Co., Ltd. (steelwork); Chatwood Safe o., Ltd. (bank security); Richard Crittall & Co., Ltd. eating, ventilating, and smoke-extraction plant); Gerrard and Sons (1920), Ltd. (reinforced concrete floors nd staircases); John Tanner and Son (general plaster ork and main contractors for bank decorations including brous plaster in banking hall); Craven, Dunnill & Co., Ltd. iling); The Art Pavements and Decorations, Ltd. (terrazzo aircases and landings, and marble divisions to lavatories); . A. Clark, Ltd. (grates); William Moss and Sons, Ltd. ood-block paving); Boothroyd Repairs, Ltd. (electric ghting); Walter Macfarlane & Co. (cast-iron window ames, cast-iron staircase balustrades, cast-iron balcony balustrades); The Carron Co. (cast-iron ornaments over entrance, cast-iron entrance gates); Ockleston and Drayton Johnson, Ltd. (steel sashes); Aird and Anderson, Ltd. (lightning conductors); Martyn & Co., Ltd. (stone carving); Edward O. Griffiths (carving on bank entrance doors); Musgraves (Liverpool), Ltd., F. E. Pescod (sanitary goods); Geo. Lowe and Sons (general ironwork); Quiggin Bros., Ltd., James Gibbons, Ltd. (locks and furniture); J. S. Nicholls, Ltd. (glazing); The Express Lift Co., Ltd. (passenger elevators and bullion and book hoist); Bellman, Ivey and Carter (Scagliola columns and pilasters—the columns and pilasters are in Cippolino Scagliola marble, the marble surrounding the steel stanchions showing no joint); T. B. Colman and Sons, Ltd. (revolving doors); John Stubbs and Son (marble, Hopton Wood stone and flooring in banking hall); Trollope and Colls, Ltd. (main contractors for bank fitting); Simplex Conduits, Ltd. (electric light fittings); James Gibbons, Ltd. (grilles, etc., to bank); British Reinforced Concrete Engineering Co., Manchester (B.R.C. fabric).

xhibition of Students' Work at the A.A.

THE long vacation being upon all the schools, the A.A. has taken advantage of the room made available to placard the walls of its central gallery and of some of the studios with the work done uring the last year, and a right brave show it makes. horoughness and the insight it affords of latent strength nd talent characterize it.

The work of the first year contains examples of studies Roman Doric, Corinthian, and Greek Doric. In the ormer, Mr. L. L. Brown, and in the latter, Mr. W. Trubnawe, give proofs of accuracy and refinement of presentaon. The study of shadows and the "Colour Experiments" e also noticeable. The "Outdoor Tone Studies," in onotone, in which students record their own impression in chastened and direct manner, seem a very sound way to rengthen their nascent power of selection. It is at this age that the students are put through the usual tests garding lettering—a not inconsiderable help towards quiring a sense of proportion and refinement—and the ottoes chosen, well drawn in Roman capitals, are a jolly dication of the kind of belligerent romanticism which it still their privilege to nurse : "To build, that is the noblest t of all arts"—"L'ombre mesure ici le temps qui finit mme elle"—though one of them evidently entertains rking doubts with his remark that "Architects are not t in their niche"! Is it possible that one can be so young d already so well-informed ?

The second year carries on the good work with studies lpably more critical. Here one feels the master's mind loting the students through all the attendant difficulties classical composition and imparting to it the confidence rn of sureness. These studies centre round Roman otifs (there is an attractive drawing by Mr. D. A. John), d motifs of the Italian Renaissance in colour. Great ftness is shown, but students, at this stage, should guard ainst the alluring results which the methods employed mulate with so much ease. The Gothic studies are markably good. I do not think that any other school n approach the standard displayed in the design, detail-, and draughtsmanship shown. The 1 in. details of ulting to a memorial chapel have a technical excellence hich anyone who has worked out the Gothic system of vaulting will appreciate. "Pompeian Colour Studies" e also displayed. It seems as though the experience ined during the last few years is yielding more grateful its; the studies are more thorough, the colouring bolder; ood sign. And now the student is told to go unaided; has to face his very first design. A sketch for a "Greek hibition Building" will help to epitomize the knowledge far acquired. Mr. Beaty-Pownall and Mr. J. G. Birkett ve sent in some very nice drawings.

The third year are by now fighting all the way with design and construction. The thing is getting more serious, and such considerable trifles as the articulations of a building are tackled in earnestness. A "Pump-room" (with an excellent design by Mr. Leonard Young), a "House and Studio for a Sculptor" (which has given Mr. E. Walmsley Lewis a chance to show his ability), a "Modern Church," a sketch for "a Week-end Bungalow" (made the most of by Miss Doris Lewis), a "Town Hall" (with an excellent scheme by Mr. A. E. Cameron), a "Concert Hall and Restaurant at the Seaside," whose intricacies have been well mastered by Mr. F. R. Green and Mr. F. W. Wood, give an idea of the range covered by third-year students who, in order to fortify their sense of design, are further given twelve-hour sketch designs, such as a "Bandstand" (I noticed a bold affair by Mr. Bennett), or a "Design in Colour for a Throne" (made the most of by Mr. Musgrave). Some of these designs have been detailed by their authors, who exhibit an adequate grasp of their constructional difficulties.

The fourth and fifth years seem to develop a hearty appetite for strong food. Their digestive system, however, is evidently equal to the task imposed upon it, if one may judge by the drawings hung up in the upper studio. The range of subjects widens yet more : "A Repertory Theatre," an "Open-air Bath Establishment," a "Town House," a "Country House," thoroughly worked out from preliminary sketches to ½ in. details, a "Council Chamber," with additional 1 in. details of steelwork, are surely proofs of the healthy and guarded eclecticism needed at this stage, and which has given Messrs. Leo. Williams, E. W. Shannon, C. G. Hyslop, L. R. Hyscock, R. E. Enthoven, the Hon. H. Pakington, and Miss E. Meickle opportunities to display their undoubted talent and industry. Quick-sketch designs are still flung at them, and this further food is still eagerly snapped up (witness the drawings of a "Lift Tower" and others). Town planning is not neglected. The ingenious use made of the ordnance map as data has given Miss I. M. Chambers and Mr. T. C. Shepperd, among others, a good basis on which to spread their grand ideas for a "British Empire Exhibition laid out in Hyde Park."

Lastly, the designs for this year's Prix de Rome, submitted by four students of the A.A., are on view in the central gallery, and they make an impressive show. As they will form part of a general exhibition, to be probably held later in the year, of all the designs submitted for this important competition, it may be better to reserve a criticism of them until then. But whatever the merits of other designs, these will not, these cannot diminish the intrinsic value of the four designs just alluded to. Taking them on a whole, they are a distinct credit to the teaching so assiduously and ably given in this particular metropolitan school.

G. H.

Experiments in Cottage Building.—3

By WALTER R. JAGGARD, F.R.I.B.A.

IN the previous articles of this series some information relative to the various methods of earth walling has been abstracted from the report[*] upon the experimental work carried out at Amesbury in 1920, and although, possibly, these types of walling represent the most interesting series of the experiments, they were by no means the only ones, and, as previously indicated, the experimental work extended to floors and roofs and to various fittings.

In the case of ground floors, the comparative costs largely confirmed expectations, as the following table will show, using No. 1 as a basic unit cost of 10.

No.	Materials and Construction.	Unit Cost.
1	4 in. thick concrete, with floated surface on chalk	10.0
2	Red paving bricks laid flat in 2 to 1 lime mortar on chalk	10.29
3	9 in. by 9 in. red quarry tiles on $1\frac{1}{2}$ in. of 8 to 1 concrete	10.67
4	Victoria stone slabs bedded on sand ..	11.56
5	1 in. T. and G. flooring on 1 in. by $\frac{3}{4}$ in. battens at 18 in. centres, bedded on a 2 in. layer of tar paving on chalk	15.1
6	1 in. T. and G. flooring on 4 in. by 2 in. joists at 16 in. centres with 4 in. by 2 in. wall plates	13.3
7	$1\frac{1}{4}$ in. T. and G. flooring on 3 in. by $2\frac{1}{2}$ in. fillets at 18 in. centres on chalk filling with 2 in. of 8 to 1 concrete between fillets	20.39

The upper floors of Cottages Nos. 14 and 12 were formed of concrete. They were both designed to carry a super load of 70 lb. per ft. super, which is, perhaps, slightly in excess of the normal requirements of such cottages. In the original design for the floor of No. 14 the centre portions of the panels were to be reduced to 2 in. thick, thus lightening the weight of the floor. The main object aimed at was the elimination, as far as possible, of temporary centering, and the method by which this was to be accomplished is explained by the sketch on the opposite page, which shows the work just before placing the concrete. Unfortunately, it was not found possible to obtain the short lengths of "Hy-rib" with sufficient despatch, and the floor was modified to the more normal construction shown in the same sketch. The beams are 8 in. by 5 in. reinforced with three $\frac{3}{4}$ in. steel rods and $\frac{1}{4}$ in. vertical stirrups, and the floor slabs, about 5 ft. 3 in. span, are $2\frac{1}{2}$ in. thick, and are placed upon "Hy-rib" reinforcement, the underside of which was afterwards plastered. The floor rests upon the inner thickness of the external cavity walls, and serves to stiffen these. The upper surface was floated, and a 2 ft. wide linoleum border was cemented down flush with the surface in the three bedrooms and on the landing.

The principal features of the upper floor of Cottage No. 12 were the precast T-beams and the precast slab panel fillings, supported by precast rebated ribs, which covered the joints. The whole of the floor was thus laid dry, with the exception of a floating coat. By forming the T-beams (see drawing on facing page) a rebate was obtained in which to rest the slabs, and the dimensions of the upper portion were such as to develop the compressive strength of the concrete to its full extent; this is an obvious improvement on the less efficient rectangular type. "Exmet" lathing and 3 in. mesh expanded metal were used for reinforcement, and the units were all precast, of one part Por land cement, one part of sand, and four parts of clea granite chippings. Strips of 3 in. mesh galvanized wi netting were laid along the tops of the beams and acro the ribs, and the upper surface was finished with a 1 i layer of fine concrete and floated.

In Cottage No. 10 the floor over the living-room and pa lour was of special construction, and though of sma scantlings, was both cheap and rigid. All the joints we such as could be cut with a saw, and the amount of labo was kept low by simplicity of construction. From the a companying illustration it will be seen that the floor consis of built-up deal binders of 12 ft. span, and spaced abo 5 ft. centres, 3 in. by 3 in. joists, and $1\frac{1}{4}$ in. T. and G. floo ing. It was constructed by nailing 2 in. by 1 in. fillets the 9 in. by $1\frac{1}{2}$ in. binder sides, which were then lifted in position on the walls. The joists were cut to lengths, plac upon the fillets and nailed to their respective binder sid with $3\frac{1}{2}$ in. cut nails driven straight through these sides. T lower 3 in. by 2 in. member of the binder was placed position, and nailed through the binder sides with simil nails at 9 in. centres. Four vertical blocks, out of 3 in. 2 in. stuff, were then nailed between the sides, two near t ends and the other two equally spaced in the length. complete the binder the upper 3 in. by 2 in. member w nailed through the binder sides, between the joists, and t floor was covered with $1\frac{1}{4}$ in. T. and G. flooring boards, t binder ends resting upon 18 in. by 7 in. by 3 in. wo templates. No plaster is used, and all the timbers a exposed and treated with two coats of "Peterlineum."

Another special type of wood floor was used over t living-room in cottage No. 4 Ratfyn. The span is 12 f and the purpose of the floor is to economize in joists by util ing the double boards in such a way as to form a series of girders. A cross section through the boards would appear at A (see opposite page), thus forming, in effect, a series wood girders, as shown at B. The 7 in. by 3 in. bridgi joists were spaced at 3 ft. 8 in. centres, $4\frac{1}{2}$ in. by 1 in. fill were nailed on each side, $1\frac{7}{8}$ in. from the top, and $\frac{7}{8}$ in. and G. boards, cut to an accurate length of 3 ft. $5\frac{1}{2}$ in. w nailed to the upper edges of these fillets. Upon these, a parallel to the length of the boards, were nailed 2 in. 1 in. slating battens, spaced at 12 in. centres, and wi short cross battens, cut to fit between them, in the cen of the span. All these battens finish flush with the top the joists, and the floor was laid with $1\frac{1}{4}$ in. T. and G. flo ing boards in long lengths. An added attraction lay in t fact that no plastering was required, the bottom layer boards providing a suitable finish to the ceiling. All t woodwork was treated with creosote before and af fixing.

Some experiments were carried out with solid and herri bone strutting. In one case a strand of hoop-iron w placed below the solid strutting between $4\frac{1}{2}$ in. by 2 joists; in another, two such strands were used, the low one carried right across the floor, under the strutting a below the 7 in. by 2 in. joists, while the other was bent between the third and fourth joists, and carried to the e joist, to which both pieces of hoop-iron were nailed. Init tension was then produced by pulling the end ba together and securing with wire, and the idea proved m effective. In still another instance the tensional pieces the herringbone strutting to 9 in. by $1\frac{1}{2}$ in. floor joists w replaced with pieces of 14 S.W.G. hoop-iron, bent over a under each joist and clout nailed. This work was intend to demonstrate the advantage of introducing some sim form of tension member into the strutting, which, by effective development of the compressive strength of wood strutting, produced what was, in effect, a second beam, crossing the line of the bridging joists. Prelimina experiments on portions of floors had demonstrated the advantages arising out of the use of such tension members.

---

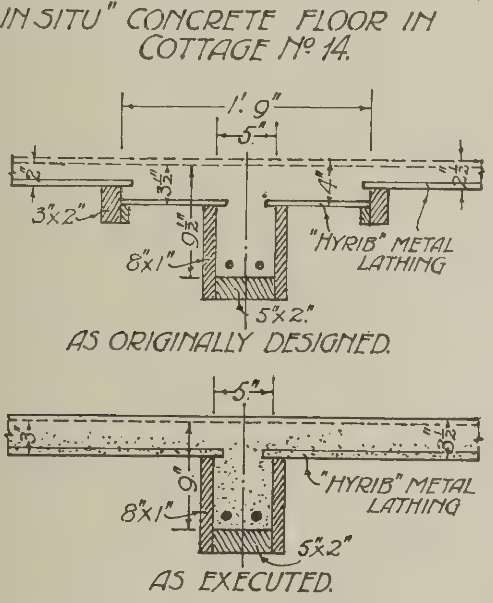
[*] "Experimental Cottages." A report on the work of the Department of Scientific and Industrial Research, at Amesbury, Wiltshire, by W. R. Jaggard, F.R.I.B.A. H.M. Stationery Office. 5s. net.

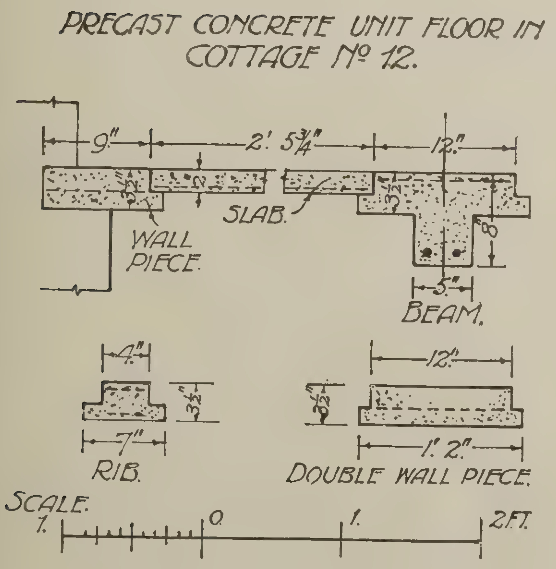
The comparison of floor costs gave the following figures :

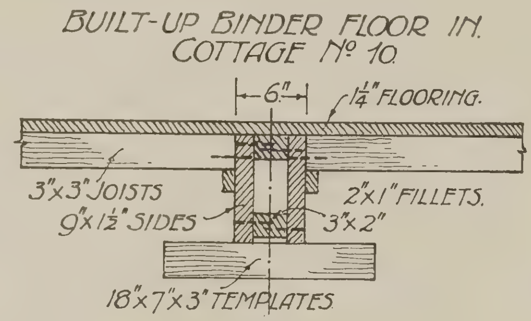
Description.	Unit Cost.
Wood floor with 9 in. by 1½ in. joists, with 1 in. T. and G. flooring at Cottage No. 5 Ratfyn	10.0
Wood floor with built-up binders at No. 10.	7.33
Wood floor with 7 in. by 3 in. joists and double boarding at No. 4 Ratfyn ..	9.33
Concrete floor in situ at No. 14	13.18
Concrete floor with precast units at No. 12	18.01

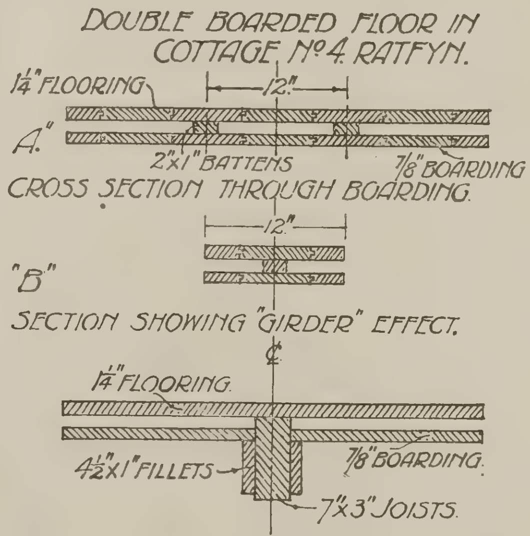
Some experimental work was also carried out in connection with the roofs of the cottages. At No. 12 the roof consists of a reinforced concrete slab, slightly pitched in two directions, and supported upon precast reinforced concrete trusses. These latter are in two halves, to facilitate handling and utilize the centre wall of the cottage, and were each about 13 ft. long by 1 ft. 9 in. high and 2 in. thick, and were reinforced with one ⅝ in. circular steel rod and expanded metal, which was allowed to project beyond the top edge, and was then wired to the "Hy-rib" reinforcement of the 2 in. concrete roof slab, the concrete being placed without centering. Owing to the failure to lay a portion of the parapet at the same time as the roof slab, some slight leaks have developed at the eaves, and this roof has been asphalted, but even with this addition to the cost, this is undoubtedly a cheap form of roof.

At Cottage No. 10 an ordinary type purlin roof, without rafters, was used. The 6 in. by 2 in. purlins were spaced at about 2 ft. 3 in. centres, and supported at the centre of their span upon a simple sandwich roof truss, built up from 6 in. by 1 in. flooring boards. The roof was covered with pantiles.

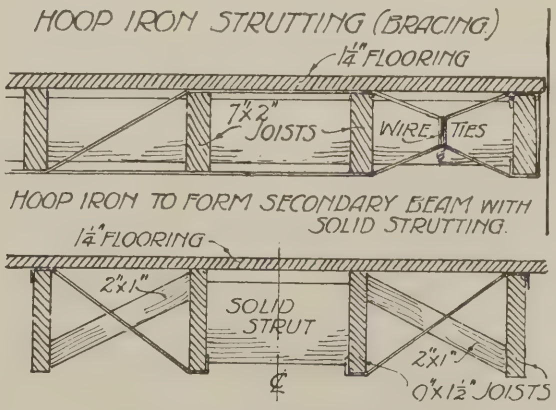






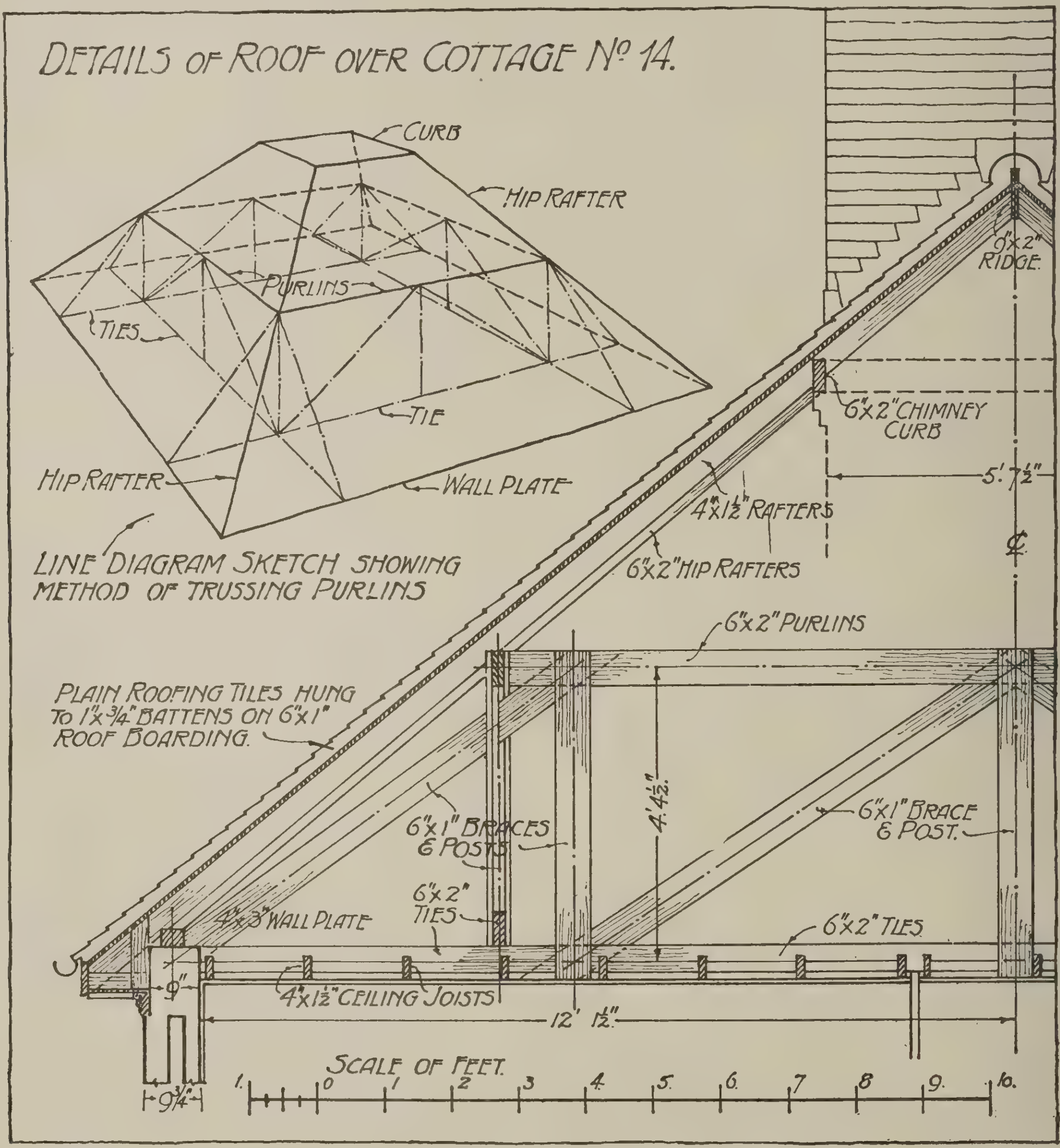

DOUBLE BOARDED FLOOR IN COTTAGE Nº 4 RATFYN.
1¼" FLOORING
12"
"A"
2"x1" BATTENS
⅞" BOARDING
CROSS SECTION THROUGH BOARDING.
12"
"B"
SECTION SHOWING "GIRDER" EFFECT.
1¼" FLOORING.
4½"x1" FILLETS
⅞" BOARDING.
7"x3" JOISTS.

SECTION THROUGH BRIDGING JOIST AND BOARDING.


HOOP IRON STRUTTING (BRACING)
1¼" FLOORING
7"x2" JOISTS
WIRE TIES
HOOP IRON TO FORM SECONDARY BEAM WITH SOLID STRUTTING.
1¼" FLOORING
2"x1"
SOLID STRUT
2"x1"
9"x1½" JOISTS

HOOP-IRON TO TAKE TENSION IN HERRING-BONE STRUTTING.

The roof of Cottage No. 4 Ratfyn was an application of the method adopted for the upper floor of the cottage. A 9 in. by 2 in. ridge piece, and 7 in. by 3 in. purlins, spaced at 3 ft. 8½ in. centres, with 4 in. by 3 in. wall plates formed the main framing of the roof; 2 in. by 1 in. wood fillets were nailed to the sides of the purlins to receive ¾ in. rough boarding and 1 in. by ¾ in. vertical and cross battens, finishing flush with the tops of the purlins. The roof surface was covered with ¾ in. boarding, and through delay in delivery of the large red Roman tiles, was also covered temporarily with roofing felt. Rather than scrap this felt by its removal it was left on the roof, but it should be noted that it could have been omitted, with a consequent reduction in the total cost. The double layer of boards with an air-space between forms a very efficient heat insulating roof. All the woodwork of the roof, whether hidden or exposed, was treated with creosote.

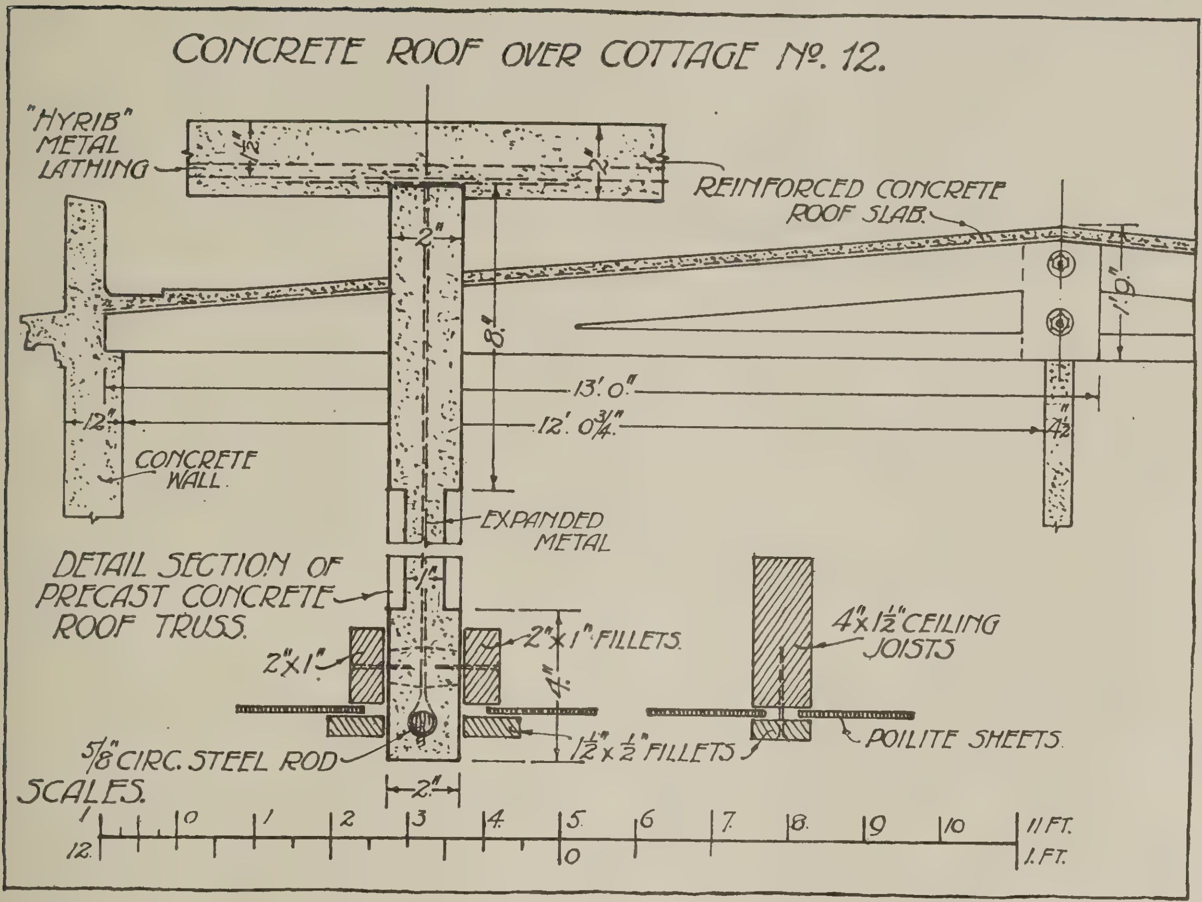


Cottage No. 14.—Plain reddish-brown sand-faced tiles were used for this roof, which was hipped at each angle. The main framing consists of 4 in. by 3 in. wall plates, 6 in. by 2 in. curb around the central chimney-stack, and 6 in. by 2 in. hip rafters, which were supported at their centres upon 6 in. by 2 in. purlins, and form the upper member of four sandwich braced trusses, which were arranged to interlock with each other, and also served to support the 4 in. by 1½ in. ceiling joists. The roof was thus made up of an upper curb, the wall plates and a series of four trussed purlins, as shown in the above perspective sketch. The bottom members of the trussed purlins formed a support for the ceiling, and the whole roof was constructed in light scantlings nailed together. The result was a strong roof, the cost of which could undoubtedly be still further reduced after experience in such a form of construction. The rafters were 4 in. by 1½ in. at 1 ft. 6 in. centres, and were covered with 1 in. close-jointed boarding. Small gables with feather-edged elm boarding form an effective mode of covering the upper curb, while avoiding the necessity for carrying up the hip rafters. The eaves were finished with a 1¼ in. fascia board, ⅝ in. soffit boarding, 4½ in. by 1½ in. plate, and small hollow mould, with short pieces of 6 in. by 1 in. floor board nailed to the soffit, about 12 in. apart.

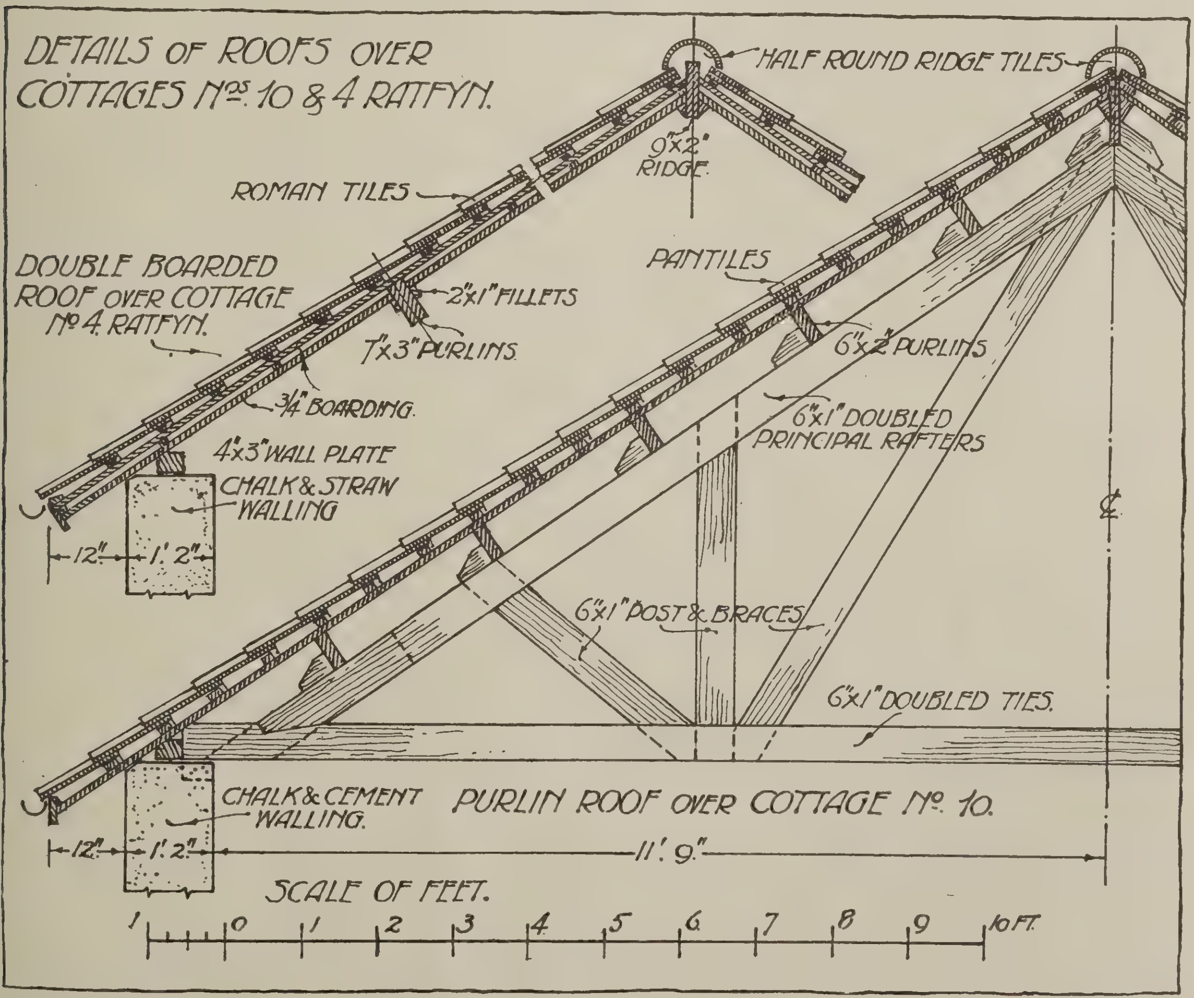
An ordinary rafter roof was used on Cottage No. 5 Ratfyn, and calls for no special comment, beyond the fact that the rafters are 4 in. by 2 in., at about 2 ft. centres, and that the roof was covered with multi-coloured rough-texture slates nailed direct to the boarding.

The comparison of costs gave the following figures :—

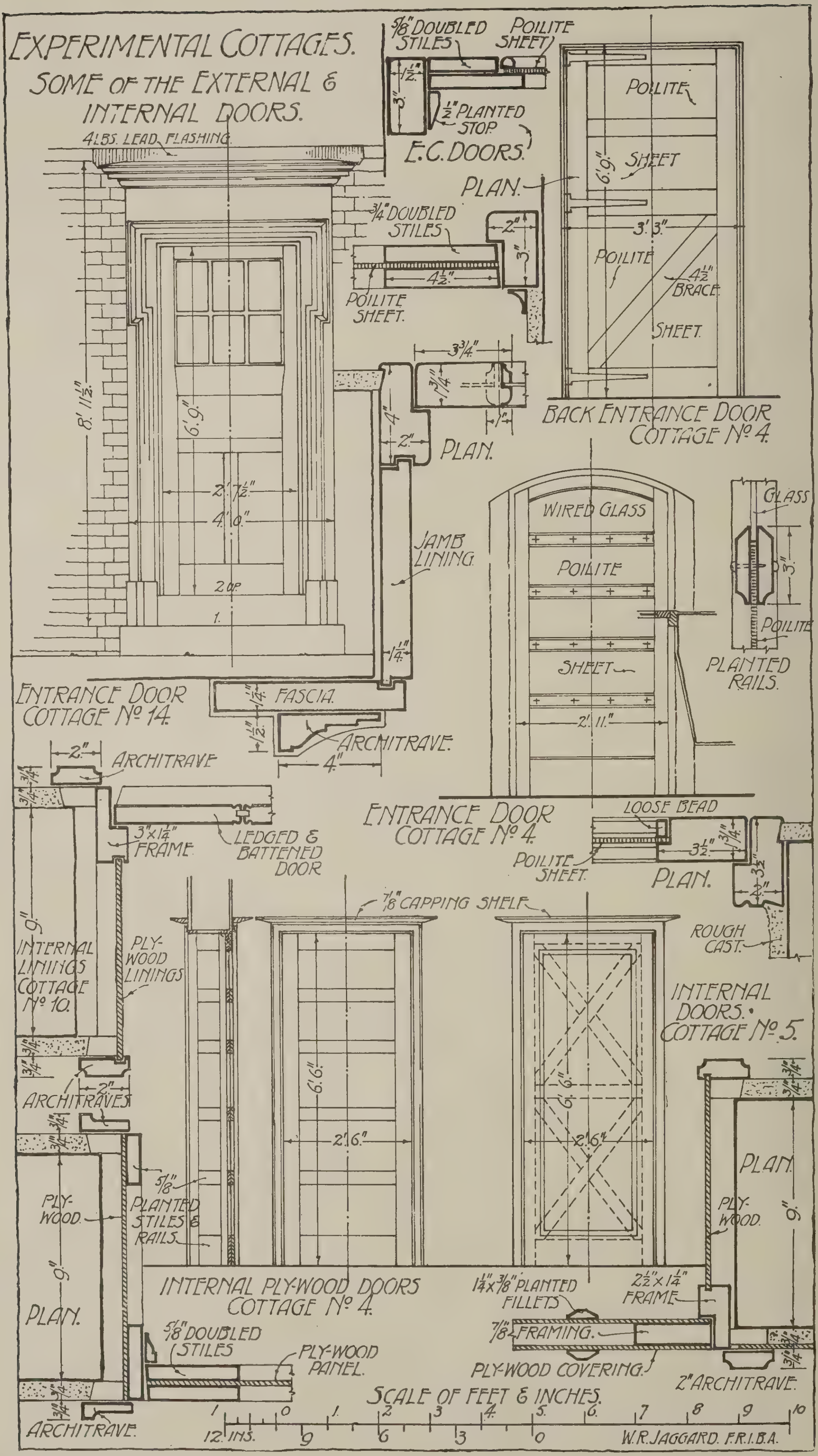
Description.	Unit Cost.
Ordinary rafter roof with plain tiles ..	10.0
Rafter roof with slates. No. 5	12.92
Purlin roof with pantiles. No. 10 ..	9.66
Purlin roof with double boarding and Roman tiles. No. 4	11.76
Hipped roof with trussed purlins and plain tiles. No. 14	12.26
Concrete roof with precast concrete trusses. No. 12	7.23

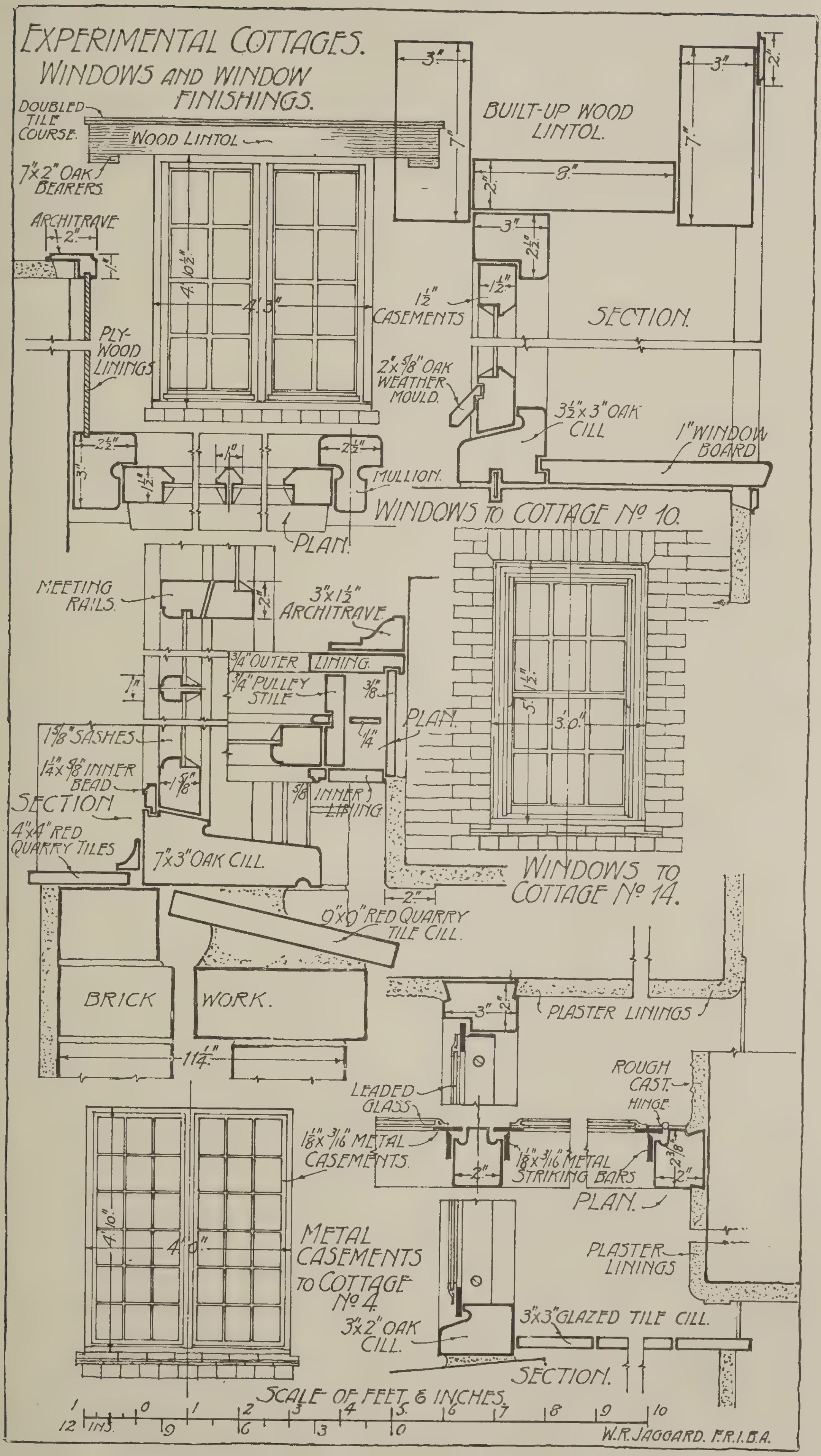


CONCRETE ROOF OVER COTTAGE No. 12.



DETAILS OF ROOFS OVER COTTAGES Nos. 10 & 4 RATFYN.

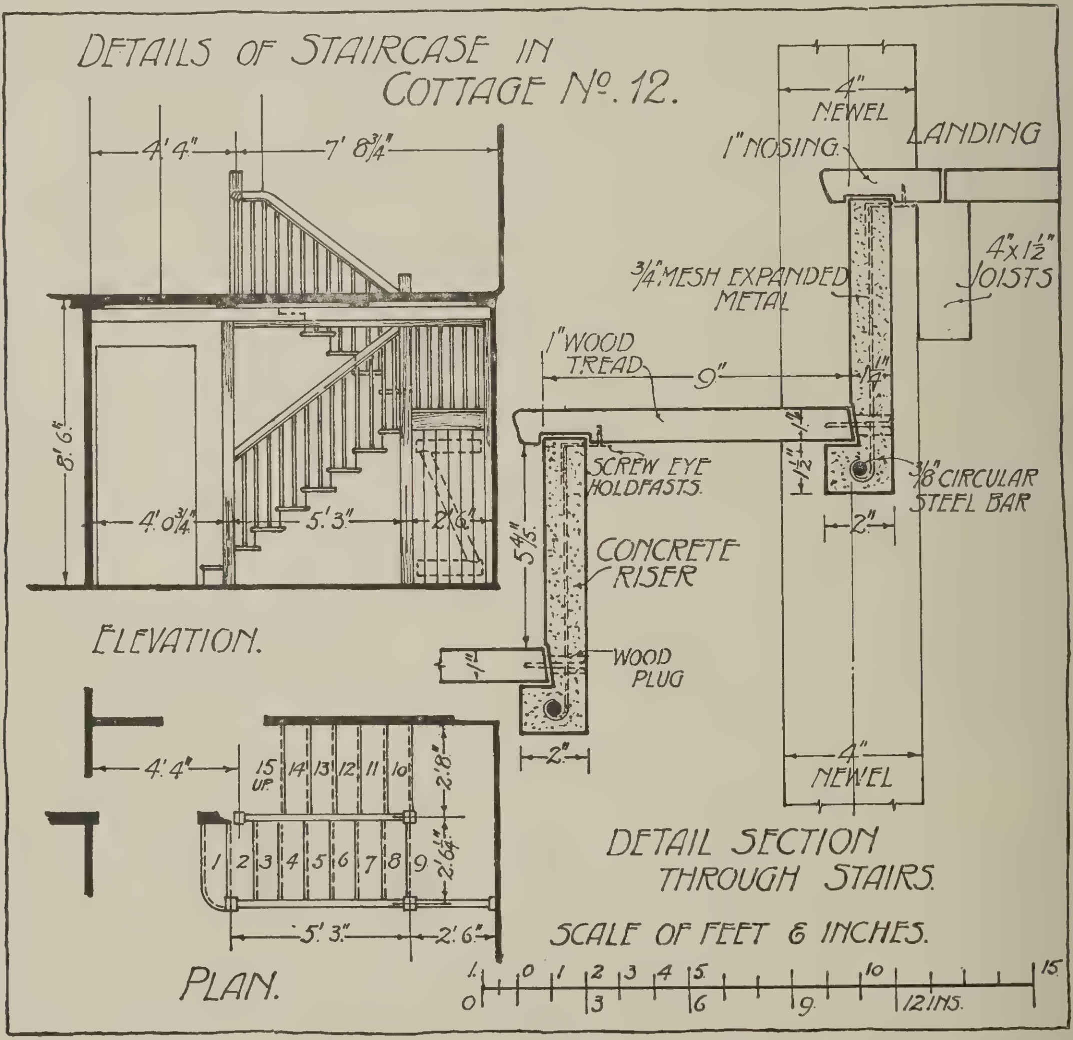

EXPERIMENTAL COTTAGES.
SOME OF THE EXTERNAL & INTERNAL DOORS.
4LBS. LEAD FLASHING.
8' 11½"
6'.9"
2'.7½"
4'.0"
2 or.
1.
ENTRANCE DOOR COTTAGE No 14.
⅝" DOUBLED STILES
POILITE SHEET
1½"
3"
½" PLANTED STOP
E.C. DOORS.
PLAN.
¾" DOUBLED STILES
2"
3"
4½"
POILITE SHEET.
3¾"
1¾"
1"
4"
2"
PLAN.
JAMB LINING.
1¼"
¼"
FASCIA.
1½"
ARCHITRAVE.
4"
POILITE
6'.9"
SHEET
3'.3"
POILITE
4½" BRACE
SHEET.
BACK ENTRANCE DOOR COTTAGE No 4.
WIRED GLASS
POILITE
SHEET
2'.11"
GLASS
3"
POILITE
PLANTED RAILS.
ENTRANCE DOOR COTTAGE No 4.
LOOSE BEAD
POILITE SHEET.
3½"
1¾"
3½"
2"
PLAN.
ROUGH CAST.
2"
ARCHITRAVE
¾"
¾"
3"×1¼" FRAME
LEDGED & BATTENED DOOR
9"
INTERNAL LININGS COTTAGE No 10.
PLY-WOOD LININGS
¾"
¾"
2"
ARCHITRAVES
¾"
¾"
⅞" CAPPING SHELF
6'.6"
2'.6"
6'.6"
2'.6"
INTERNAL DOORS. COTTAGE No 5.
¾"
¾"
PLAN.
PLY-WOOD.
9"
PLY-WOOD.
⅝"
PLANTED STILES & RAILS.
9"
PLAN.
INTERNAL PLY-WOOD DOORS COTTAGE No 4.
⅝" DOUBLED STILES
PLY-WOOD PANEL.
1¼"×⅜" PLANTED FILLETS
2½"×1¼" FRAME
⅞" FRAMING.
PLY-WOOD COVERING.
2" ARCHITRAVE.
¾"
¾"
¾"
¾"
ARCHITRAVE.
SCALE OF FEET & INCHES.
12 INS. 9 6 3 0 1 2 3 4 5 6 7 8 9 10
W.R. JAGGARD. F.R.I.B.A.


EXPERIMENTAL COTTAGES.
WINDOWS AND WINDOW FINISHINGS.
DOUBLED TILE COURSE.
WOOD LINTOL
7"x2" OAK BEARERS.
ARCHITRAVE
2"
1"
PLY-WOOD LININGS
4' 10½"
4' 3"
3"
7"
2"
8"
BUILT-UP WOOD LINTOL.
2½"
1½"
1½" CASEMENTS
SECTION.
2"x 5/8" OAK WEATHER MOULD.
3½"x 3" OAK CILL
1" WINDOW BOARD
2½"
1½"
MULLION.
PLAN.
WINDOWS TO COTTAGE Nº 10.
MEETING RAILS.
3"x1½" ARCHITRAVE
3/4" OUTER LINING.
3/4" PULLEY STILE
3/8"
1/4"
PLAN.
1 5/8" SASHES.
1¼"x 5/8" INNER BEAD
1 5/8"
SECTION
4"x4" RED QUARRY TILES
7"x3" OAK CILL.
5/8" INNER LINING
5' 1½"
3' 0"
WINDOWS TO COTTAGE Nº 14.
9"x9" RED QUARRY TILE CILL.
BRICK WORK.
11¼"
PLASTER LININGS
ROUGH CAST.
HINGE
LEADED GLASS
1 1/8"x 3/16" METAL CASEMENTS.
1 1/8"x 3/16" METAL STRIKING BARS
2"
2 3/8"
PLAN.
4' 10"
4' 0"
METAL CASEMENTS TO COTTAGE Nº 4.
PLASTER LININGS
3"x2" OAK CILL.
3"x3" GLAZED TILE CILL.
SECTION.
SCALE OF FEET & INCHES.
12 INS. 9 6 3 0 1 2 3 4 5 6 7 8 9 10
W.R. JAGGARD. F.R.I.B.A.

Fittings.

The external doorway of Cottage No. 14 was finished with eared moulded architraves, mounted upon a fascia board and surmounted with a moulded cornice, the door was $1\frac{3}{4}$ in. thick, with glazed panel, and was hung to a 4 in. by 2 in. door-frame. A somewhat similar door-frame was used for the main entrance of No. 10, and also for No. 12 cottage. The entrance doorway of No. 4 cottage was formed with a single sheet of "Poilite," with $\frac{3}{4}$ in. planted stiles and rails, screwed through from both sides. Other doors were constructed with $\frac{5}{8}$ in. doubled stiles and rails, forming a rebate to receive "Poilite" sheets secured with small beads.

Some of the internal doors were constructed with "Poilite" sheets, beaded into $1\frac{1}{2}$ in. rebated stiles and rails, others were formed with three-ply wood, with $\frac{5}{8}$ in. planted stiles and rails screwed together from both sides, with round-headed screws, but the latter have not proved satisfactory.



Another type consists of a $\frac{7}{8}$ in. thickness framing, with crossover bracing, covered on both sides with "Venesta" board, and hung to $2\frac{1}{2}$ in. by $1\frac{1}{4}$ in. rebated frames, with "Venesta" board linings housed thereto and to the back of the architraves.

Standard "cottage" metal windows, Type V. 6, were used in No. 12 cottage, while solid 3 in. by $2\frac{1}{2}$ in. wood frames, with $1\frac{1}{2}$ in. wood casements were used in Cottages No. 10 and No. 5, the former with three-ply wood linings, and the latter with "Venesta" board linings. Cottage No. 14 was fitted with cased frames and $1\frac{5}{8}$ in. sliding sashes, with external architrave, internal plaster linings, and 4 in. by 4 in. red quarry-tiled window bottom. A traditional form of casement window is used in many of the old cottages, consisting of a rectangular section wood frame, with a plain flat iron casement, with leaded lights, closing against its face. Owing to shrinkage and twisting these are nev very weatherproof, and in Cottage No. 4, window fram were used based upon this traditional type, but by mea of flat metal strips, screwed to underside of head and sides of frame and mullions, a metal-to-metal joint w obtained.

The comparative costs were as follows :—

Description.	Unit Cost.
Solid wood frames and casements. No. 10	10.0
Wood frames and metal casements. No. 4	14.77
Cased frames and sliding sashes. No. 14..	15.9
Standard metal casements. No. 12 ..	10.9

The space for the stairs in these cottages was somewh restricted, but modifications in the plans of Cottag Nos. 12 and 14 enabled a stair to be used without winde The only stair calling for comment here was that of No. This was of dog-legged type, the risers being of prec concrete $1\frac{1}{4}$ in. thick, reinforced with $\frac{3}{4}$ in. mesh expanc metal, bent around a $\frac{3}{8}$ in. circular rod at the botto Provision was made to receive 1 in. deal treads, and risers were built into the concrete block walls as the w proceeded. The idea was quite successful, the concr risers alone were in constant use by the workmen for acc to the upper floor until the treads were placed in position

An asbestos sink and draining-board were fixed in scullery of Cottage No. 12, but proved so fragile that edges had to be protected with concrete; elsewhere ordin glazed earthenware sinks and wooden draining-boards w fitted. Each cottage was provided with an enamel iron bath and closed-in dresser.

Each of the cottages has been the subject of experiments connection with heating and cooking apparatus, and they re fitted in accordance with instructions from Mr. A. H. rker, B.Sc., of University College, London. Their comte explanation is too lengthy to be entered upon here, taken as a whole, the experiments were essentially an rt to compare in practice the relative effects of combina-n of function on the one hand, and separation of function the other. Mr. Barker states that the objects he kept view were to equip the cottages in such a way that ater efficiency would be combined with improved ser- and reduced fuel consumption, and at the same time nake a practical comparison between the effects of the opposite principles of design. Standard fittings were d, except in one case, where a specially designed cooking range was installed, and the results of the experiments in actual use are expected to yield some interesting information.

In conclusion, it should be noted that as to cost, and even comparative costs, all the new types and variations of construction would be done more cheaply and better (*a*) if a number of houses were being built in the same manner, and (*b*) if the workmen had experience with the newer methods; and owing to the conditions under which the work at Amesbury was carried out the experimental value of the work was severely limited. It is hoped, however, that other and fuller opportunities may occur for the further development of such experiments in cottage building.

[*The previous articles in this series appeared in our issues for June* 20 *and July* 25.]

Enquiries Answered

e Editors cordially invite enquiries from readers who require information on architectural, constructional, or legal matters. swers to enquiries are in all cases the work of experts; and while every care is taken to make the replies thoroughly reliable, Editors cannot hold themselves responsible for any inaccuracies that may inadvertently occur. Correspondents whose ficulties involve possible legal proceedings are strongly urged to consult their solicitors before taking action on any advice t may be given. Examination questions cannot be answered. It must be understood that, as a rule, both question and swer will be published in these columns. The name and address of the querist must always be given, not necessarily for publication. Correspondents are requested to be as brief as possible, and to write on one side of the paper only.

Ash from Factory Chimney

. writes: "My client is the owner of a five-story factory, top floor of which is covered with a glazed north light . In the middle of the factory is the chimney stack, the boilers are fed, at times, with large quantities of rwaste, cardboard, etc. When this is done the chimney ch is about 80 ft. high) emits ash to such an extent that ds its way through the roof to a degree which seriously feres with the work carried on in the factory. The htening of the chimney has been suggested, but I gine there must be firms of engineers making appliances eet such cases."

e do not know of any appliance likely to overcome the culty. Perhaps one of our readers can supply the mation.

Preservation of Bricks

rchitect" writes: "My client is desirous of protecting bricks of his house from deterioration by weather. bricks are what I would call 'flaking away,' and are ler than the standard bricks, being 9 in. by 4½ in. by ., and consequently not easily replaced. Is there any rvative to prolong the life of bricks and prevent bling? Rough-cast or pebble-dash is not desirable."

e bricks are probably red and underburnt, and they ot now be made equal to ordinary hard, well-burnt s, but they may be saved by using one of the silicate da solutions. The best known are the following, and rms indicated would be pleased to send all particulars prices with instructions for use: "Szerelmey Stone d," Messrs. Szerelmey, Ltd., Rotherhithe New Road, on, S.E.16; "Impregnol," Messrs. Raines and Porter, Hull; "Siasic," Mr. H. Hemingway, 15 Seething London, E.C.; "Silicate Petrifying Liquid," J. B. Orr , Ltd., Charlton, London, S.E.; "Blundell's Petrifying d," Messrs. Blundell, Spence & Co., Ltd., Hull and on; "Browning's Solution," The Indestructible Paint td., King Street, London, E.C. HENRY ADAMS.

Dry Rot

ubscriber" writes: "There is a suggestion to adopt a l form of linoleum for a wood block floor—the wood s being laid on concrete. The floor is on the third or level. The point has been raised as to whether there likelihood of dry rot setting in? The material for ost part would be laid in tiles about 12 in. square, and would be fixed in position with special waterproof cement—to the exclusion of all air. Any information you can give me based on practical or theoretical experience would be highly appreciated."

—In my experience dry rot is very uncommon on upper floors. The only cases I can recall were where ordinary open joist and board floors were "pugged" with lime mortar. Presumably the blocks are already laid—otherwise why not affix the linoleum direct to cement screeding? If they are so laid and have been down some time (i.e., not a new building), I think the risk is practically nil. Even if they are newly laid presumably they are in bitumen, and in that case the risk should be very slight. Dry rot seems most usually started in situations where moisture or warm moist air is imprisoned in contact with timber as in a board floor laid on damp concrete and covered with lino, or a joist floor insufficiently ventilated beneath.

G.

Steel Structure Hut

R. H. T. writes: "Would some correspondent who has had experience of the erection of steel structure huts during the war give advice how to re-erect same? Size of hut, 60 ft. by 20 ft.; walls, cement. The materials supplied by the Disposals Board consist of: five steel principals, 20 ft. span; two steel gables, 20 ft. span; fourteen steel stanchions, 10 ft. 6 in. span; four steel stanchions, 13 ft. span; roof and floor; twelve windows and two doors. Are walls made of metallic lathing, and can position of doors and windows be altered? Would such a building when re-erected be regarded as a temporary or a permanent structure?"

—Without further particulars the writer can only guess at the arrangement of the details. It would appear that concrete walls are intended, if so they should be formed of concrete blocks, built in panels between the flanges of the stanchions. Otherwise the walls would be formed with angle or tee sections between the stanchions, properly braced and covered with corrugated iron. The doors and windows can be placed where required. Whether this could be regarded as a temporary or permanent building would depend upon the local by-laws. It is possible that the parts are not complete, as, for example, an angle section to connect the tops of the various stanchions. The stanchions should be fixed in a block of concrete, say, 2 ft. by 2 ft. by 3 ft. deep. HENRY ADAMS.

Stone Seats and Screen Walls

By G. CADOGAN ROTHERY

STONE benches are among those good old things which deserve to be brought into fashion once more, for they add to the amenities of public parks and walks as well as to those of private gardens. Their variety is infinite, so that we can hope to renew our acquaintance only with a few of the main types. First among these are the memorial seats, which are rather in vogue just at present, though not to the extent that they should be. These, however, form a class rather than a type, for they may be of any shape, adorned with statuary, bas-relief carving, inscribed lettering, or even inserted metal panels or lettering. But as memorials they should take high rank, always being useful and easily made humbly beautiful or strikingly imposing according to desire or the demands of the situation.

Commonest, of course, is the straight bench, consisting in its most primitive shape of a box-like structure of two upright slabs supporting a horizontal seat. This, naturally, is developed by raising the back slab so as to provide a rest, and adding side slabs rising above the seat and carved into the shape of arm rests. In this case the seat rests on the front slab and fits into grooves in the back and side slabs. Such benches can be made quite handsome.

Greater opportunities, however, are afforded by the exedra or semicircular form, which is the school or conversational Greek type. With these the designer has considerable latitude for expressing his ideas. The back may be low and plain, or tall, furnishing a really protective screen. The plainness may be modified by introducing a frieze, cornice and coping, by placing pedestal pillars at each end of the semicircle, scrolled supports for the seat, and perhaps erecting a tablet at the back, flanked by pillars, consoles or scrolled leaves. In a West London garden suburb the local war memorial is an exedra bench of this kind, with low back, divided into panels partly filled in with copper plates inscribed with the names of the fallen.

Metal insertions are not always successful. If attempted, the metal should be fairly thick and heavy to avoid the appearance of tawdriness, and should be protected as far as possible by deep recessing or by framing in mouldings of pronounced projecting section. Most metals weather badly and stain the stone. This is so with brass and iron, less so with copper and bronze (although all these will blacken, especially in smoke-laden atmosphere), least of all with a good gun-metal alloy. If metal letters are used, the inscription should first be sunk carved and the letters cemented in the cavities, employing a cement fast to stone and metal. It is better if the letters are provided at the back with a thin flange, which may be made to deflect slightly by pressure into grooves at the base or sides of the sunken letter.

Semicircular benches in connection with screen walls can be seen on the Victoria Embankment. Two successful modifications of the exedra are respectively in New Square, Lincoln's Inn, and in Lincoln's Inn Fields gardens. The first instance is an imposing war memorial to the members of the Inn and the Inns of Court Officers' Training Corps. The bench, partly recessed in the library gardens, is raised on a stone platform with three steps, long and shallow. At the back is a tall, oblong block, dressed with sloping edges instead of cornice or mouldings and bearing on its face a large inscribed gun-metal tablet, recessed in the stone. On each side of this is a low wall, pierced with frettings somewhat in the form of the Union Jack. These walls are straight, and also the short flanking walls, these being joined not at right angles, but by short lengths at an angle. These walls support comfortable bench-table seats, the end ones terminated by shaped pillar blocks. It has the appearance of quiet dignity, the rich cream tone of the stone standing agreeably, not aggressively, against the green background of lawn and trees and the red brick of the hall and library beyond.

THE BRUNEL MONUMENT,
VICTORIA EMBANKMENT.

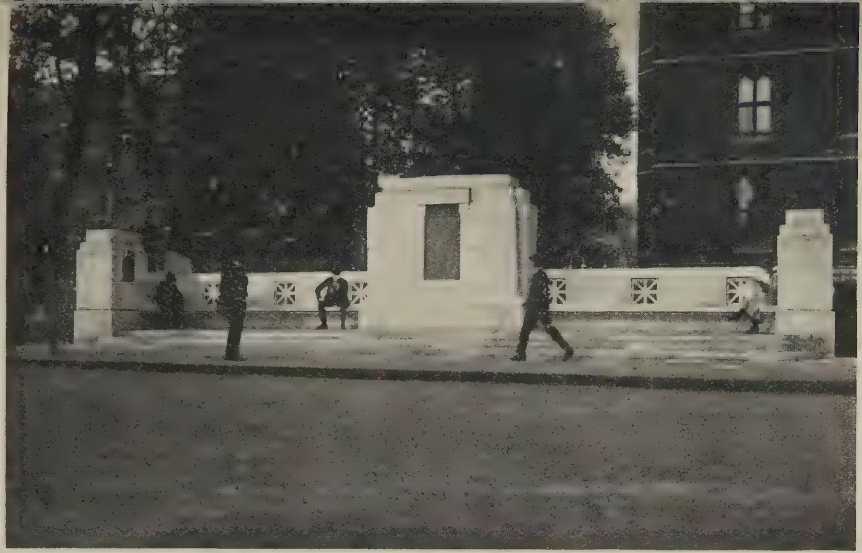
The Lincoln's Inn Fields monument is to the memory of Margaret Macdonald, who lived and worked in the Fields for many years. Here the planning of the tall, short screen wall is on the same lines, the angles joining back and flanking walls giving the impression of an exedra, but of a more severe kind. It is solidly built of large unpolished blocks of grey granite, the outer angles chamfered. On the top is a handsome bronze group of statuary, a woman in a sitting posture with outstretched cloak protecting a bevy of adoring children. At the back a metal inscribed tablet is recessed in the stone. The bench, on a platform within the protecting screen walls, is of teak, partly fitted into grooves in the stone. While this memorial is a fine and useful one, the metal after a few years' exposure has weathered badly, looking quite black.

Wooden seats in combination with stone benches have some advantages, for they are softer and warmer. Ma facturers of glazed terra-cotta make rights with piercings to receive s board or slat seats and back rests, tw more uprights being used accor to the length of the bench. This coul copied in stone. It is a combination suitable for ordinary benches, espec those that are partly protected, perhaps hardly giving sufficient im sion of permanence for memorial w If we contrast the Lincoln's Inn F bench with those at the base of the sc walls on the Victoria Embankm which are also topped by statuary see the difference at once. The gives a cosy, more simple, even hon touch to the composition.

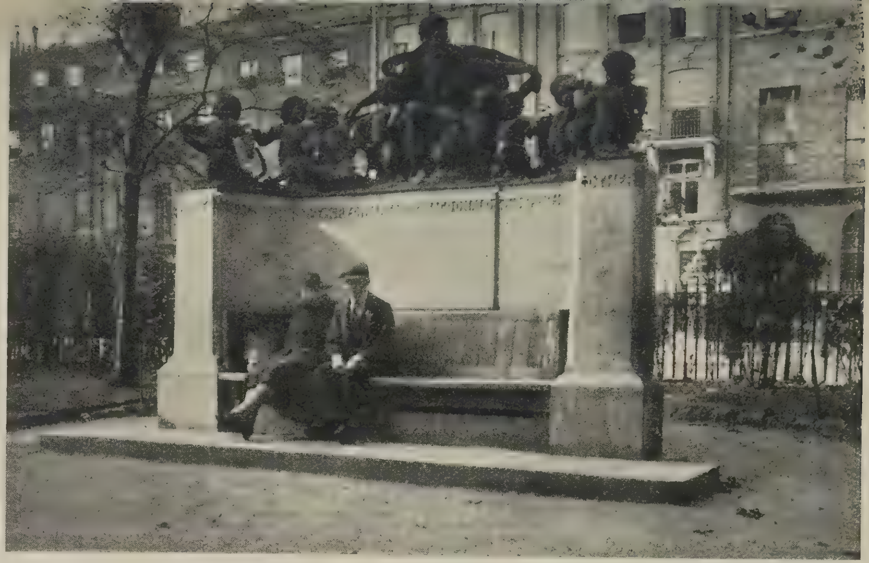
Miniature exedra seats on bridges as useful as they are picturesque, a too few examples we possess on Th bridges prove. A kind of revers the exedra is seen when we place benches in a ring round trees, but this is done only monumental trees o growth should be chosen, both to pre the possibility of strangulation of gr and to possess fitting associa Benches so placed always look whether the trees are in leaf or not, a summer they are always great favou Stone benches in combination fountains also suggest comfort for weary, and are therefore most a priate as memorials. They may be p on the sides or at the back, or even flanking walls. If the last-named is adopted a cattle-trough may be a back and dog drinking fountains ou the flanking walls.

Whenever possible benches shoul placed on platforms. Whether partake of the shape of large monum slabs, perhaps stepped, or merel squared or crazy paving slabs will de upon circumstances. The pavin most appropriate for rustic benches heavy slabs for more imposing struc Scoring the slabs to produce ribs channels pointing outwards gives and pleasant footing.

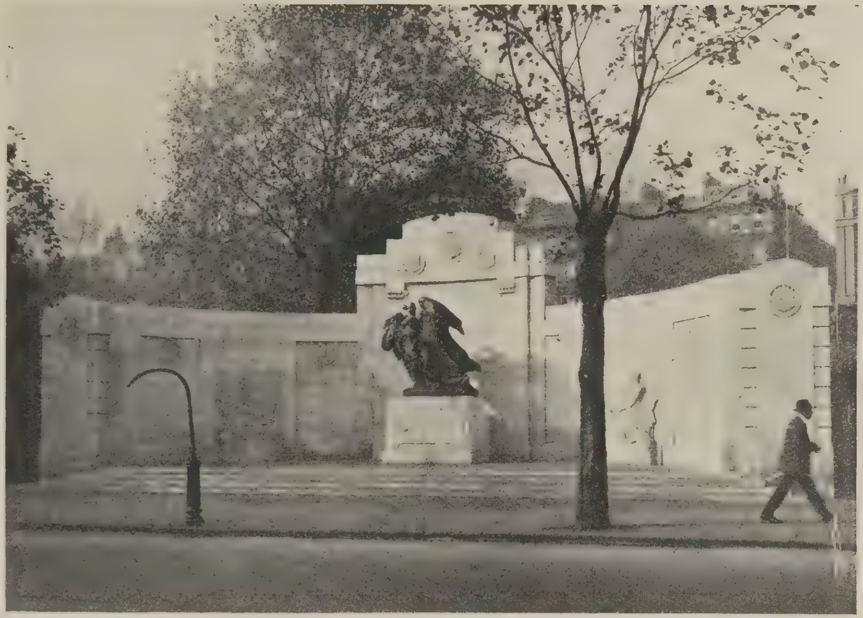
As regards garden benches, al seats are a useful type, capable of variation. In this type the screen more or less vaulted, providing a which may either be formal or rustic in the latter case resembling a g with rough masonry or roughly d stone. This permits of the use of c or beautifully marked and col stones, some of which can be rough d into odd shapes or carved so as to duce single figures (perhaps fairies, s gnomes, etc.) or processional friez again, lizards, frogs, etc. The formal character alcoved benches be in the Romanesque (very suitab woods and shrubberies or amidst r the Gothic (best for gardens of mansions or villas of the romantic of architecture), or classic (well ad to formal gardens). Charming exa of the classic alcoved benches are seen on the northern side of Kensi Gardens. These are two tall ma structures, with stone dressings, inside with wood wainscoting from



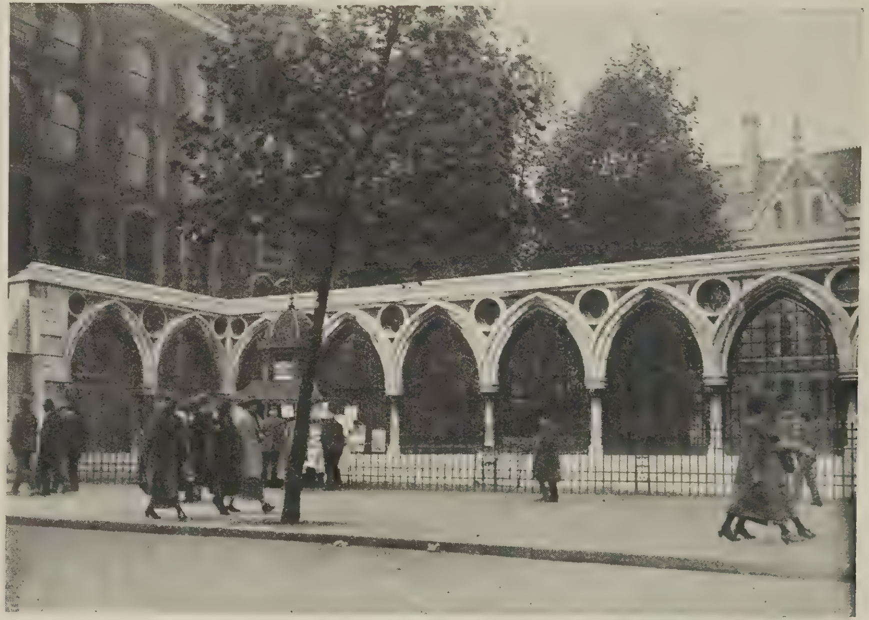
INNS OF COURT O.T.C. WAR MEMORIAL.



MONUMENT TO THE MEMORY OF MARGARET MACDONALD, LINCOLN'S INN FIELDS.



THE BELGIAN MEMORIAL, VICTORIA EMBANKMENT



SCREEN WALL TO THE LAW COURTS, LONDON

to the carving. The seats are also of wood. These have an outlook on the flagged sunken garden, with its series of fountains leading to the waterfall and the Serpentine beyond, the whole with a stone balustrade.

In certain situations it is well to pierce the walls at back and sides with windows, giving pleasant outlooks. These openings may be glazed, or if they are left open, then they should be well above the head level of people seated on the benches, and the openings should be so contrived as to give some protection against rain and wind. This can be done in thick walls by giving the openings an upward slant, with narrower opening on the inside to those outside. With thinner walls a dripstone or penthouse course or slab can be placed above the opening. These alcoved benches are particularly adapted for erection in woods or in very exposed positions. When the alcove is wainscoted it is possible to provide draw-out wind-screen panels. In other cases, at points where panoramic views may be enjoyed, the low back wall is to be preferred. By a refinement the bench can be divided into separate seats by means of upright slabs (plain or cut to fancy curves and adorned with mouldings) or arms. These arms may be terminated by a flat table, useful for work-bags or, let us say, cups of tea. The low-back wall may also be flat, to provide a platform table, and the ends can be adorned with carved vases, statuettes, etc.

Quite simple stone benches seen in Italy consisted of broad slabs resting on carved dolphin supports, there being no back-rest or end screens. Other examples noted consisted of a slab seat on each side of a straight back, with side wings, a rectangular box-like arrangement that looked as well as it was comfortable. Such benches can be left plain or enriched with mouldings and carving.

An adjustable alcoved bench for exposed positions can be contrived tl have a perfectly level circular platf with concave well in the middle and the periphery a groove semicircula section. Then have a slab, on the u side provided with a boss and a ring, series of smaller bosses, near the e The size and position of these project must correspond with the depression the foundation platform. Fit the in position and construct thereon a l alcove and bench, taking care to pro end posts that can easily be caught of. A bench of this description ca turned in any direction desired. stone of platform and slab should fairly thick and hard. Abrasion thr friction will be reduced by increasing points of contact. With an arrangen such as this drainage must be caref provided for, and it is desirable to the platform some inches above gro level in order to minimize the possib of earth or sand drifting into the groo

---

Book Reviews

Colour and Colour Reproduction

The subject of colour is not only of great interest to architects, it also offers a wide field of discovery of no small value. Such an everyday subject could not be expected to have many and large unexplored regions, but the fact remains that real knowledge of colour phenomena available for the artist, the architect, and the paint manufacturer, or even the dye maker, is both scrappy and inexact. The complex but often unsuspected prejudices of the human eye—the strange and often unexpected results obtained by the mixture of different pigments, the entirely different results obtained by the mixture of lights of the same colours as those pigments—the violent changes produced in the appearance of delicate tints by the mere propinquity of other colours—the reasons for harmony or discord between tints viewed simultaneously; the arresting beauty of the results obtained by three-colour photography and three-colour process work—are all delightful mysteries which concern the daily work of the architect, the creative artist, almost as closely as they concern the pictorial artist.

The book gives a really excellent example of three-colour printing. The living beauty of the complete print, seen in contrast with the anæmic and lifeless tones of its three components is most arresting, and should alone inspire a keen desire to purchase a volume which will explain how such wonders come about. The prospective reader should not be prejudiced unduly by a cursory examination of the letterpress. There are certain undesirable features in the author's method of presenting his subject, which are unfortunately somewhat obvious. His style resembles that of the mining prospector rather than that of the miner, and the reader must be prepared to find the gold of knowledge left largely embedded in somewhat hard ground, or at least only partially exposed. Occasional nuggets are completely extracted, but many valuable veins of information are left partially worked, with the result that the reader is often left with material which he must reduce and refine before it will meet his particular needs.

This is doubtless no serious matter to the scientific student familiar with the terms and processes mentioned, but it may well serve to discourage the more or less lay reader, and to an extent which is, we think, often quite unnecessary. The author is frequently so absorbed in his really wonderful subject, so obviously anxious to get on to new matter, that he sometimes leaves fundamentals insufficiently clear. Such brusque phrases as "described elsewhere" or "see a later paragraph" in a book of 180 pages are apt to engender in the reader a feeling of annoyance and even of resentment which might have been avoided at the expense of very little trouble. Another feature which we cannot regard as otherwise than unfortunate is the somewhat liberal use of inverted commas to indicate optical devices which are quite capable of clear definition in a very few words. This tends to convey the impression that the author is writing almost exclusively for those who are intimately familiar with optical research apparatus, and is disregarding the much wider circle of those whose daily work involves the solution, by rule of thumb if necessary, of many of the problems with which he deals by exact processes. It is obvious, however, from the preface that this was far from his intention.

Even so, to those who are keen to obtain accurate information upon a subject full of extreme interest, even if occasionally they have to dig for it, and to all who require an authoritative work of reference, this book should prove a mine of reliable information brought well up to date. We cordially wish it success.

P. J. WALDRAM.

"Colour, and Methods of Colour Reproduction," by L. C. Martin, D.I.C., A.R.C.S., D.Sc., Lecturer in the Optical Engineering Dept., Royal College of Science; with chapters on Colour Printing and Colour Photography by William Gamble, F.R.P.S., F.O.S., Editor of "The Process Year Book"; 9 in. by 6 in.; 187 pp. 76 illustrations and two coloured plates. 12s. 6d. net. Blackie and Son.

"House and Cottage Constru- tion," Vols. II and III

In these further and conclu volumes the author comes from general to the particular. The twe one chapters pass in review the va divisions of building work, commen with foundations and ending in rep which looks like subtle irony. A siderable proportion of the subject m is, of course, not new, and bearin mind the title, there is a suspicio "padding" in the inclusion of such th as "herringbone bond for walls 4½ b thick," "acute squints in single Fle bond," "fire-resisting encasing for col stancheons, girders, etc," and the Considerable space is also devote methods of construction launched optimistic inventors during the stages of the late housing campaign, also to the experimental work of Department of Scientific and Indus Research, whose reports are extensi drawn on. The most useful chap of the book are those on stairc sanitation and plumbing.

The author does not show great f liarity with some of the less ordinary t of construction which he essays to t In speaking of stone slab roofs, thoug appears to identify these with "the slates of Yorkshire," the descriptio far more nearly related to the sm Stonesfield slates of Gloucestershire o Collyweston slates of Northants, w are, as Mr. Newbold says, "only suit for roofs with a steep pitch." Both Y shire and Horsham stone slates ar were) habitually laid to a flattish owing to their large size and conseq great weight and danger of slipping. *pisé de terre* is not by any means the as cob with the straw left out. C essentially a wet process, and *pisé* a one. On the whole a disappointing on a specialized view of the wide su of building construction, which m have made a very good one.

"House and Cottage Construction," by Harry Newbold, M.S.A., Vols. II and III. Caxton Publ Co., Ltd. 1923. 58s. 6d. the set of three volume

Architecture in the Lay Press

London's Worst

he determined effort made by Brigh- residents to rid their town of "the worst statues on earth" will be ched by all beauty lovers with in- est.

An American who did not know ghton but knew something of Lon- , after reading the report, proudly nounced that he had found the ugliest ght" in London.

His choice fell on the three lamp ndards outside St. Katherine Dock use on Tower Hill. There will be very people who have seen them who will rrel with the American's view. For er ugliness they must stand alone. ey are shapeless masses of masonry, ch ought to have been removed long .

But there are other places in London l in the running for the doubtful our of being named "the ugliest." ch ink has been spilt in denouncing ring Cross railway bridge.

here can be little doubt that Crutched ars is far and away the ugliest street he City itself. It teems with historical ciations, but for dull, drab, dirty notony it takes a lot of beating.

auxhall Cross is another very dull depressing thoroughfare. The long walls of the gas factory on the one d, the ugly station and railway bridge he other, and the general air of gloom ch never seems to leave the spot bine to make this busy corner a very esirable place.

ondon has only one skyscraper— en Anne's Mansions, near St. James's k. The tremendous height of this ck of buildings, combined with its lute lack of architectural beauty, led many people to the conclusion London has no greater monstrosity. thur L. Leach, in "The Daily ress."

New Regent Street

cidentally, the discussion about new ent Street confirms the truth of kin's contention that you cannot ider architecture apart from ethics economics. For the point at issue t really two kinds of architecture; two kinds of shopkeeping. It is nable to prefer one to the other, t is not reasonable to ask for modern keeping in the architecture of Nash. t only is modern shopkeeping much dependent upon display, but it is more dependent upon competition play. Consequently the problem of rchitect is entirely different. Nash upon a foundation of "the goods"; odern architect has to build upon a lation of the advertisements. It does ollow that "the goods" are worse in ty than they were a hundred years but it does follow that they are nted in a different manner. We exchanged shopkeeping in the strict for merchandising and salesmanship. d, anyhow, the time for regretting egent Street of Nash is past. For or worse, the character of the Regent Street was set with the ng of the Piccadilly Hotel, and what ns of the work of Nash, putting the fact that the ground floors in the Quadrant are no longer as Nash designed them, though good in itself and for its purpose, is an inconvenience. Beyond a certain degree of change, old virtues cease to apply. The only rational way to preserve the Regent Street of Nash is to go back to the shopkeeping of Nash's day; and I see no disposition on the part of the Nash enthusiasts for anything so fundamental.

Personally, I cannot say that many of the new buildings in Regent Street give me much positive pleasure, but they give me negative relief and an immense admiration for the taste and skill of the architects in solving their exceedingly difficult problem.—Charles Marriott, in "The Westminster Gazette."

New York's Sky Bungalows

The coolest people in burning New York this summer are the Up and Over Club. They are as yet unorganized, but have received their name because they are all inspired with the same desire—to find a place in New York which is not underground nor on street level. They have soared far above the rents, and are cosily ensconced on the roofs of skyscrapers.

The first Manhattanite to take to the roof was a rich eccentric who hated the noise of New York, where he made his fortune. He built himself a home on a skyscraper in the heart of the business district.

He had wealthy imitators almost at once, then artistic and literary folk began to join the Up and Overs. A well-known New York architect reserved for himself the roof of a skyscraper he designed, and has built a charming Italian villa with a conventional garden, where he lives comfortably with his wife and child. A novelist decided to live on a roof instead of going to the mountains. John Barrymore, the actor, built a summer house on the roof of his Greenwich Village dwelling, and immediately dozens of other villagers erected summer homes on their roofs. Some are merely gay tents or log cabins, others are quite elaborate dwellings, and all have gardens, gay with geraniums and roses in big boxes.—Marion Ryan, in "The Daily Express."

The Admiralty Screen

Modern ideas of restoration in architecture are going far to remove the reproach contained in the usual guide-book references to "the restorer's art," and a very good example of the new devotion to historical accuracy is gradually being unfolded in Whitehall. The Admiralty building—not the noble arch at the top of the Mall, but the old Adam structure facing on to Whitehall itself—was considered rather mean when it was first built, and the architects erected a typical Adam screen of pillars and archway, which gave dignity to the entire conception. Unfortunately, a First Lord in the early years of the last century found the single central arch inconvenient for carriages coming and going to his receptions in the then official residence, and without the least regard for the architectural unities he had two of the pillars removed and two smaller arches knocked in the wall behind. Now, when London is rapidly losing its best eighteenth-century buildings, the Office of Works has decided to restore the screen to its original form, and the work is almost complete. The old pillars are, of course, blackened and scarred by time, and the finishing touch to the artistic re-creation of the screen is the process now in operation whereby the new pillars of Portland stone are being given a worn and weather-beaten appearance. When it is finished it will be quite impossible to guess which are the pillars commemorating the vandalism of a forgotten First Lord.—"Birmingham Post."

On Critics

The primrose path for critics of painting or anything else is always to cry up whatever was clearly popular among their readers about a year ago. This brings them a wide reputation for sturdy common sense and knowledge of their job. And, on the ancient principle that there is always something, if only a little, in what a great many people believe, there is even likely to be some grain of foundation for the preferences thus expressed, though those who express them may not always know what it is. The steep and thorny path for the critic is first to train himself to have some individual susceptibility to the appeals of various works of art, and then to stake his little all on what that personal sensitiveness tells him, as Ruskin did on his perception of new kinds of beauty and truth in the pre-Raphaelites. It is not for the critic to be a painter, nor to be able to teach painters how to paint, or picture-buyers how to buy. His job is simply to express the reaction of his own mind to this or that work of art. And it strikes us that at present the English Press as a whole, and not merely the half-dozen newspapers which have always shared our own hobby of treating art as a serious human interest, attempts the criticism of painting more creditably than it ever did before. It is probably quite true that some art critics are more prone to over-rate than to under-rate the adventurous experiments of artists who may be pioneers and may be duffers. But of the two main directions in which criticism may err, that one is surely the safer. The accumulated strength of the kind of art that is established and traditional is always very great, for most people form their opinions about art upon things that they heard or read some time ago. Their instinctive impulse, when confronted with any new sort of art, is to boo it. The art that moves wholly along old and accepted lines has a public already made for it. It can look after itself pretty well. But if an artist were now to arise who made some such call upon our openness of mind as Claude and Turner made when they promoted the sun into a sufficient subject for the art of the greatest painter, he might sorely need a Ruskin to see him through. And his Ruskin would have to be the real man, the somewhat radical prophet of new ways, and not merely the cultivated conservative critic whom one is apt to find in Ruskin now that his modernity—where it was sound—has triumphed so completely as to become classical.—"Manchester Guardian."

The New Housing Act

THE Ministry of Health has issued a circular (No. 388a) to draw attention to the provisions of the Housing, etc., Act, 1923. The appendix to the circular brings up to date and amplifies the summary of the provisions in the Housing (No. 2) Bill for the assistance of new construction which was contained in the appendix to the circular 388 issued on April 27. Among the most important changes regarding new construction made in the Bill during its passage through Parliament are the following :—

(*a*) The maximum area of houses or flats eligible for subsidy has been increased from 850 sq. ft. to 950 sq. ft. in the case of two storied cottages and from 780 to 880 sq. ft. in the case of one story cottages, bungalows or flats.

(*b*) Where a local authority satisfy the Minister that, having regard to the special circumstances of their area, there is a need for houses of smaller dimensions, he may permit houses of smaller size than the normal minimum to rank for financial assistance. Such permission will only be granted for such limited number of houses for a particular area and subject to such conditions as the Minister may determine; the minimum sizes in these special cases will be 570 sq. ft. for two storied houses, and 500 sq. ft. for flats or one storied houses.

(*c*) Every house or flat to be eligible for subsidy must be provided with a fixed bath unless the Minister, on the recommendation of the local authority, approves otherwise.

(*d*) Where houses eligible for subsidy are erected by a Metropolitan borough council under an approved scheme the London County Council are empowered to supplement the contribution made by the Minister to an extent not exceeding three pounds a year for a period not exceeding twenty years.

(*e*) The date by which houses to rank for subsidy must be completed remains the 30th September, 1925, but when the Minister is satisfied that failure to complete by that date was due to circumstances over which the authority, body or person had no control, and that the construction of the house or the necessary preliminary work of development on or about the site was begun within a reasonable time, he may permit a house completed before 1st June, 1926 (instead of 1st January, 1926, as proposed in the Bill), to rank for subsidy.

(*f*) The period within which local authorities are empowered by section 5 of the Act to make advances, etc., for the purpose of increasing housing accommodation has been extended, by one year, to 30th September, 1926.

(*g*) The maximum advance which may be made by a local authority to persons or bodies of persons constructing or altering houses under section 5 of the Act or to owner occupiers under the Small Dwellings Acquisition Acts has been fixed at 90 per cent. of the value. The maximum advance during construction remains at 50 per cent. of the value.

(*h*) The requirement that a person purchasing a house under the Small Dwellings Acquisition Acts shall be required to reside in the house has been further modified, and will have effect for a period of three years only from the date when the advance is made or when the house is completed, whichever is the earlier, and it will be within the discretion of the local authority to dispense with this condition at any time.

Various points connected with the grant of assistance to private enterprise are dealt with more fully than in the previous circular.

Under section 1 (3) the Minister is empowered to make contributions towards the expenses incurred by a local authority in carrying out an improvement scheme under Part I and Part II of the Housing of the Working Classes Act, 1890. The amount of assistance in connection with any particular scheme which will be by way of fixed annual contribution will be settled in consultation with the local authority, and may not exceed one half the estimated average annual loss likely to be incurred in carrying out the scheme. Section 9 enables agreements to be made between local authorities carrying out a scheme under Part I or Part II and the licensing compensation authority in regard to licensed premises included in such schemes. Section 11 applies to Part I and Part II schemes, the procedure laid down by section 10 of the Housing, Town Planning, etc., Act, 1919, for entering on land which a local authority are authorized to purchase for the purpose of Part III of the Act of 1890. It is provided, however, that the notice to be given in the case of Parts I and II schemes shall be not less than twenty-eight days, instead of fourteen days as in the case of Part III schemes. Section 15 together with the First Schedule to the Act provides that the simpler procedure applicable to schemes under Part II of the Act of 1890 shall apply to Part I schemes. The schedule also simplifies the accounting arrangements under the Housing Acts, and makes uniform the provisions as to the service of notices under those Acts. The effect of the modifications introduced by this section and the First Schedule to the Act are explained in some detail in the Memorandum on clause 15 of the Housing, etc. (No. 2), Bill (Cd. 1913 of 1923), which was issued while the Bill was before Parliament.

In addition to other miscellaneous amendments to the Housing Acts, the Act contains the following provisions relating to town planning :—

(1) Section 18 extends the machinery of the Acquisition of Land (Assessment of Compensation) Act, 1919, to the settlement of claims for compensation and betterment made in pursuance of section 58 of the Housing, Town Planning, etc., Act of 1919.

(2) A minor amendment in the Second Schedule also deals with compensation.

(3) Section 20 empowers the responsible authority under a town planning scheme to promote within a limited time a varying scheme for the purpose of withdrawing or modifying any provisions of the original scheme which may have occasioned heavy claims for compensation, without prejudice, however, to the right of the ow
affected to make a further claim in resp
of the scheme as varied.

(4) Section 21 enables the Minister
authorize the preparation of a to
planning scheme for land, whether dev
oped or not, with the object of preservi
the existing character and features o
locality with special architectural, histo
or artistic interests.

Copies of this circular may be p
chased through any bookseller or direc
from H.M. Stationery Office. Pri
2d. net.

The Housing Subsidy

Is the £6 housing subsidy to be u
to help middle-class owners ? This
portant question has arisen over
refusal of the Ministry of Health to gr
the subsidy to the Coombe and Mal
Urban District Council.

Mr. H. Aldridge, the secretary of
National Housing and Town-plann
Council, points out in "The Manches
Guardian" that the real issue is that
houses for which the subsidy has b
refused in Surrey and elsewhere, w
coming within the measurements of
Act, are to be sold at a price so hig
to place them beyond the reach of
average working man. Examining
finances of the Surrey case, Mr. Aldri
shows that the local authority t
proposed to use the State subsidy with
making any contribution themselves
such a way that the occupying ow
would be called upon to make a wee
payment of £1 a week with rates
repairs in addition. People who
take houses on such terms are not t
whom the Government set out chi
to benefit. It is not really a questio
whether the houses have a parlour or
—that is an unimportant detail.

The example of the Whitehaven Co
is quoted as one to be followed. T
the local authority, unlike the Ma
Council, are giving a substantial am
themselves, with the result that for ho
costing less than £500 to build the occ
ing owner, in return for weekly paym
of about 10s. a week, would be enable
own his own house in about twenty y

What housing reformers are ch
concerned with is that nothing shal
done to defeat the efforts that are
made by the Ministry and the local au
ities together to secure that the h
built under the Act shall be built at
flated prices, and therefore at rents w
the means of working-class folk.
is what might result if the Ministry
subsidies to enable people to own h
costing £700 to build, including
and land, as at Malden. Within the
two or three years the local autho
have been letting tenders for h
coming within the limits of the su
at from £300 to £400 exclusive of
and land. The local authorities,
Aldridge says, should be encourage
every way to continue work under
existing schemes, which account
70 per cent. of the houses already p
by the Ministry.

A New Giant Kinema

American kinema magnates, visiting gland at various times to see how their films were faring in this country, have pressed themselves in no uncertain ms as to the deficiencies of British wmanship. We had not learnt, they d, the first thing about presentation. had no picture theatres worthy of name. We should study the New York ls. This is precisely what has been ne by an enterprising London manager, l the result is to be seen at the Shep-d's Bush Pavilion, a giant picture-use opened last Thursday by Sir lliam Bull, M.P. The theatre, which been erected from the designs of Mr. ank T. Verity, is declared to be the gest in the world, with seats for 3,000 ople and standing room for 2,000. combines the best features of all the American kinemas, which have been sonally examined by the manager, l is decorated in three tones of copper, h lighting effects in twenty different ours.

The A.A. Exhibition

t is often felt by those responsible for organization of the schools of architure that it would be a great advane to everyone concerned if the average ctising architect had a more intimate owledge of what the schools were ng. Practising architects might well l that the education of the coming eration of architects is one that conns them. In this connection it is eresting to note a special visit made week by a number of architects to exhibition of A.A. school work at and 35 Bedford Square. The party met by the director of education, Robert Atkinson, the principal, Mr. M. Robertson, and some of the masters, explained in detail the principles of ning adopted at the A.A. Amongst se present were Sir John Burnet, J. Alfred Gotch, P.R.I.B.A., Mr. urice E. Webb, Mr. E. C. P. Monson, Mr. H. M. Fletcher.

Plenty of Bricks

here would seem to be an increased ply of bricks coming in the near future, ording to the second interim report of interdepartmental committee apnted to survey the prices of building erials. The report has been issued the Ministry of Health as a White er. The committee state that in tland there is a surplus of bricks, and ngland and Wales—with the excep- of London and the south-east—the ply appears to be adequate. In Lon- and the south-east, owing to the bad ook of trade last winter, the output of ks has not been as large as events proved to be desirable. The general ly is, however, likely to increase in near future. This year's output of ks is already in part available, and a er supply should shortly be forthing. In the meantime the Fletton ut is steadily increasing. The proion of Flettons for the month of was 38,000,000, as against 33,500,000 May and 23,000,000 for January. view of these facts we think purers should hesitate to pay increased s for prompt and preferential dey," concluded the report.

In a separate note the chairman, Sir Halford Mackinder, says: "On comparison of the July prices with those of June it will be seen that there are a good many local fluctuations which extend to almost all of the materials under consideration. On the whole, however, a general balance is preserved between increases and decreases. Common bricks have increased in price in one locality by as much as six shillings per thousand, and have decreased in another by as much as five shillings. In the main there has been a tendency slightly to increase the price of bricks.

"Timber, except flooring and lead, has been somewhat easier in price, and for the remainder the fluctuations by way of increase and decrease have approximately balanced."

Leeds Housing Colony

The Leeds Corporation's house-building scheme at Middleton continues to make satisfactory progress. At the end of July, 1922, the builders in twelve months had erected 199 dwellings, and all but seven of them were occupied. Now, 547 are finished and tenanted, and fifty more are nearing completion. Last spring the Ministry of Health authorized the construction of 500 additional houses, under certain conditions. Of these 100 at Middleton and 100 at Crossgates are all but finished. The Corporation have also undertaken to build 200 more houses, and a practical start is being made with the task at Middleton.

The Manchester Memorial

It is expected that the designs for the Manchester War Memorial will be completed within the next few weeks. The architect, as exclusively announced in the JOURNAL, is Sir Edwin Lutyens, R.A.

Competition News

Cork Competition Award.

The design of Messrs. Jones and Kelly, MM.R.I.A.I., of Dublin, has been placed first in the competition for the new City Hall, Cork. Reproductions of the winning designs, together with the assessor's report, will be given in our next issue.

St. Stephen's Church Hall.

The competition for the St. Stephen's Church Hall and Institute, Bush Hill Park, N., has been won by Messrs. George Baines and Son, F.R.I.B.A., of London.

Wirral Union: Clatterbridge Infirmary Competition. Halifax: Bull Green Lay-out Competition.

Members and Licentiates of the R.I.B.A. must not take part in the above competitions, the conditions not being in accordance with the published regulations of the Royal Institute for architectural competitions.

New Building in Cross Street, Manchester.

Twelve competitive designs from Manchester architects for the new building which is to be put up in Cross Street, Manchester, next to the Royal Exchange, are now being prepared and will be completed before the end of next month. Professor C. H. Reilly is the assessor. The site is at present occupied by the Edinburgh Life Building, which will come down. The frontage of the new building will conform with the present line of the Exchange, and thus further open the Cross Street bottle neck. This alteration was one of the conditions made by the Corporation, who are the vendors of the site.

List of Competitions Open

Date of Delivery.	COMPETITION.
Aug. 25	Public Swimming Baths and Washhouses, East Greenwich. Assessor, Mr. Henry V. Ashley, F.R.I.B.A. Premiums: £300, £200, £100. Apply Mr. Frederick J. Simpson, Town Clerk, Town Hall, Greenwich.
Sept 12	Masonic Temple in Broad Street, Birmingham. Premiums: £500, £300, and £200. Sir Banister Fletcher, F.R.I.B.A., is the assessor. The competition is restricted to architects who are masons subscribing to Lodges in the Province of Warwickshire. Apply Mr. J. P. P. Dutfield, 65 Temple Row, Birmingham.
Sept 30	Designs for a series of plaquettes in bronze illustrative of London as the capital city of the Empire, or of one or more of her main architectural features. Designs should be submitted in the form of models in plaster. The following prizes are offered:—One prize of 100 guineas, two prizes of 50 guineas, three prizes of 25 guineas. Apply Deputy Master of the Royal Mint, London, E.C.1.
Sept. 30	The best colouring of a design for the vestibule connecting 315–317 Oxford Street with 17–19–21 Dering Street, Messrs. Thomas Parsons and Sons' new offices and showrooms. Prizes: 100 guineas, 50 guineas, 25 guineas, and five consolation prizes of 10 guineas each. Assessors—Sir Edwin Lutyens, R.A., F.R.I.B.A., Sir David Murray, R.A., P.R.I., H.R.S.A., Sir John Lavery, R.A., Mr. Frank Brangwyn, R.A., and Mr. E. Guy Dawber, F.R.I.B.A. Apply Competition Department, Messrs. Thomas Parsons and Sons, 315–317 Oxford Street, London, W.1.
Oct. 1	The Student Welfare Committee, University of Glasgow, invite Competitive Designs (limited to architects having an office in and practising within the Municipal Boundaries of the City of Glasgow) for a pavilion to be erected on the University Athletic Ground at Westerlands, Anniesland, at a cost of £10,000. Assessor Mr. Alexander N. Paterson, A.R.S.A. Apply Honorary Secretary, Student Welfare Committee, The University, Glasgow.
Oct. 1	Lay-out of the Bull Green Site and part of the centre of the Town of Halifax. Premium £50. Apply, with deposit of £1 1s., to Mr. Percy Saunders, Town Clerk, Town Hall, Halifax.
Oct. 15	Lay-out of a river embankment promenade, adjoining the River Thames below the Barnes Bridge, for the Chiswick Urban District Council. Premiums £105, £52 10s., and £26 5s. Apply Mr. E. F. Collins, clerk, Town Hall, Chiswick, W.4. Deposit, £1 1s.
Nov. 5	Art Gallery for Hull. Assessor, Mr. John W. Simpson, PP.R.I.B.A. Apply (with cheque for £2 2s.) to Mr. H. A. Learoyd, Town Clerk, Guildhall, Hull.
Jan. 1	The Imperial War Graves Commission invite architects who served during the war as members of the Military, Naval, or Air Forces raised in any part of the British Empire to send in their names for admission to a competition for the designing of the undermentioned memorials to the missing to be erected in France by the Imperial War Graves Commission. The memorials to the missing proposed are to commemorate those who fell in the war in France and Belgium but have no known grave, and will be in the neighbourhood of the following places, and will have inscribed on them the following number of names:—At Bethune, 20,000 names; at Armentières, 15,000 names; at Cambrai, 6,000 names; at Soissons, 5,000 names. Applications for particulars of premiums and other regulations from those desiring to compete are to be addressed to the Secretary (Works Branch), Imperial War Graves Commission, 82, Baker Street, London, W. 1, and must be received there not later than 1st January, 1924, and must be accompanied by a statement giving particulars of the war service and professional career of the applicant and clearly stating which of the memorials it is desired to compete for. Deposit, two guineas for each set of plans. The Assessor is Sir Aston Webb, K.C.V.O., P.R.A.
No date	Extensions to the Poor Law Institution, Premium £50. Apply Clerk to the Wirral Board of Guardians.

Houses and Population

Mr. George Hicks, in his Presidential address at the annual conference of the National Federation of Building Trade Operatives held at Ilfracombe, referred to the crisis in the trade which culminated in April last and said that the settlement then arrived at was obviously a compromise. Those engaged in the *pourparlers* felt as keenly as any of the rank and file the injustice of being forced to accept reductions below the sliding scale adopted in 1921; but claimed that the Arbitrator's award was favourable to them, as it whittled down the employers' demand by about 75 per cent.

Turning to general questions, Mr. Hicks said that population was racing houses and gaining rapidly. If all the available labour was put on to building houses at once it would take a score of years to catch up in that race.

But a fact of greater gravity remained, he went on. It was common knowledge that building was not to-day attracting new blood sufficient to compensate for the natural loss of man-power due to the passage of time. What this meant to the nation ought to be plain to the minds of those who had the nation's affairs and destinies in charge, except that foresight seemed no more to be a quality of statesmanship than public interest a concern of commercialism.

"It is at such a time," said Mr. Hicks, "that the attempt is made to filch from the building operative the small advantage gained as a result of improved organization over the conditions that prevailed in 1913. The best authorities on housing outside the building industry are agreed that good conditions must be established if the present numerical strength is to be kept up, let alone increased, and the point of view was laid down explicitly at the last conference in London of municipal representatives convened by the National Housing and Town Planning Council. I warn those who have any shred of responsibility in this matter that we are drifting to a condition where the limit of possible overcrowding will be reached, and this country will have not only an unemployed margin but literally a houseless margin, which will mean desperation and potential barbarism. The fact that fathers are ceasing to apprentice their boys to our trade in anything like the number of former times, and that apprenticeship wages are ridiculously low, is a striking commentary on the supposition of relative prosperity in the building industry."

Alluding to the Special Committee on Building Materials' Prices, Mr. Hicks said the terms of reference must be enlarged to the extent of enabling the Committee not only to demand the production of business ledgers and accounts wherever required, but also to make definite proposals for legislation according to what was necessary for effective control. "It is amazing," he said, "that with a problem so vital to the industrial efficiency, general health, and social morality of the nation confronting the executive to-day a handful of grasping profit-mongers should be allowed to stop progress in the name of private enterprise. That is what it means. What municipality, or, for the matter of that, what ordinary builder is going to plan house erection or town development at a loss to fill the pockets of the trusts? The race may be poisoned in filthy slums, just as it may be battered and even annihilated in future wars, so long as "business is business" to-day no matter what the consequences to-morrow. Our demand is for nothing more ambitious than moderately decent living conditions, and without those it is shown the industry cannot live.

The Hendon Town-planning Scheme

Hendon Rural District Council have approved a town-planning scheme under which they propose to acquire Headstone Moat Farm, Harrow, and fifty acres adjoining for a public recreation ground. The Moat Farm was once the local residence of the Archbishops of Canterbury. Thomas-à-Becket was there in 1170, just previous to his murder. Archbishop Arundel lived at the farm in 1407, when banished by Richard II, and Archbishop Chicheley, whose tenants complained that he cut down the timber to provide building material for his new college at All Souls', Oxford. Cardinal Wolsey is also said to have resided there for some time. The residence is now a farmhouse, and in the parlour is an iron fireback dated 1569, bearing the arms of Philip II of Spain.

Town Development in Wales

Mr. W. S. Purchon, Head of the Department of Architecture in the Technical College, Cardiff, writing in "The Western Mail," says: The publicity recently given to the question of a proposed new railway station for Cardiff raises the important point of the necessity for proceeding with, and completing, a civic survey of the city. This is a subject which is, however, not only of interest to Cardiff, but to all towns in the Principality; and the importance of it is but emphasized by the recent discussion at the Swansea Corporation Parliamentary committee on the subject of a suitable site for a new civic centre. Or, to take another example of greater general interest perhaps at this time of the year, consider the case of Porthcawl, a town which is stated to have grown more rapidly than any other in the Principality during the past decade, having doubled its population during that period. Porthcawl is magnificently situated in beautiful natural surroundings, and has a wonderful opportunity of developing into one of the finest health resorts in the country. How can Porthcawl ensure, so far as is humanly possible, that its development will be carried out on the most satisfactory lines?

The wise solution of the special problems mentioned in Cardiff and Swansea, together with the question of the complete development of those cities and of other towns in the Principality, whether those towns be of the industrial type or, like Porthcawl, health resorts, depends in the first instance on a civic survey of each town, linked up as may be necessary with the surrounding areas by means of regional surveys.

Some idea of the importance of the civic survey may, perhaps, be gleaned from the following facts with regard to the development of Dublin. Some years ago the Civics Institute of Ireland offered a p
of £500 for the best design and report o
plan for "Greater Dublin." This c
petition developed into an internatio
affair, schemes being submitted fr
various countries, by eminent expe
and the adjudicators including s
prominent men as Professor Patr
Geddes, of Scotland, and John Nolan
America. The result of the competit
was that the scheme submitted by
fessor Abercrombie, Sydney Kelly,
Arthur Kelly was awarded the pr
and this scheme, together with an illu
nating report, has recently been publis
The important point which emerges fr
this competition, so far as concerns
present article, is the emphasis with w
the successful authors state that t
recommendations are tentative, and t
no work should be commenced with
a thorough systematic investigation
means of a civic and regional survey
provide the necessary data, on w
alone can a successful scheme for
future be properly based.

In South Wales much spade work
the direction of these surveys has alre
been done, but still much more remain
be undertaken.

New Inventions

Latest Patent Applications.

19631.—Babidge, E.—Fastening dev
for scaffolding, &c. July 3

19705.—Gay, G.—Means for secu
roofing slates. August 1.

19840.—Harrison, C. H.—Manufac
of reconstructed stone. Augu

19979.—Levy, M.—Concrete, &c., c
positions. August 3.

19725.—Minache, S.—Building mate
August 1.

19996.—Watts, A.–Kerbstone. Augu

Specifications Published.

201098.—Henderson, A.—Concrete b
ing blocks.

200475.—Guastavino, R.—Acoustical
ing material for interiors.

Abstract Published.

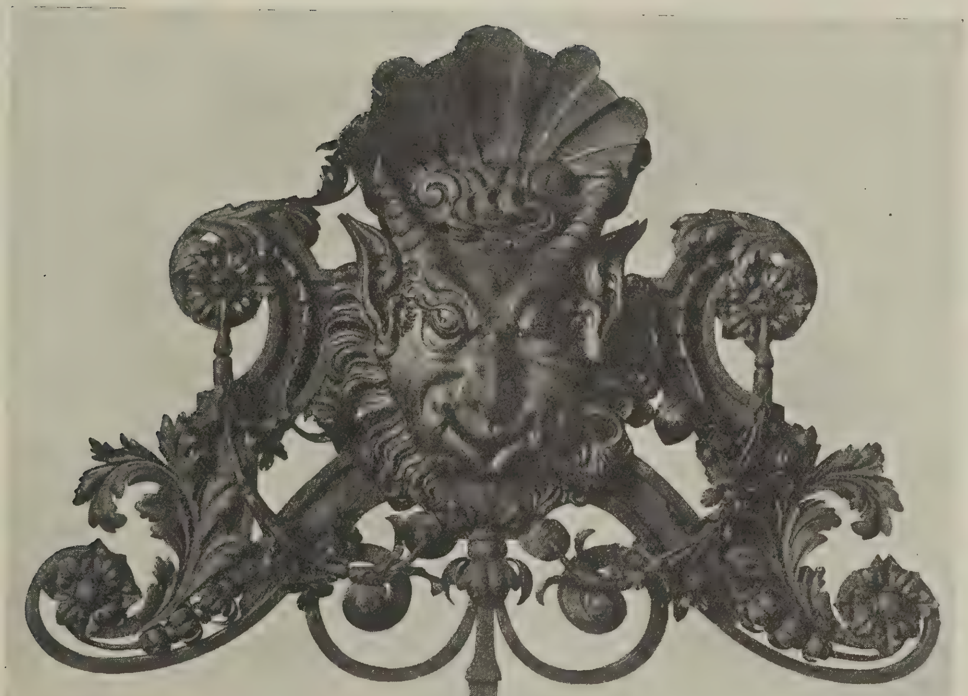
199128.—Casting walls in situ.—H
Merrill, Deichman H
Cologne, Germany.—In the
cess of casting walls in
between moulds or perma
slabs which are set edge
with the vertical joints o
alignment, and which are
cured by clamping bolts
gaging the body-portions o
course and the two me
edges of the members of
superposed course as desc
in the parent specification,
vision is made by an inner s
core mould members to fo
hollow wall. The core mem
are held within the outer m
bers the correct distance
by precast cruciform dist
pieces through which pass
bolts to clamp the membe
position. The distance p
are varied in length by e
sion pieces.

The above particulars are specially prepared by
Rayner & Co., registered patent agents, of 5 Ch
Lane, London, W.C. 2, from whom readers of the J
may obtain information free on matters rela
patents, trade marks, and designs. Messrs. Rayne
will obtain printed copies of the published specifi
and abstract only, and forward on post free at the
1/6 each.

ednesday, August 29, 1923. Vol. LVIII. No. 1495

THE ARCHITECTS' JOURNAL & Architectural Engineer

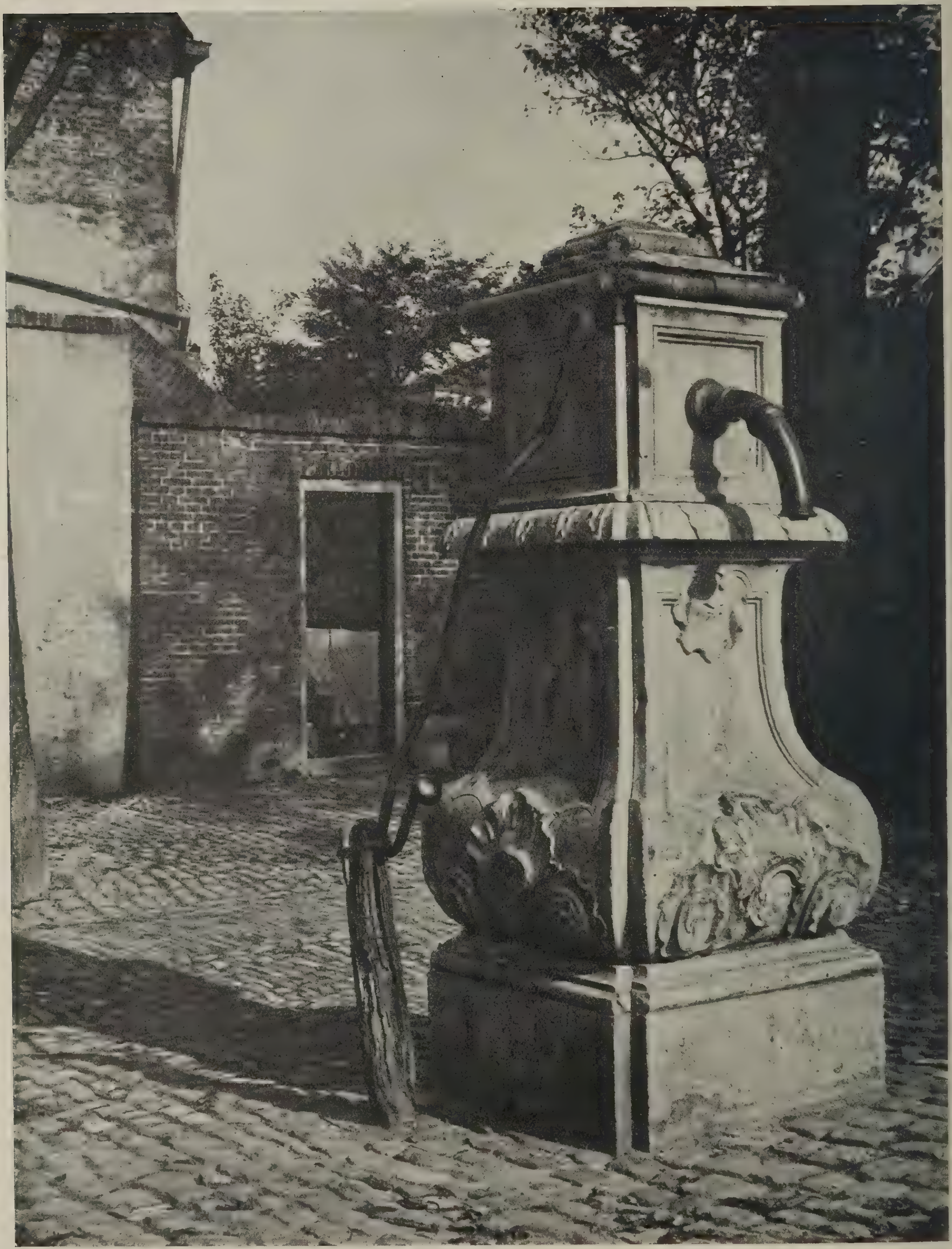
With which is incorporated "The Builders' Journal."



A WROUGHT-IRON FINIAL FROM A GATE OR SCREEN, HAMPTON COURT.
BY JEAN TIJOU (ABOUT 1690).
(Now in the Victoria and Albert Museum.)

27-29 Tothill Street, Westminster, S.W.1.

Middelburg, Holland : Pump in Fish Market



The 18th-century pump illustrated is typical of many found in various parts of Holland. Possessing so much beauty villagers might be excused for talking of "the parish pump."

THE

ARCHITECTS' JOURNAL

27-29 Tothill Street, Westminster, S.W.1.

'ednesday, August 29, 1923

Volume LVIII. No. 1495

The Spread of Ugliness

NO observant person can travel about the country without noticing a slow but steady growth of ugliness which is quietly and insidiously spreading itself over the countryside. It is a growth vhich has been checked by the war, but not killed. Despite he outcry that private enterprise is unable to provide iouses there would seem to be ample evidence to the conrary. That the supply is still far behind the demand is ndisputable, but in every district houses of the speculaive type are being erected.

Anyone with knowledge may find it a quite amusing liversion, as he passes along a main road from village to illage, to affix dates to the various cottages, small houses, nd villas which he will encounter. Starting about 1860 ie will note the change of type by 1880, flowering into the Jubilee Cottage" of '97, which gives way to a new style t the turn of the century, to be followed by pre-war and ost-war types. One characteristic they all have in common —that of ugliness. But there are degrees of ugliness, and hat of to-day is, on the whole, less acute than that of fifty ears ago. But why need there be ugliness at all? Is it o be presumed that mankind instinctively prefers the ugly o the beautiful? We think that the reason is to be found n ignorance and vulgarity. Often enough ugliness is efended on economic grounds, but beauty bears no elation to cost, a fact so clearly apparent in almost very village in the country that the plea is at once ontradicted.

The ugliness arises from many causes. One of them is he attempt to make one class of building emulate the forms nd manners of another. The earlier types which we have ientioned often owe their ugliness to their pretentiousness. ompletely ignoring the simple cottage prototype they spire to be miniature copies of larger houses. This signifies t once too much and too little education on the part of iose responsible for their creation. Had there been less, iere would have been no desire to depart from the simple ottage forms, since knowledge of all else would have been icking; had there been more, both the undesirability and ie unsuitability of such emulation would have been ppreciated.

The ugliness of to-day is not altogether of the same kind. here is no longer quite the same pretentiousness and the ame meretricious ornament that characterized the house f twenty-five to fifty years ago. Instead, there is a poverty f material and construction. The houses then, whatever ieir defects, were for the most part sturdily built, albeit adly planned and conceived. To-day the planning has imroved, but the houses have about them an air of frailty. nd the materials are poor, both in quality and quantity, oth in colour and in texture. This ugliness of the countryde is, of course, not limited to the actual houses. It extends such things as gates and fencing, to the relation of the ouses to each other, and farther afield, to the signs and lvertisements on country shops, and, of course, to wayside oardings. The last, however, it is hoped, will be successlly dealt with by legislation, so that beyond deploring the fact that they have been tolerated so long, we need not concern ourselves with that particular aspect of ugliness. As architects, however, it is impossible not to be acutely sensitive to this other ugliness.

The question we have to consider is: Can anything be done to check this spread of ugliness which threatens in time to devour the whole countryside?—for little by little the old houses and cottages must inevitably pass away, and if they are all to be replaced, as at the moment seems likely, in the present reckless manner, the prospect is indeed a gloomy one. One hopeful sign is the attempt that is being made to bring about a collaboration between the architect and the speculative builder. And the R.I.B.A., by the publication of a special scale of charges for such work, shows that it is alive to its desirability. We do not know to what extent work may, in the future, be carried on in this way; so far we have seen little evidence of it. Until it becomes more general the spread of ugliness is to some extent inevitable.

In towns suggestions have seriously been made for the establishment of committees who may exert some control over building and kindred matters affecting street amenities. In the country, however, such an arrangement is as impossible as it is undesirable. An enlightened landowner may retain some control over the kind of house that is to be erected on his land, he may even go so far as to insist upon the submission of the design to his architect. Such methods, while admittedly here and there preserving the amenities of a particular district, are, however, not fundamental. They are in the nature of an attempt to alleviate suffering by means of temporary opiates while leaving untouched its cause. Permanent improvement can only come from a desire for beauty, both on the part of those who build and those who buy, and from a realization that beauty is not dependent upon cost, being, indeed, often cheaper than ugliness. A penalty for our extended knowledge, one of the many, is that what was once achieved without a conscious effort, now demands that we should make one. We can no longer take the materials that lie around and build thereof a simple house, beautiful in its straightforwardness and unassumingness. Such buildings have a natural beauty which is akin to that of a bird's nest. Now we know more, but our wisdom avails us little in achieving greater or equal beauty. We may plan more healthily—indeed, we do—with thought for sunshine and ventilation, and we may equip our houses so that the work of those who live in them is lessened and their comfort greater. Yet we despoil the landscape.

It would seem that the only way to develop this desire for, and appreciation of, beauty is by the personal influence of those who know. And who is in a better position to exert this than the architect? His work takes him about the country and brings him in contact with all kinds of persons, but particularly with those who build. Let him, therefore, show both by his example and conversation the way by which the countryside may yet be saved and the further spread of ugliness averted.

Notes and Comments

The Bank of England

IN a leading article in "The Times" last week on the designs for the Bank of England, it was stated that there were two alternatives to be considered—either to leave Sir John Soane's design practically untouched or to adopt Mr. Herbert Baker's proposed alterations. Mr. Mervyn Macartney writes to the same paper, however, suggesting that a third course is possible and, to his mind, preferable to changing the whole character of the Bank building. The Soane Trustees, very rightly, laid emphasis on the cardinal point in this composition—namely, its horizontality. Mr. Baker's task, says Mr. Macartney, is to marry his new work to the old. He suggests, therefore, that the architect should keep his big block back 25 ft. from the screen wall and 30 ft. above the present parapet. He also suggests that he should dig down 40 ft. into the soil, and if these two extensions do not provide a sufficiency of accommodation, then let the directors adopt the plan so successfully used by the Post Office and decentralize their business. There must be many activities of the Bank which can be easily managed outside the skirts of the Old Lady of Threadneedle Street, just as the Post Office has branches in Queen Victoria Street for telephones, parcel post at Mount Pleasant, and savings bank at West Kensington. By means of telephones and pneumatic tubes it ought to be possible for many branches of the Bank's work to be carried out as well in Finsbury as at the Bank.

The City Churches

There was published a few days ago an abstract of the measure providing for the union of benefices and disposal of churches within the metropolis which is to come before the National Assembly of the Church of England. The new measure is to "facilitate" the removal of churches whilst at the same time providing safeguards against the zeal of would-be destroyers. Though the measure applies to the metropolis as a whole, there are certain clauses dealing particularly with the City. Thus, before the bishop can appoint a commission to consider any proposal to pull down a City church, he must require a body, to be styled the Metropolitan Benefices Board, to advise him whether, in their opinion, a commission should be appointed. As this Board is to include representatives of such bodies as the Royal Academy, the R.I.B.A., and the Society of Antiquaries, among others, it is unlikely that its advice would be disregarded.

The measure has evidently been drafted with great care and foresight and with a manifest desire to prevent ill-considered action. But however adequate the safeguards, the fact remains that it concedes the principle involved in the destruction of churches. Once it is passed any proposal of the sort must be regarded on its merits; it will no longer avail to protest that the idea is wrong in principle. Public opinion has checked one plan to destroy some of the City churches, but its voice will not avail to the same extent once legislative machinery has been set up to deal with such proposals. The nineteen City churches are by no means out of danger, and it behoves everybody therefore who cares for their preservation to scrutinize very carefully a measure which may "facilitate" their removal.

Wembley

Those who have had an opportunity of seeing Wembley, even in its present skeleton form, are tremendously impressed with its size and scope. From an architectural point of view the exhibition has proved what can be done with steel and concrete. Concrete has been used to a greater extent and in a greater variety of ways at Wembley than in any other collection of buildings in the world. Everything that it has been possible to make in concrete has been made in concrete. Even the flagstaffs are concrete. Alread the visitor can see something of the impressiveness of th two great halls, the Palace of Engineering and the Palace o Industry, which stand on either side of the central avenue The actual buildings, of concrete and steel, like the rest o the exhibition, are practically complete. The Palace o Engineering, with its gross area of just under half a millio square feet and its net area for exhibits of 325,000 sq. ft. is probably the largest concrete building in the world One might despair of its ever being filled with exhibits wer it not for the fact that most of the available space ha already been allocated and that the different sections of th engineering industry are competing with each other t make the most attractive display. The Palace of Industry which is not quite so large—covering a mere eight acres— is in a more forward state than its bigger brother, and it i possible to guess what imposing displays can be made b the industries, which are to arrange their own exhibits.

Peace in the Building Trade

The award, made by Sir Hugh Fraser, as arbitrator o the question of working hours in the building industry was issued last evening by the National Allied Buildin Trades Employers and the National Federation of Buil ing Trades Operatives, the parties to the arbitratio It is rarely that an arbitrator succeeds in pleasing bot parties, but in this case the award appears to hav been welcomed by both masters and men. Mr. Erne J. Brown, director of the London Master Builder Association, said that employers generally would welcom the award, owing chiefly to the fact that it had broken th continuity of the forty-four hour week, which had been suc a fatal hindrance to business in the six light summer month And he thought that the award would be the end of th trouble between the employers and the operatives. Indee the operatives' federation, said Mr. Brown, had alwa been just as loyal in the observance of the terms and co ditions of the arbitrator's award as the employers, a where sectional trouble had arisen over a question of wage the operatives' federation had studiously insisted upon t terms of the award being adhered to, and had given support to sectional demands. He saw no reason at all w the same condition of things should not result from t award now before them. And so, perhaps, we can now lo forward to a long peace, and perhaps the building tra will begin to extend itself in earnest, and perhaps hous will be built, and prices come down. If the basis of worki conditions has been settled to the satisfaction of all parti it is good news indeed, but pity it is that it should have tak so long.

Any Way but the Right Way

At the last meeting of the Scarborough Town Coun reference was made to the provision of a public hall a ball-room and other premises (including a room for t accommodation of the late Col. Harrison's collection the present site of the Olympia, and land on the cliff adjoi ing forming part of the St. Nicholas Gardens. Alderm Sir Meredith Whittaker took exception to the borou engineer preparing sketch plans of the proposal a sending them to theMinistry of Health with a view ascertaining whether a loan would be sanctioned. moved an amendment that the minutes be deferr until the sketch plans had been submitted to a committ of the whole Council with an estimate of the cost. Alderm Whittaker intimated that the scheme might cost £150,0 Of course, none of the councillors seems to have thoug of the proper thing—that the sum they were prepared spend should be decided upon, and a competition be th promoted so that architects, rather than the borou engineer, could show what they can do.

MONTHLY CAUSERIE

Joking Apart

Praise where Praise is due

MR. HAROLD SPEED and Mr. W. W. Scott-Moncrieff have both, with different weapons, recently assailed the vitals of the commercial man : Mr. Speed lets light into him from many irections with a rapier, while Mr. Scott-Moncrieff loads a un with philosophic buck-shot and shoots him dead. he commercial man never defends himself against attacks f this kind : perhaps he prefers to let well alone, for we now that his reticence is not due to native modesty since ord Leverhulme has told us that a man who engages in he open field of commercial competition must first fling side his modesty. Whatever the reason may be, it is only ir that the commercial man should be given his due. either of the above-named speakers paid tribute to the any benefits the commercial man bestows upon the community, but the debt is one which ought not to be fortten, and I regret that, in an article of the limits of this, ly scant justice can be done to the subject.

The field is such a large one that it is difficult to know hich part of it to invade, but I will begin with that not important matter, the health of the people. The benefits stowed on mankind in this cause by commerce are almost yond saying. The commercial man, for instance, has ven us a soap "which prevents smallpox, measles, and arlet fever," and a mouth wash which guards us against l infections ; but these are small matters for there is no sease from cancer and consumption to chilblains and ad-colds for which commerce does not supply a dozen rtain remedies. No sooner do the doctors discover a w disease than commerce steps forward with a positive re for it : Pyorrhœa has no terrors for the man who knows here to buy his tooth-powder. In the aggregate it may said that commercial enterprise in pharmacy offers an most complete guarantee against death from any other uses than accident or old age ; commerce, too, freely takes on its shoulders a responsibility which doctors evade : *guarantees* the efficacy of its remedies. It is, in fact, aracteristic of commerce to guarantee everything from hair-wash to a gold-mine, so that the word "guarantee" s during the last fifty years taken a new lease of life and me to its appointed kingdom at last. The enormous advange to the community of being able to lay out its money ly on goods that are absolutely guaranteed, is entirely due the generosity and candour of the commercial man. this he displays a sense of what is fit and becoming which quite lacking in the craftsman, as Mr. Speed, in perfect tice, might perhaps have mentioned. Unless pressed to do the craftsman will proffer no declaration that his reredos genuine oak and actually carved by hand, nor does he n print in his correspondence-headings a general guaree of authenticity of materials and workmanship.

Much might be said in praise of the enterprise and intiveness with which the commercial man not only meets ry ambition of luxury and display, but anticipates the dest dreams of the public. Beautiful diamonds and rls, indistinguishable from the products of the volcano l the oyster ; silks and satins that surpass the spinnings n the cocoon, and furs of the rarest descriptions duly ranteed to the full limits allowed by law, are placed hin the reach of nearly all of us. Not only, too, does commercial man enable us to make custards and omelets hout breaking eggs, but he waits upon our sentiments whims with a devoted attentiveness. Knowing that re is a demand for new-laid eggs which cannot readily met by this country, he imports them from Denmark elsewhere ; and he meets the unreasoned prejudice n which Egyptian and Chinese eggs are viewed by mixing n with the "new-laid eggs" so that they may be eaten n relish or excused as accidents.

architects the efforts of the commercial man to brighten and beautify country scenes and cities alike has special significance. By his devices the approach from the station into the heart of Oxford no longer lies between bleak house-fronts and enclosure walls, but becomes a gaily-coloured avenue of entrancing pictorial designs filling the mind with a succession of varied thoughts. Similar displays have been arranged as a foil to the more august splendour of our architectural monuments, and St. Paul's, our greatest cathedral, is appropriately set-off by our largest advertisements. The monotony of our fields and hedgerows is relieved by gaily-varied decorations whose perennial brilliancy is secured by enamelling on iron plates. Even the vast hemisphere of the heavens it is not beyond the scope of commerce to embellish, for we are promised that "sky-writing" is soon to be put on a sound business footing, while upon the bleak skies of midnight, he has already laid a brilliance that effaces the stars and puts the moon to shame. No present poet who should stand upon Westminster Bridge will be depressed with the austere thoughts that colour Wordsworth's sonnet, for in all directions he will see parti-coloured lights flash in untiring splendour, while, with the glory of a hundred comets, moon-white beams strike upwards to the zenith, reminding him that to-morrow's sun will rise on a phenomenal bargain sale of sock-suspenders and men's braces.

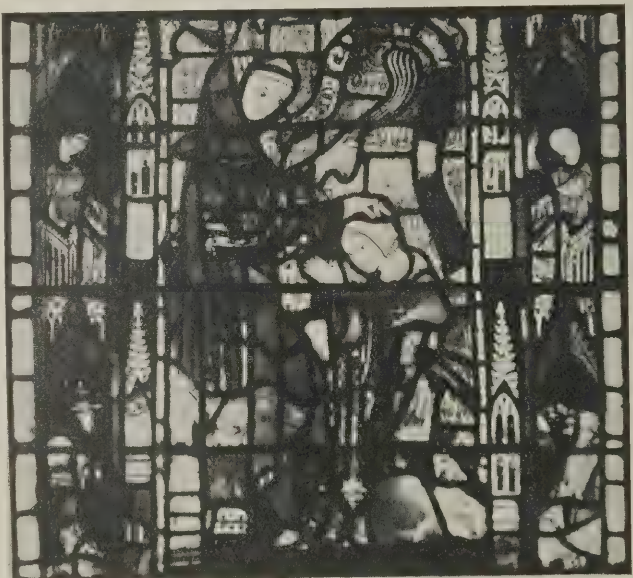
For all this and much more we have to thank the commercial man : but do we thank him ? On the contrary, the public appears to receive his most ecstatic adventures in its service with a cold scepticism. It is pathetic, if not tragical, to observe the efforts made to command attention and the scant results that often attend these efforts. For instance, the explicit statement that a certain soap "prevents smallpox, measles, and scarlet fever" has been vitrified in imperishable enamel on iron plates widely displayed, and it is difficult to say what more could be done to familiarize the public with the fact ; yet, during the recent smallpox scare, not only was this simple safeguard against an epidemic ignored, but no proposal was ever made to use it as an alternative to vaccination. This treatment of the commercial man needs explanation ; that he feels it acutely is evident. If he has port to sell, for instance, he is at his wits' end to know how to acquaint the public. He appears to think that if he states the simple fact the public will suppose he is going to palm off on them methylated spirit strained through black-currant jam or some other decoction ; he therefore goes to enormous trouble to explain that the port he offers is pure unadulterated wine, guaranteed to be made from actual bona fide grapes grown in Portugal and which has paid full duty as genuine wine. So, too, if he wishes to clear off old stock from his shop he seems to think—we may well ask why ?—that the public will suppose he is trying to cheat them with a fraudulent pretence of a sale, and he accordingly insists in every possible way that it is a genuine bona fide sale offering real bargains, and that cheap stock has not been bought and mixed with the old ; and he often goes to the labour of writing tickets in which one price replaces a higher, which has in turn replaced one higher still, so that the public may visualize the successive spasms of agonized reluctance with which he has brought himself to sacrifice his property. There is much that is puzzling in these circumstances, and much, no doubt, upon which the commercial man could enlighten us. For instance, I can no more understand the difference between a gold watch and a genuine gold watch ; leather and real leather ; English cherries and bona fide English cherries, than I can understand the difference between a lighthouse and a genuine lighthouse ; a plough and a real plough, and a dog and a bona fide dog. In this I have to admit that the commercial man has the advantage of me.

KARSHISH.

The York School of Glass Painting

By JOHN A. KNOWLES

GLASS PAINTING has been practised at York from a very early period, and in the Minster is the earliest panel of painted glass in England. The subject is Christ in Glory from a Jesse Tree, and it is so extraordinarily like similar panels at St. Denys and Chartres that it is impossible to believe otherwise than that all three were derived from a common source, but whether English or Continental it is difficult to say. The Jesse at Chartres dates about the year 1145, and when the Abbot Suger filled the windows of his abbey of St. Denys with glass between the years 1142 and 1151, we are told he fetched "strangers of divers nations" to do the work. The eminent authority on glass, the late Mr. N. H. J. Westlake, dated the York Jesse anterior to 1170, and it certainly shows more refinement, and presumably, therefore, is of later date than the others. It is generally supposed to have formed part of one of the windows of Archbishop Roger's choir, built between the years 1154 and 1181. But it might be argued, with some show of probability, that an even earlier date than 1170 might be assigned to this panel and that it might even have come from Thomas of Bayeux's church, pulled down in 1154. There is, at any rate, sufficient evidence to show that the connection between French and English work in glass at that time was close, and that the York panel is, as Westlake pointed out, "the earliest piece of painted glass in England. Unfortunately, it is placed too far beyond the reach of the ordinary student for examination, and it would be an advantage, for the purposes of study, if a more convenient, and yet secure, position could be found for it." Although this advice was given over forty years ago, the panel still remains in one of the most exposed positions in the north clerestory of the nave.



PENANCERS' WINDOW, THE NAVE, YORK MINSTER: A PENANCER INFLICTING PUNISHMENT.

The two principal centres of mediæval glass painting were London and York. Roughly speaking, London painted most of the windows for the south and York for the north. As regards York, we have several records of York sending windows to Durham, Finchale Priory and elsewhere; Ripon Minster sent men to York, "inquirying for glass." But though London and York designed and painted windows they did not make glass, and practically all the coloured glass and most of the white had to be imported from the Continent.

As Prof. E. S. Prior has pointed out, the mediæval architect, in planning his cathedral, specially kept in view the effective display of stained glass so as to get the utmost effect of colour in his interior. Unless special provision is made for this, much of the ultimate effect in the interior is lost, for the windows farthest away from the eye are hid owing to the thickness of the walls. To overcome this the architect fixed those windows which were farthest away on the inner face of the wall and so brought all the glass into view. This can easily be seen at York, where the clerestory windows of the Ladye Chapel have been brought inwards as much as possible, and that this is no mere accident is shown by the fact that this portion of the choir was the first to be built.

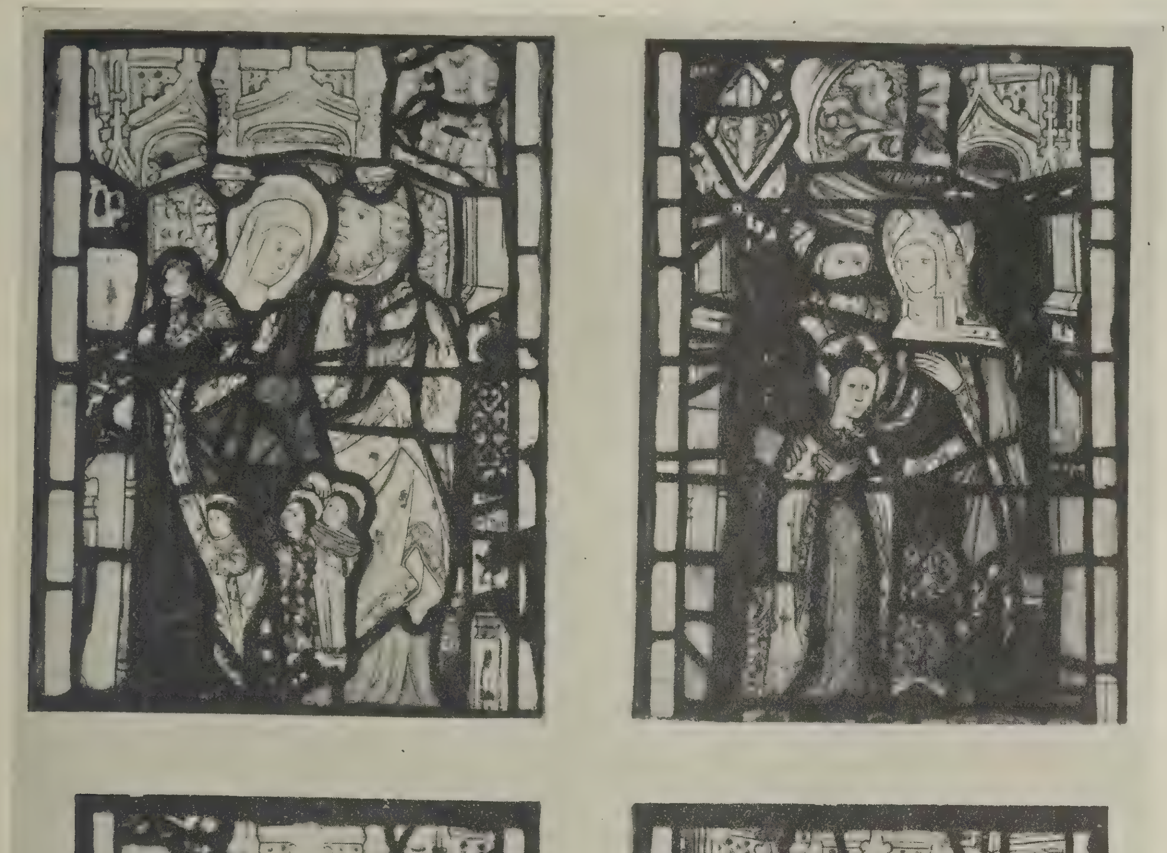
Not only this, but, probably in order to get in an east window higher than would ordinarily be possible, the roc has been made to slope upwards at the end, though thi dodge cannot be seen by the spectator underneath; whils at Gloucester—whose east window competes with York fo the distinction of being the largest east window in England– in order to get in a window wider than the Cathedral itsel the side walls of the last bay have been sloped outward So far from the popular idea that the mediæval artists ha too much regard for artistic truth to do such things, th reverse is the case. Examples innumerable might be quotec but one will suffice. The groining of the roof at York ha been carried up so far in stone and in order to save expens continued in wood painted to match.

No doubt everyone at some time or other has wondere how such large sums as would be required to pay fo buildings and stained glass were raised. Of the mo obvious ways it will be unnecessary to speak, but of th others I will briefly refer to one, viz., the Penancers Pardoners. There were twelve of these at York and the duty was to fix the amount and duration of the penance be inflicted in such cases as were reserved for the decisic of the ordinary. Chaucer ga these men a fearful characte and that his opinion of the was not exaggerated, and th they formed an obvious obje for jests of the satirist, the is ample documentary eviden to show. In the nave of t Minster there is a windc evidently paid for by the Pe ancers, which shows in o light a Pardoner chastising man and in another a wom —probably his partner in si whilst in the border maso carve stone and ecclesiasti pour money out of bags, sho ing to what end the procee of their activities were applie The Fabric Rolls show that one year (1421) a sum eq to more than a thousand poun of our money was derived fr this source, and the will of o of these gentlemen has be preserved, which shows that had prospered in this wor

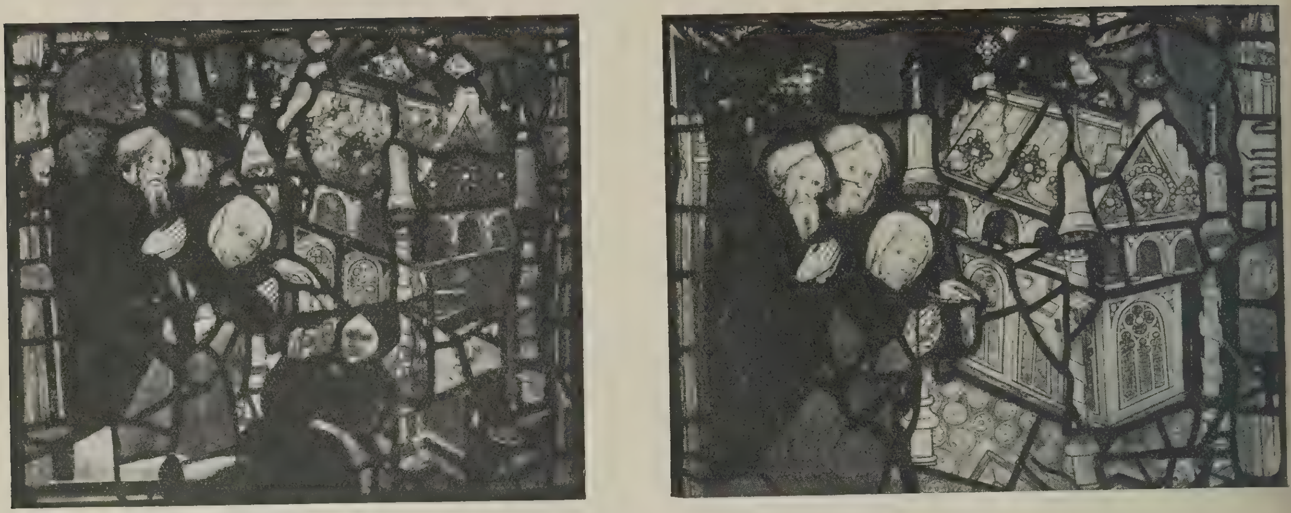
A few years ago, and even to a large extent at the prese day, the opinion was very generally held that attached cathedrals there was a stained-glass department wh windows were designed and painted. The late De Purey-Cust, for example, stated this not once but seve times, and the same theory has been more recently ela rated by an eminent American architect, Ralph Ada Cram, in his "Ministry of Art," and by Leader Scott, in "Cathedral Builders." As far as the great east window York is concerned, this is absolutely true, this glorious w being designed and painted in the Dean and Chapter's o shop with glass and lead bought, and labour specially hi for the purpose. Let us give the ecclesiastical authorit of that day every credit and all praise for the result.

But apart from the great east window there is evidence that any of the others were done under t system. Whençe, then, comes the foundation for the gene belief? From the building accounts; there we see items payments for lead, glass, and materials for glass painti The glaziers' shop is mentioned and the kiln for firing gl whilst there are items of payment of wages innumera But the actual portent of a mediæval document cannot eaned from a mere perusal of the words, and when we amine the rolls item by item we see that in almost every se where the nature of the work done is mentioned, it is ther "mending" or "repairing," and that even this was ne by men who were in business in the city. But six ms only deal with glass *painting* as distinct from *glazing*, two of these relate to the year 1577. The others, in , seem to be a transcript of Matthew Petty's bill for ting forty-eight panels all alike with the arms of the n and Chapter in the great Lantern Tower.

e are also liable to get an entirely erroneous notion from ccount rolls of what manner of men the men who are set down as receiving wages for working at the Minster were. We read, for example, of "John Petty," glazier, working in the fabric for seventy-seven days between the feasts of the Purification and All Saints, and being paid 43s. 6d. wages, and Thomas Drawswerd, being paid 32s. 11d. for painting the canopy carried over or above the feretory of St. William with gold and colours. From these items we might conclude that Petty and Drawswerd were humble individuals. But it is very doubtful whether either Petty or Drawswerd ever worked, in the ordinary sense of the word, at the Minster at all. In point of fact, both of them were as important personages as the Dean himself, Sir John



HOLY TRINITY, GOODRAMGATE: MARRIED SAINTS AND THEIR CHILDREN.



ST. WILLIAM WINDOW, YORK

One cartoon (with slight alterations) made to do for two different subjects. Panel 68 (left), Boy recovered at the Shrine. Panel 100 (right), Leprous Woman at the Shrine. The child and the mittens of the mother in panel 68 have been eliminated in panel 100, and spots painted on the face and hands so as to make her into a woman with leprosy. The man in the background now points at nothing at all.

Petty, to give him the title by which he was afterwards known, was a very big man indeed, and Thomas Drawswerd was no less a personage.

The work of the York school was distinct from that of others in material, design, and choice of subject, and local fashions in costume and armour are frequent. A favourite line of subjects in York glass showed sanctified persons who were united in holy wedlock, surrounded by their children. These were probably intended as a sly dig at the celibacy of the religious orders. The laity, who saw the frequent open scandal of the lives of the friars, were asking themselves, like Chaucer's much-married wife of Bath, wherein lay the special sanctity of celibacy, and what was the biblical authority for it.

> "Wher can ye seen in any maner age
> That highe God defended (i.e., prohibited) marriage
> By express word? I pray you telleth me,
> Or wher commanded he virginitee?"

Jokes and skits also were frequent. Across the bottom of one of the windows of the nave are represented a hunting scene, a fox running off with the goose whilst the good wife throws the distaff after it and the husband saddles the horse to give chase, and the funeral of a monkey. The fox and the goose story is in Chaucer's "Nonnes Preestes Tale," but the designer of the window did not go to Chaucer for his subject as the window was executed thirty years or more before the "Canterbury Tales" were written. The monkey's funeral was probably intended as a skit on the Yorkshire love of display at funerals, which even nowadays has not entirely died out. The corpse is preceded to the grave by a monkey bellringer and another bearing the processional cross. A cock and a fox conduct the service at the graveside. In the house of mourning a neighbour endeavours to console the monkey's widow, who wipes a tear from her eye, whilst another neighbour, or perhaps the undertaker, unable to simulate a sorrow he does not feel, tucks into the cake and wine with gusto.

In York work members of noble families are frequently shown wearing on their heads chaplets of feathers or leaves, as in the St. William window, and in St. Denys's Church. The frequency of this feature in the east window of Great Malvern Priory is one of the reasons for believing that that window also is York work. Apart from stained glass only one other example, as far as I know, of these chaplets being worn is known, this being on a brass, also in Yorkshire, of Sir Thomas de St. Quentin, *c.* 1420, at Harpham. In armour also local variations occur. Thus in the figure of St. George in Holy Trinity, Goodramgate, the mentonniere or chin-plate is well represented, and this detail does no occur elsewhere, as Dr. Gaynor informs me, except o three brasses, all of which are in Yorkshire.

The above detail of armour seems to have been derived like many more similar ones, from the Continent. York artists, indeed, seem to have obtained much of their in spiration and many ideas of treatment from where they obtained the glass, viz., the Rhenish provinces. A favourit scheme for a window was to represent the patron saints o various guilds. The three most popular guilds in York were those of Corpus Christi, St. Christopher, and St George. The Corpus Christi procession and the pageant on the following day was one of the big events of the yea in York life. Another popular holiday was that in honou of St. Christopher and St. George, when a gigantic figur of the former was carried through the streets, and a ma in armour on horseback acted St. George and rode throug the streets preceded by the waits and followed by th dragon made of canvas distended by hoops and borne b porters, whilst five hundred of the citizens bore shield with the arms of the saint done in silver paper and ve milion. This explains why one frequently sees in Yor windows figures of St. Christopher and St. George on eithe hand. In Holy Trinity, Goodramgate, we have these tw with a Corpus Christi subject in the middle. The Corpu Christi Guild was the exclusive guild to which the merchan and many of the aristocracy and the higher clergy belonged It was a very favourite subject at York, where are to seen four examples, two of them replicas of one anothe The only other example known in England of native work manship is at Winchester.

Suns are very common in York glass, and have un doubtedly political reference. They appear, however, lon before the time of Edward IV, whose badge it was whe men exclaimed :—

> "Now is the winter of our discontent
> Made glorious summer by this sun of York."

The sun was also the badge of Richard II, who was a goo friend to the city, and made it a county by itself, gave th chief magistrate the title of Lord Mayor, presented it wi a sword and with a cap of maintenance, the one to carried upright and the other to be worn in the presence all dignitaries, ecclesiastical and civil, save only th presence of the king, and even in the precincts of the ve Minster itself, a sight which must have been gall and worm wood to the ecclesiastical authorities. Another York

dge frequently to be seen in windows, which is mentioned
th the sun of York by Shakespeare, is the eagle :—

> "If thou then be that kingly eagle's bird
> Show thy descent by gazing 'gainst the sun."

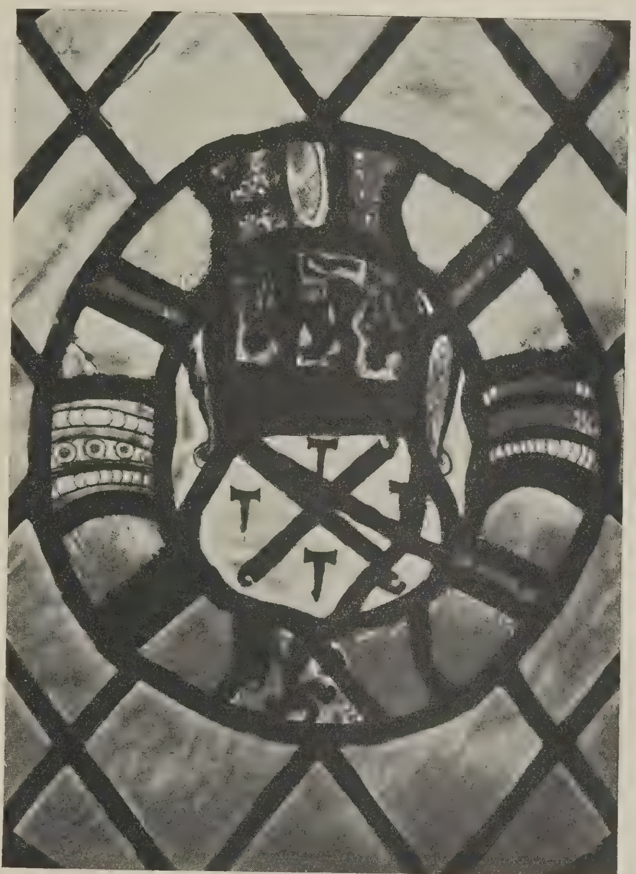
hile still another Yorkist badge was the lion sitting on its
unches with its tail cowed. These lions and eagles are very
mmon. They are to be seen, for example, in the window
ently refixed in the south aisle of the Ladye Chapel.
ıfortunately this window has been put back with the
nels in the same state of disarrangement as that in which
ey were left by some former glazier or plumber, with the
ult that two panels exactly alike are to be seen one on the
of another, and the feet of the saints below are placed
h above their heads at the top of the window! There
a remarkably close relationship between work at York
d Winchester, or more exactly Oxford and Winchester,
most of the work in the latter city was executed at
ford.

In common with all other schools of glass painting York
n practised extreme econ-
y in the making of new
wings. Even in the St.
lliam window, which is un-
ubtedly one of the greatest
sterpieces ever done any-
ere in glass painting, the
mber of times in which
ıres, groups, or whole sub-
ts have been used over again
surprising. Thus panel 68
resents a mother who has
ught her sick child and
pped him up against the
ine of the saint whilst she
ys for his recovery. A
ctator points with fore-
ger at the child. By elimi-
ing the figure of the child
l painting spots all over
woman's face and hands,
same drawing has been
de to represent a leprous
nan recovered at the shrine,
the spectator in back-
und now points at nothing
ll. Similarly, by elimina-
the figure of a spectator
drawing of a hump-backed
cured at the shrine has
n used for another panel
esenting the recovery of a
wned child.

rawings of single figures
ı as bishops and saints
, after being variously
ured so as to disguise
fact that they were all
, used many times. Thus St. Thomas of Can-
ury, in the Parker window, becomes St. Chad in the
veden window next to it, and someone else at Bolton
y Church; and St. William of York in the Parker win-
becomes St. Nicholas in the Wolveden one, and an
bishop at Bolton Percy, and so on. If this sort of thing
rred in windows placed fairly near the eye we shall be
ared for anything in the clerestory, and whilst it would
langerous to express a definite opinion without the
st scrutiny, as far as can be judged from the floor, the
westernmost clerestory windows of the choir are
tically identical, and I think it will be found that with
or two changes these consist not of eight distinct figure
ns, but of one design repeated eight times.

though the glass-painters of mediæval times did not
their works, I think, provided large-scale photographs
available for study, that the authorship of many of
could be determined with some degree of certainty,
here is no school of glass painting elsewhere where so
much is known about the artists themselves. In later times the glass-painters had a method of signing their works which is little known. This was done by impressing their names on the lead. This was made possible by having the wheels of the lead-vice, which squeezes the square bar of lead into a section resembling the letter H, instead of being toothed or milled in order to grip the lead, engraved with the name of the glass-painter. A piece of lead used by the father of the famous Henry Gyles (1645–1709), for example, bore the inscription "Edmond Giles of Yorke 1665."

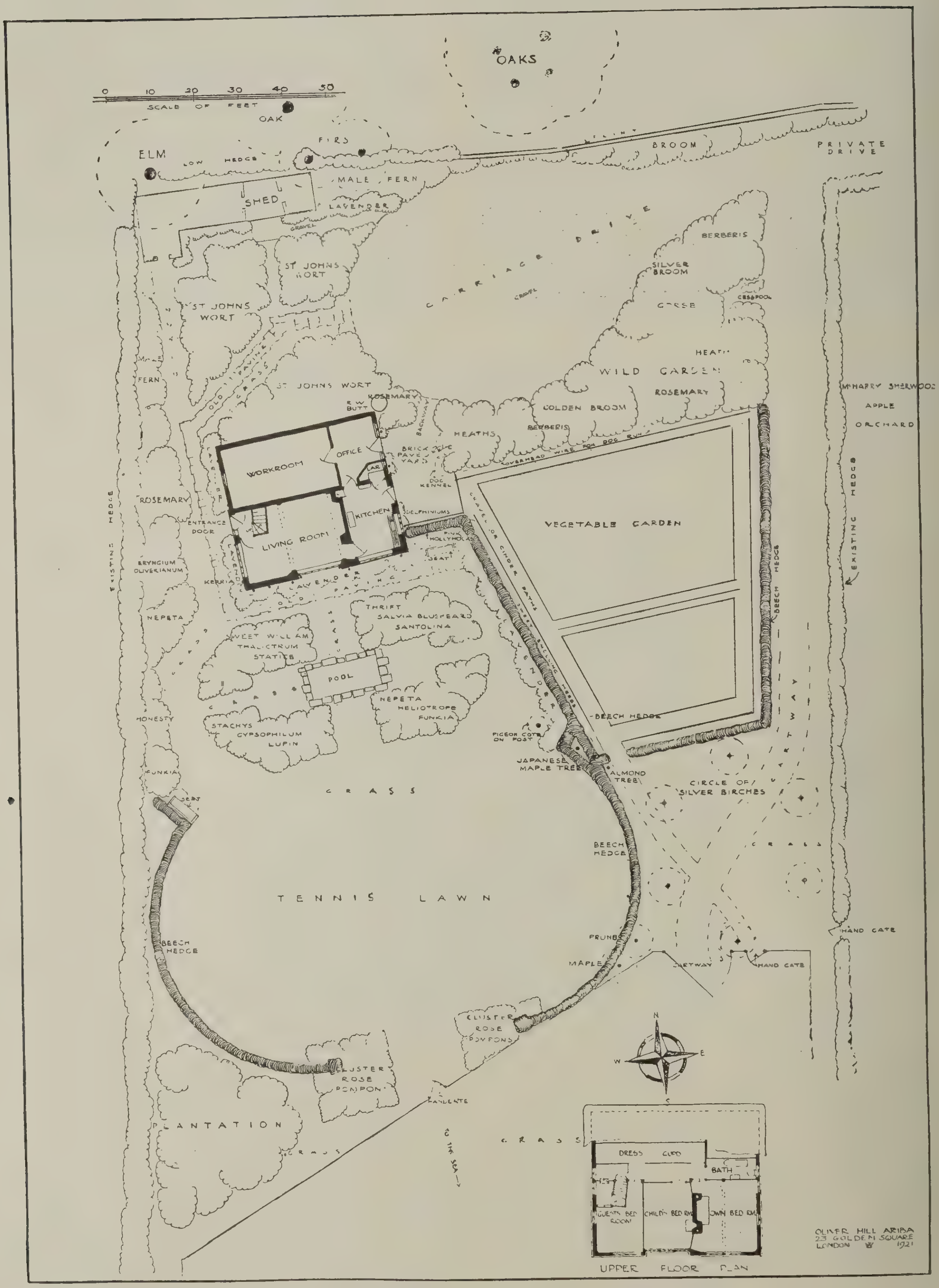
York glass-painters were at an early date incorporated into a craft guild, not so much perhaps because they would as because they must. Two sets of ordinances have been preserved, both of which make it perfectly plain that these repressive regulations were not drawn up by the craft but by the city. We cannot imagine any association of manufacturers and capitalists voluntarily throwing open their workshops for inspection and offering to fine one another in case of fraud or bad workmanship, the fine to go for the benefit of the city. So far from the mediæval craftsman taking such a pride in his job that he put his best work where no one would see it, the reverse is the case. There was as much scamping as there is to-day and probably more, and that glass-painters were no exception to the rule is shown by the minute stipulations in contracts that the paint should be fired in the kiln and not merely mixed with oil.



ARMS OF THE GLASS-PAINTERS' GUILD IN TRACERY OF EAST WINDOW, NORTH AISLE, ST. HELEN'S CHURCH.

Like all the guilds the glass-painters adopted an heraldic device derived from the tools used in their trade which they used as their arms. These seem to have been borrowed without any change or difference from those of the London Glaziers' Company—and consist of two grozing irons (used for chipping the glass to shape) and four glazing nails. They are to be seen in glass in the tracery of the window over the altar of their craft guild chapel in St. Helen's. These arms, although of late seventeenth century date, probably replace an earlier shield, and were possibly a labour of love on the part of Gyles the glass-painter, for at his time the guild no longer existed as he was the sole representative of the craft in York. In the St. Peter in Prison subject in the south aisle of the choir of the Minster a fifteenth-century glass-painter has jokingly painted the device of his craft on the banner or weather vane of Peter's Prison. There might be a subtle skit or reference intended here, for the Dean and Chapter's prison was known as Peter Prison, and the glass-painters in the direct employ of the Chapter who lived within the close, which was close barred and shut off from the city each night, might possibly be regarded as prisoners by the freeman glass-painters outside. We at any rate know that the Cathedral glass-painters were not allowed to enjoy the privileges of those who were citizens, from the fact that John Thornton, in spite of his skill and eminence in his craft, was not made a freeman of the city until two years after the great east window was finished.

[The foregoing extracts are from a paper read before a meeting of the Archæological Association at York.]



PRINSTED FARMHOUSE, WEST SUSSEX: GARDEN PLAN.

OLIVER HILL, A.R.I.B.A., ARCHITECT.

(See also following pages.)

Oliver Hill, A.R.I.B.A., Architect

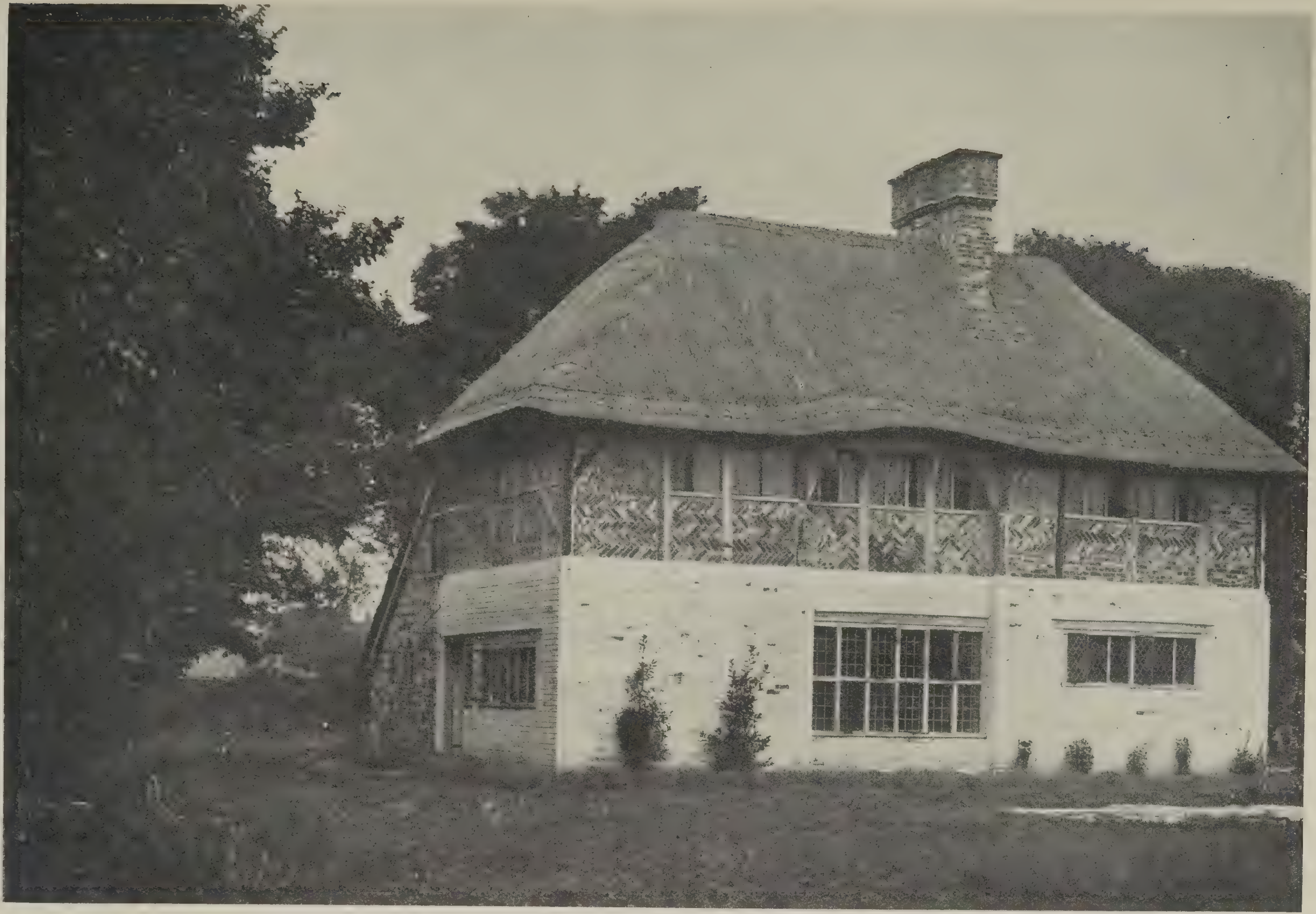


Photo: F. R. Yerbury.

This house was recently erected for an invalided officer working his own small farm in West Sussex. The traditional picturesque manner was specially desired. The materials are brick cavity walls to the ground floor with oak half-timbering and brick nogging over. The ground floor is laid with wide elm boards, and the doors are simply constructed of elm cross boarding. Elm was also used for the staircase.

THE LIBRARY
OF THE
UNIVERSITY OF ILLINOIS

Modern Domestic Architecture. 54.—Prinsted Farmhouse, West Sussex

Oliver Hill, A.R.I.B.A., Architect

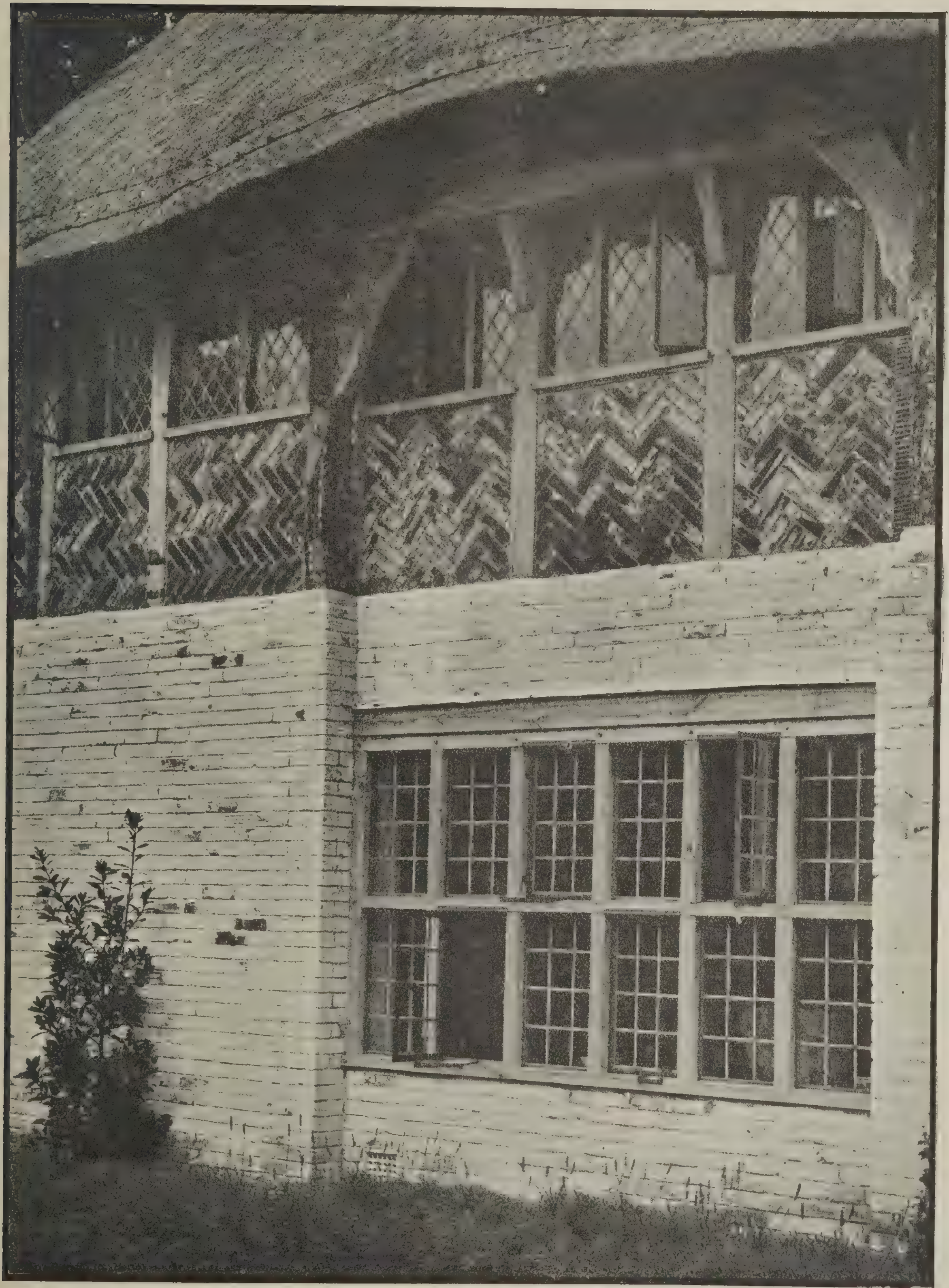
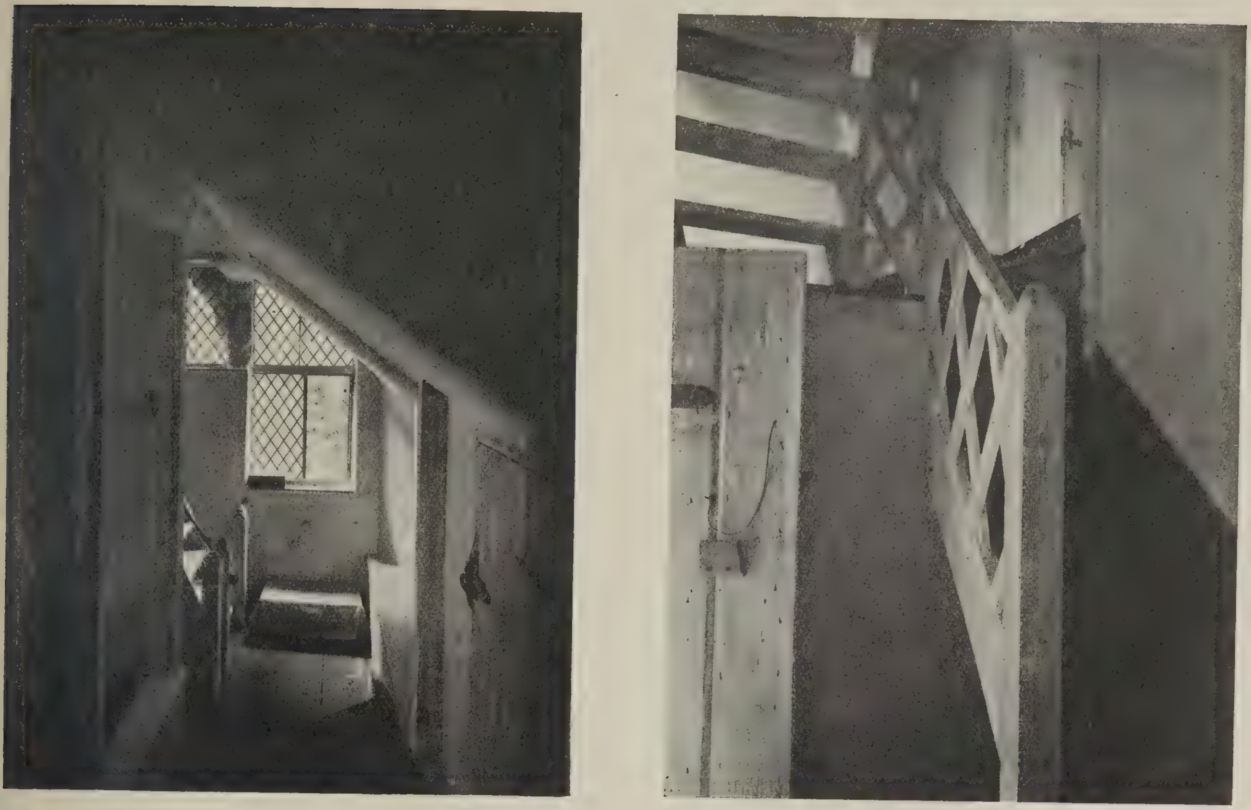


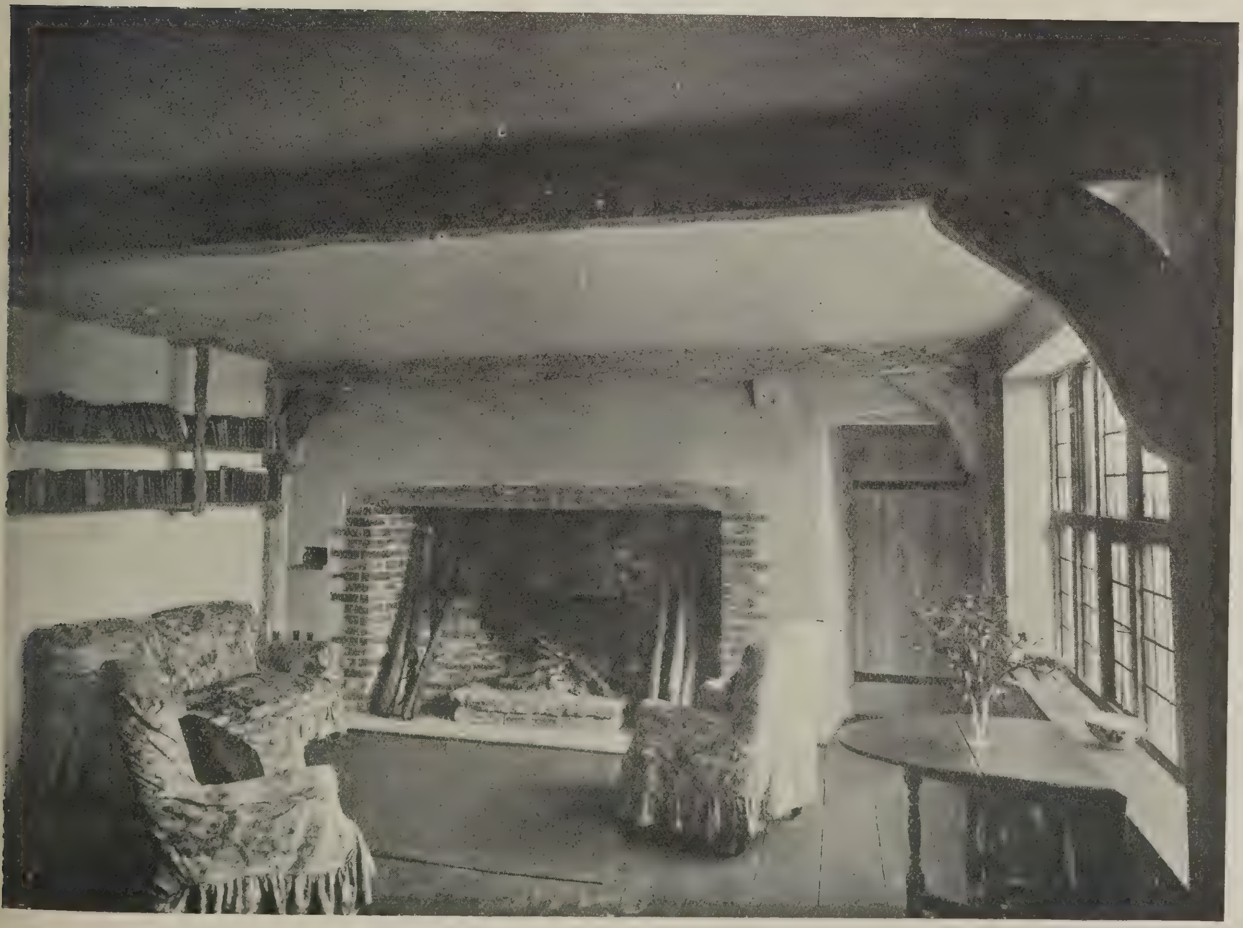
Photo: F. R. Yerbury.

Oak half-timbering with herring-bone brick nogging has here been used with delightful effect.

THE LIBRARY
OF THE
UNIVERSITY OF ILLINOIS



TWO VIEWS OF THE STAIRCASE.



THE LIVING-ROOM.

Photos: F. R. Yerbury.

PRINSTED FARMHOUSE, WEST SUSSEX. OLIVER HILL, A.R.I.B.A., ARCHITECT.

Labour Saving in the Home[*]

THE recent enthusiasm for domestic labour saving, covering as it does every activity in the routine of family life, is an encouraging feature of present-day philanthropy, using the word in its proper and broadest sense. The monstrous drudgery to which a large majority of women, chiefly wives and mothers, have had to submit, is neither natural nor unavoidable, and the toll on the national health thus levied constitutes a serious racial loss. The lot of the working man's wife must always be exacting, but it is possible to reduce the toil and discomfort, and in so doing to effect a reaction on the home that cannot fail to have a corresponding influence upon the life and development of the community.

In dealing with so wide a field this Sub-Committee has wisely limited itself to a broad review, paying particular attention to heating and cooking, these being the most urgent of the problems with which we are faced. Advantage has been taken of the time that has elapsed since the Government schemes were completed, and visits have been paid to ascertain the views of the tenants. While we can hardly hope to arrive at any finality, we ought now to be in a position to consolidate a definite advance, not only in amenities and fittings, but in the planning and design of the house, which, as we are reminded, is itself the chief piece of labour-saving apparatus. The reports of the visits, incorporated in an appendix at the end, go to prove that the secret of labour saving is to be found in the elimination of the need for work rather than in the provision of "labour-saving devices." The reaction against these has arrived, and this is hardly astonishing since many such fidgety inventions create far more labour than they save, while some of them apparently derive their origin from the inspiration of Mr. Heath Robinson. The first essential in effective labour saving is clearly that the house should be thoughtfully planned to avoid unnecessary walking from point to point in carrying out the daily routine, but we need not call this "motion study," a term that is un-English and peculiarly irritating. To produce such a plan it is essential to know intimately the work that has to be done, and the order of doing it. Next, the housewife must be provided with adequate hot water and with the most suitable apparatus for cooking and heating generally. This is a problem of extraordinary complexity; one to which there is probably no definite answer, as so much depends upon the human factor and upon the methods of the individual.

We are all familiar with the scientist who proves conclusively that something is impossible, although if he were not blinded by his formulæ he would see it happening in all directions. We get an example of this phenomenon in scientific recommendations as to separating the functions of the kitchen range. It is possible to show that in ideal circumstances or on a large scale it is economical to use separate fires for the oven, the hot plate, and the hot water supply, since any fire that attempts to perform all three functions is a jack-of-all-trades and master of none. If the ordinary man who had carried out no experiments on the point were asked his opinion, he would say without hesitation that one fire must clearly be cheaper than three; but in this report we find stress laid on laboratory experiments that go to prove the contrary, and on page 7 we get the impression that functions should as far as possible be separated. Now, while it may be desirable to separate them for other reasons, it will certainly not be found so where solid fuel is used, either from the point of economy or labour saving. This is in effect admitted in the Fuel Research Board's Report No. 4, dealing with Mr. A. H. Barker's tests of ranges and cooking appliances. After leading us perhaps to expect the opposite verdict w
are frankly told, on page 25, that "it cannot be taken
proved, even in respect of economy only, that separation
function necessarily leads to economy in fuel in practic
use. It may well be that, although on a prolonged te
the separate efficiencies of specially designed applianc
would be much greater than of the corresponding parts of
composite one, yet as actually used in practice more fu
might in fact be used in the separate than in the composi
one, . . . apart altogether from losses due to waste or carele
management." This is one of those occasions whe
sufficiently solid foundations are not available for t
erection of a trustworthy scientific structure; there a
too many unknowns and variables, and we are safer, for t
present at least, in making one fire combine functions whe
circumstances do not dictate otherwise. In admitti
that a given quantity of coal will, in cottage practice,
more work used in one fire properly designed for thr
purposes than in three fires each designed for one purpo
we are on fairly safe ground, and it is important that
should be clear about this, since it gives us a definite starti
point on which to base further practical investigation
but if we assume the opposite the issue becomes so mu
confused between theory and practice that we cannot
on at all.

The stock argument in favour of the composite range
the living-room is that it keeps the living-room warm
winter, whereas, if the range is in the scullery, either
separate fire has to be provided in the living-room, at p
hibitive expense, or the family must live in the sculle
since it is the only warm room in the house. Whe
however, the scullery cooking appliance is not a solid f
auxiliary but a gas cooker, the position is entirely differe
and the report under consideration advocates a parl
grate in the living-room, fitted with a back boiler, and a
cooker in the scullery. We can assert positively that,
the absence of cheap electricity, gas provides the soluti
to the cooking problem, but a word of warning should
coupled with any recommendation to provide gas ov
with flues; if they are so fitted the oven flue should deli
into an unsealed hood to avoid the possibility of do
draughts that may put the gas out and cause danger
explosions. The ideal treatment for a gas cooker is
cover it with an ample canopy to carry off not only
products of combustion but the steam and smell of cook
as well; the disadvantage is of course the expense on
adjunct that can hardly be classed as a necessity, and t
is the explanation of its absence in Government houses

The reports of visits paid to various housing esta
make instructive and perhaps depressing reading, and
can only hope that the follies that confronted the visitor
every turn are not of universal occurrence.

Labour saving is intimately connected with smoke ab
ment, since the hours of labour wasted annually on
necessary washing due to the soot in the air run into
lossal figures. One could wish, therefore, that raw coal w
not here treated quite so much as the natural and pr
domestic fuel. While it may be necessary for many y
to continue its use, we must never relax our efforts to esc
from this bondage, and we must realize that labour sa
on a comprehensive scale is not consistent with the c
bustion of raw coal in the domestic grate.

The activities of such bodies as the Garden Cities
Town Planning Association will be more than ever requ
in the immediate future, and in no direction is a hel
hand more necessary than in encouraging thought
foresight in the provision of houses and fittings gene
of a type that will lighten the almost intolerable bu
that falls upon the housewife.

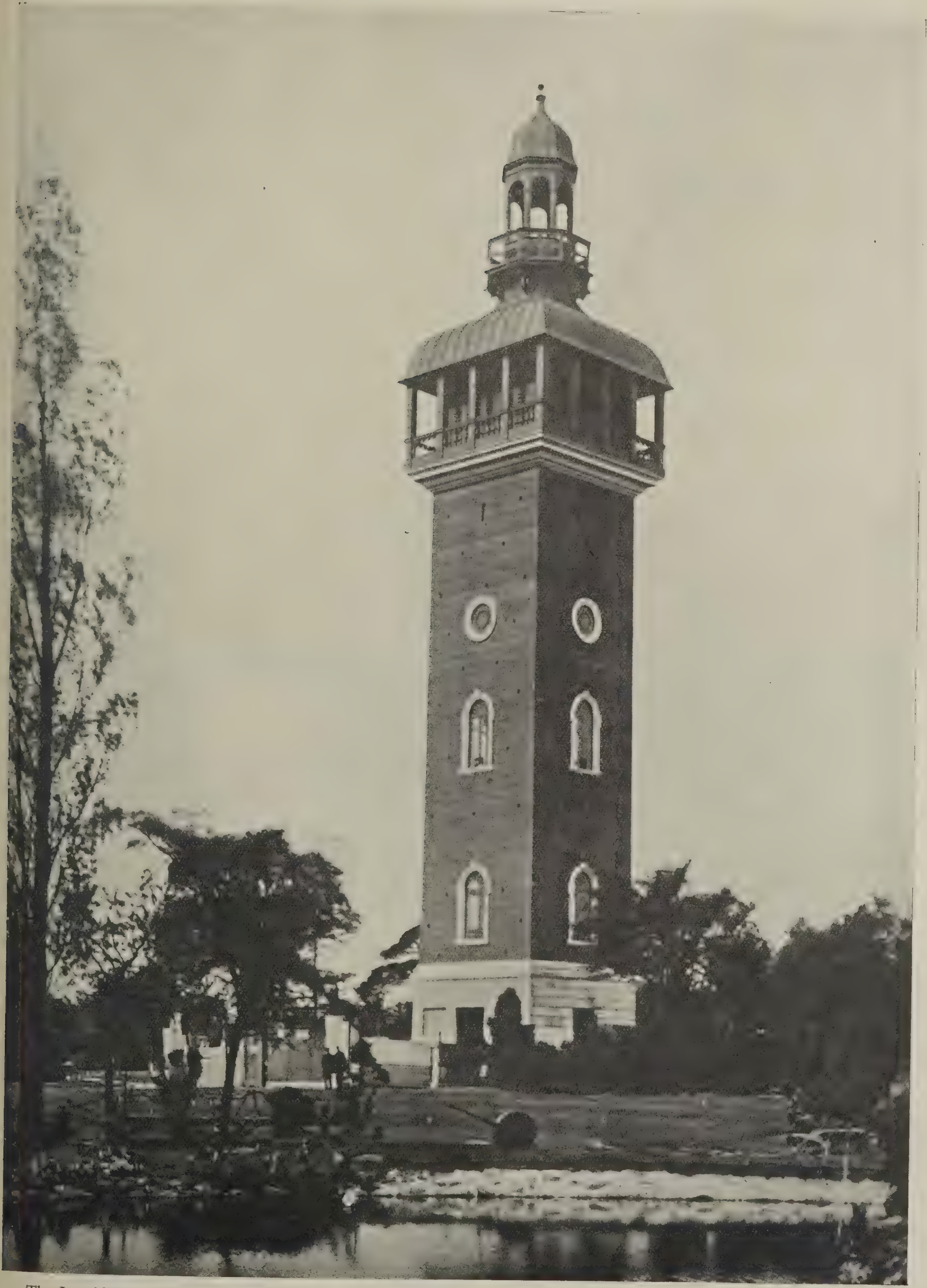
MANNING ROBERTSO

---

[*] "Labour Saving in Small Houses." Being the Report of an Inquiry made by a Sub-Committee of the Women's Section of the Garden Cities and Town Planning Association, 3 Gray's Inn Place, London, W.C.1. Fourth Edition. Price 9d.

Current Architecture. 191.—Loughborough War Memorial Tower

Walter Tapper, F.R.I.B.A., Architect



The Loughborough Tower, raised by the citizens to commemorate Loughborough soldiers, sailors, and airmen who fell in the war, has a base of Portland stone; the main portion of the structure is of small red bricks with Portland stone dressings; and from the main cornice upwards the construction is in wood covered with copper.

(See also following pages.)

THE LIBRARY
OF THE
UNIVERSITY OF ILLINOIS

The Loughborough War Memorial

A Campanile and Carillon

WALTER TAPPER, F.R.I.B.A., Architect

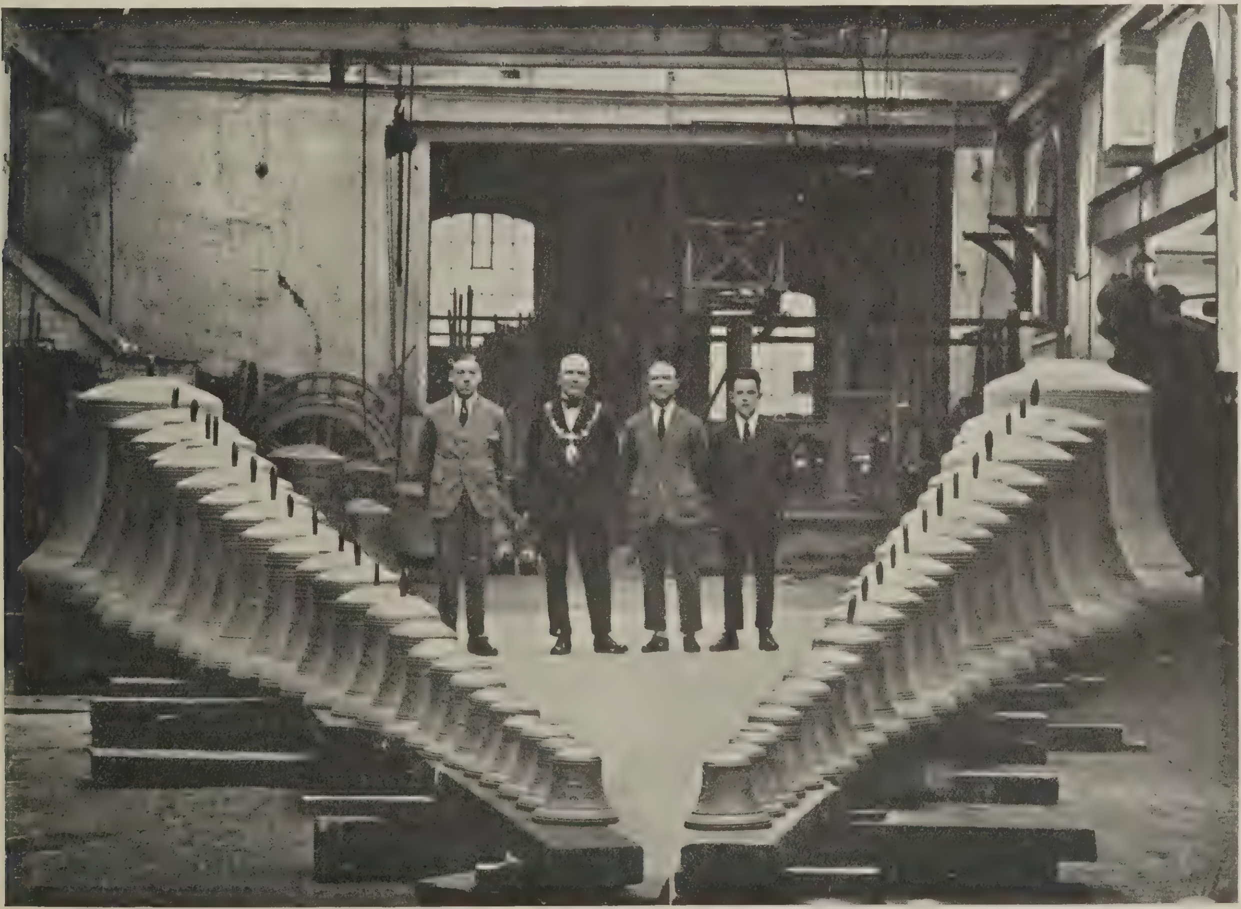
AMONG the many schemes adopted in the British Empire for perpetuating the memory of the fallen this memorial is the only one of its kind. In 1919 it was decided by a plebiscite vote to erect a lofty campanile to contain a carillon of bells, and this project has been carried out on a much larger scale than was at first thought possible. The inclusion of a carillon as part of the scheme is significant, for the carillon and its music are inseparably associated with Belgium, a country possessing many fine chromatic sets of bells and producing the finest bell-ringers in the world.

The tower, designed by Mr. Walter Tapper, rises to a height of 152 ft. The base, 26 ft. 9 in. square and 16 ft. high, is of Portland stone, on which four large bronze panels bear the names of 478 men in whose memory it is erected. A bronze plate in the entrance hall records the laying of the foundation-stones on January 22, 1922, by General Lord Horne and Mrs. P. J. Godber. Internally the tower is divided into four chambers, the entrance, a room which it is suggested shall be used as a museum, the clavier chamber, and the bell chamber. The bell chamber contains forty-seven bells, the largest of which weighs 4⅕ tons and the smallest 20 lb., the total weight being 21 tons, and the compass is four octaves chromatic, the lowest two semitones being omitted. The greatest care has been exercised in the construction of the bell chamber, which has been specially designed acoustically so that all the bells shall be heard equally well, while the musical effect of the carillon as a whole shall be the best possible. For richness of tone, accuracy of tune, and perfection of mechanism the Loughborough carillon is, perhaps, the finest in the world. All the bells have been given either by individuals, by local organizations, or by the men and women engaged in the industries carried on in the neighbourhood, and the total cost of the scheme is approximately £21,000.

Loughborough has for many generations been known for its trade of bell-founding. In all England there are but four or five carillons. There is one in Cheshire, one at Bournville, and one at Tavistock. It will be interesting to see if, with such an instrument available, people hereabouts will cultivate a taste for bell music like those of the Netherlands, who go to listen to a campanologist as English people go to an organ recital. At the opening ceremony, performed by Field-Marshal Sir William Robertson, the first recital was given by a celebrated virtuoso, M. Josef Denyn, of the Mechlin belfry.

It is a temporary drawback to this carillon that there is, as yet, no one there to play, but there are two aspirants already at Loughborough who have lately been in Belgium gaining instruction.

The bells were cast by Messrs. John Taylor and Sons, the well-known bell founders, of Loughborough, who themselves gave £2,000 towards the total cost of £7,000. All the other work in connection with the memorial was carried out by local firms. The entire cost of the memorial has been fully subscribed, and represents 16s. per head of the population of the town.

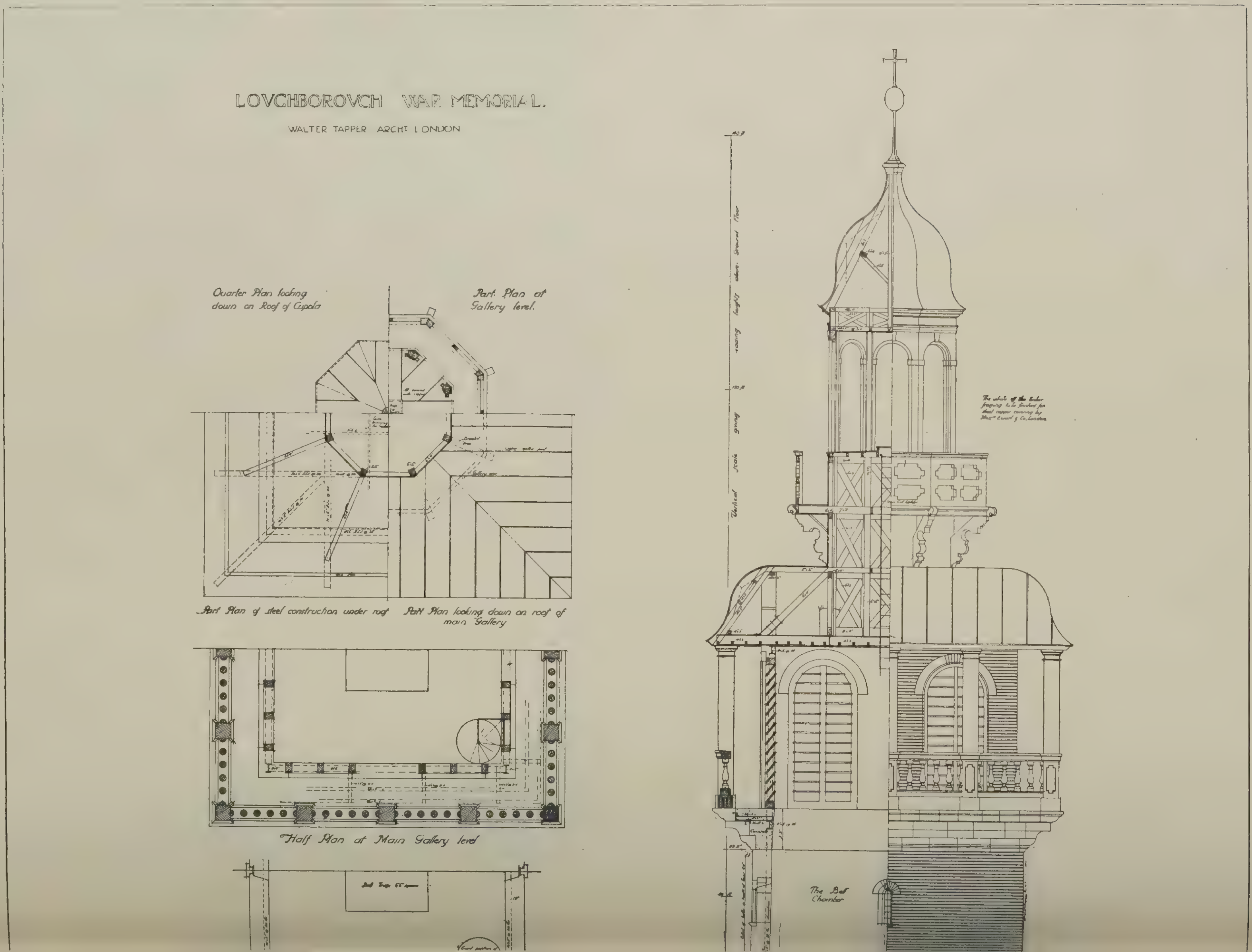


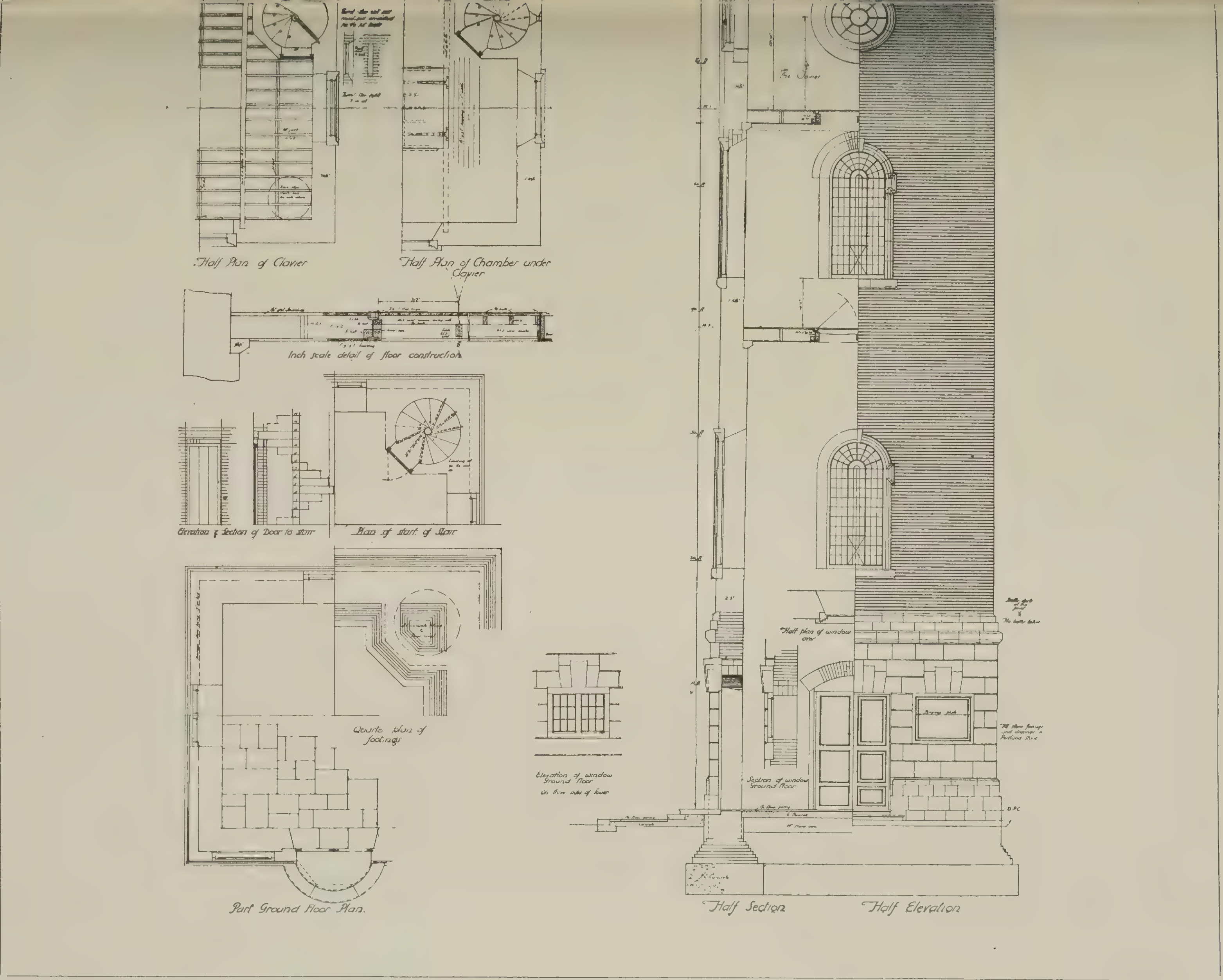
THE BELFRY.

The largest bell is 5 ft. high, and weighs 4 tons 4 cwt. The smallest bell is 7½ ins. and weighs 20 lbs. Each of the 47 bells composing the carillon is a memorial in itself and bears the names of the givers.

Architects' Working Drawings. 68.—Loughborough War Memorial Tower

Walter Tapper, F.R.I.B.A., Architect


LOVGHBOROVGH WAR MEMORIAL.
WALTER TAPPER ARCHT LONDON
Quarter Plan looking down on Roof of Cupola
Part Plan at Gallery level.
Part Plan of steel construction under roof
Part Plan looking down on roof of main Gallery
Half Plan at Main Gallery level
Vertical scale giving reading heights above Ground Floor
140 ft
120 ft
The whole of the timber framing to be finished for sheet copper covering by Messrs Ewart & Co. London
The Bell Chamber



The above drawings show a half elevation and section of the tower, and plans and details of its more important features. A general view of the Memorial appears on page 325.

Cork City Hall Competition

MR. LUCIUS O'CALLAGHAN, F.R.I.A.I., A.R.H.A., the assessor in the Cork City Hall competition has made his awards as follows :—

First : Messrs. Jones and Kelly, MM.R.I.A.I., of Dublin.

Second : Messrs. McDonnell and Dixon, Dublin.

Third : Messrs. W. H. Byrne and Son, Dublin.

The competition was limited to architects living and practising in Ireland.

Referring to the winning design in his report the assessor says :

Planning.—The placing of the building on the site is very satisfactory. The arrangement of the various departments has been carefully studied and the planning throughout is excellent. The council suite placed on the first floor or principal floor with the main entrance from Anglesea Street is most conveniently arranged. The council chamber, of good proportions, is admirably situated. It is, as it should be, somewhat retired from the main corridor, and approached through an ante-lobby, which also gives access to the members' room and the room for deputations. The council cloakroom and lavatory adjoins the members' room. The committee rooms, Lord Mayor's parlour, town clerk's department, etc., are also well arranged. The planning of the other rooms on the first floor is carefully studied. The ground floor generally is very well laid out, all the departments being conveniently arranged. The unit of width of rooms, i.e., 18 ft., is a good one, and in consequence the rooms, even the smaller ones, are of good proportion. The lavatory blocks are well disposed and, an important point, are planned over one another, which is conducive to simple and economical plumbing and drainage.

Lighting.—A point of the very greatest importance in the planning of municipal offices is the ensuring of ample and direct lighting to all rooms, stairs, and corridors. The lighting of corridors by borrowed light, though sometimes used in office buildings on congested sites, is quite unsuitable for a building of this kind. The objection to borrowed light to corridors is so obvious that it seems unnecessary to stress it. I may, however, point out the serious permanent expense of having to provide artificial light during even a portion of the year in a building of this kind. In this design the whole of the rooms, stairs, and corridors are splendidly lit.

City Hall.—The city hall is of good proportions, and well placed on the site in such a way that it can be most economically constructed, the flank walls screened by the office buildings calling for but the simplest treatment. The entrance to the city hall is so placed that, whilst in direct communication with the rest of the buildings, it does not cut up or interrupt in any way the communications between the various departments in the municipal offices. The crush hall might with advantage be enlarged, and this can readily be done without materially affecting the design. Corridors or covered ways would also be desirable from the side exits.

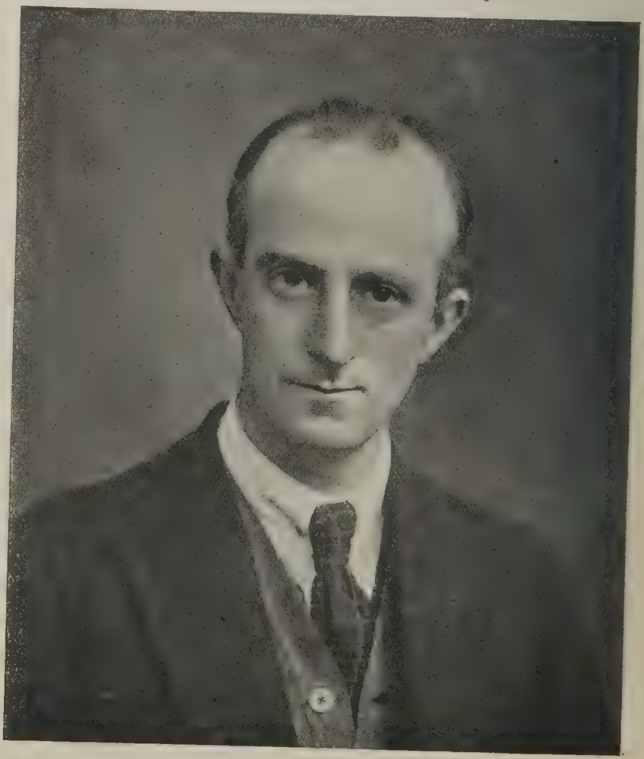
External Treatment.—The elevations, of good classical character—though simple and relatively inexpensive—are of good proportion and detail, and should make an imposing and dignified building, eminently suited to the site and the surroundings.

The Winners.

Mr. Stephen S. Kelly was born in 1891, and entered the office of Mr. R. M. Butler, F.R.I.B.A., in 1914, with whom he served three years' apprenticeship. He studied at the Architectural Association and the Dublin Metropolitan School of Art; carried off many prizes as a student; and qualified by examination for membership of the Royal Institute of Architects of Ireland in 1919. He worked in the office of Mr. John J. Robinson until 1920, when he entered into partnership with Mr. Alfred E. Jones. In the same year they were placed first in the competition for Ballymena Town Hall.

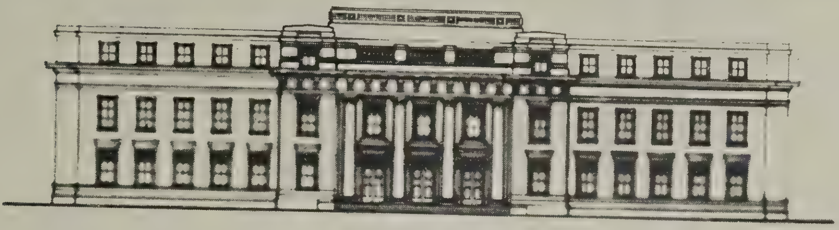
Mr. Alfred E. Jones, who is twenty-nine years of age, commenced his architectural training at the age of seventeen in the office of Messrs. Ashlin and Coleman. He studied at the Architectural Association and the Dublin Metropolitan School of Art, and qualified for membership of the Royal Institute of Architects of Ireland by examination in 1918. While still a student in the profession he won several prizes. He worked in several Dublin offices, principally that of Mr. R. M. Butler, F.R.I.B.A., until 1920, when he started in practice with Mr. Stephen S. Kelly.

MR. ALFRED E. JONES, M.R.I.A.I.

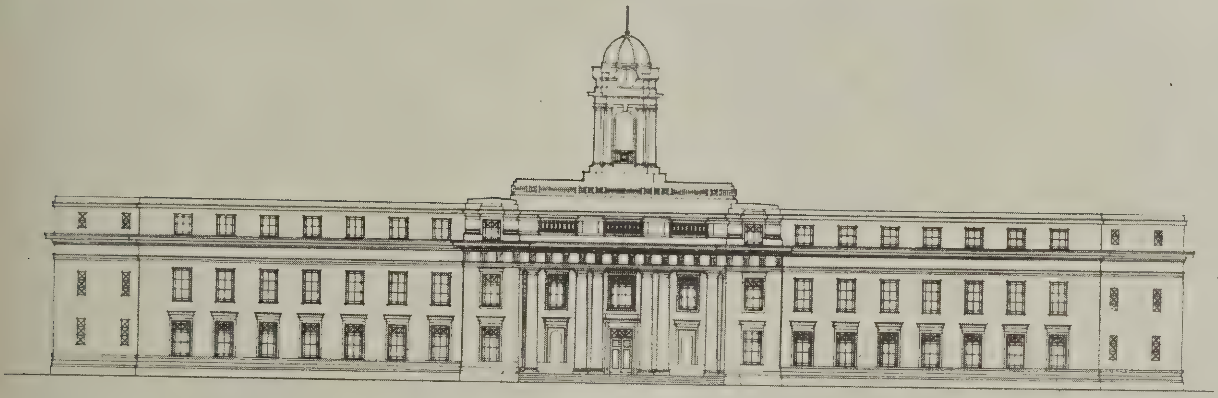


MR. STEPHEN S. KELLY, M.R.I.A.I.

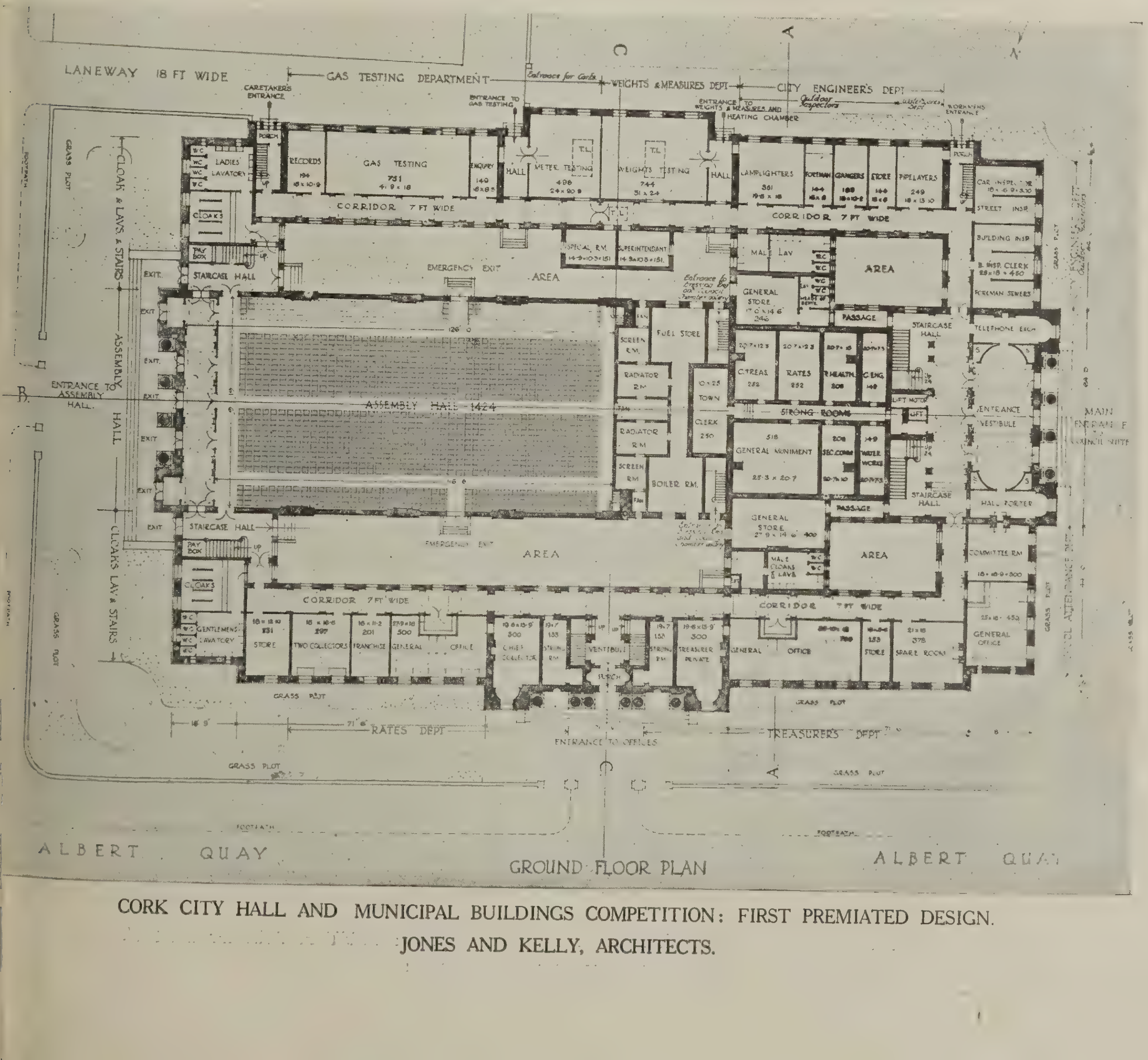
THE AUTHORS OF THE WINNING DESIGN.



ELEVATION TO ANGLESEA STREET

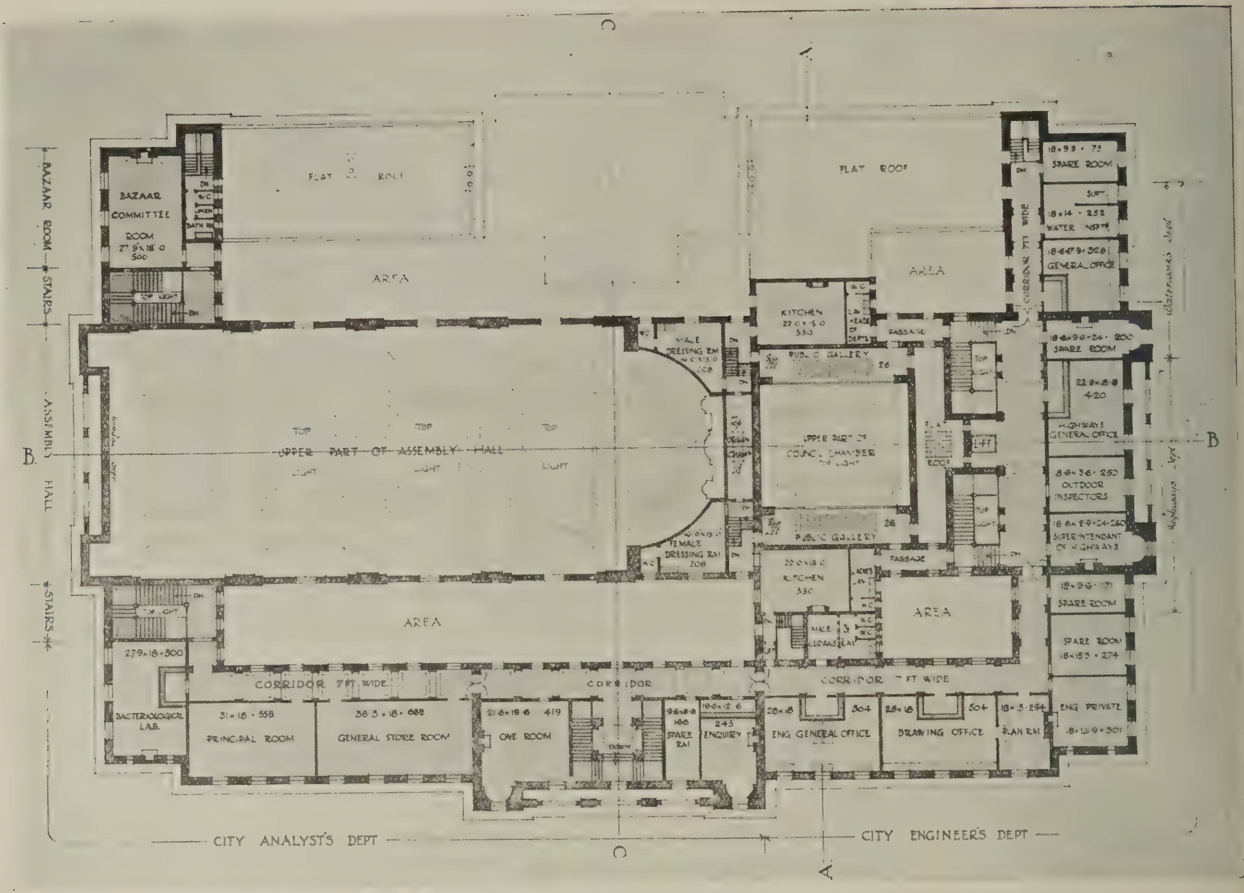


ELEVATION TO ALBERT QUAY

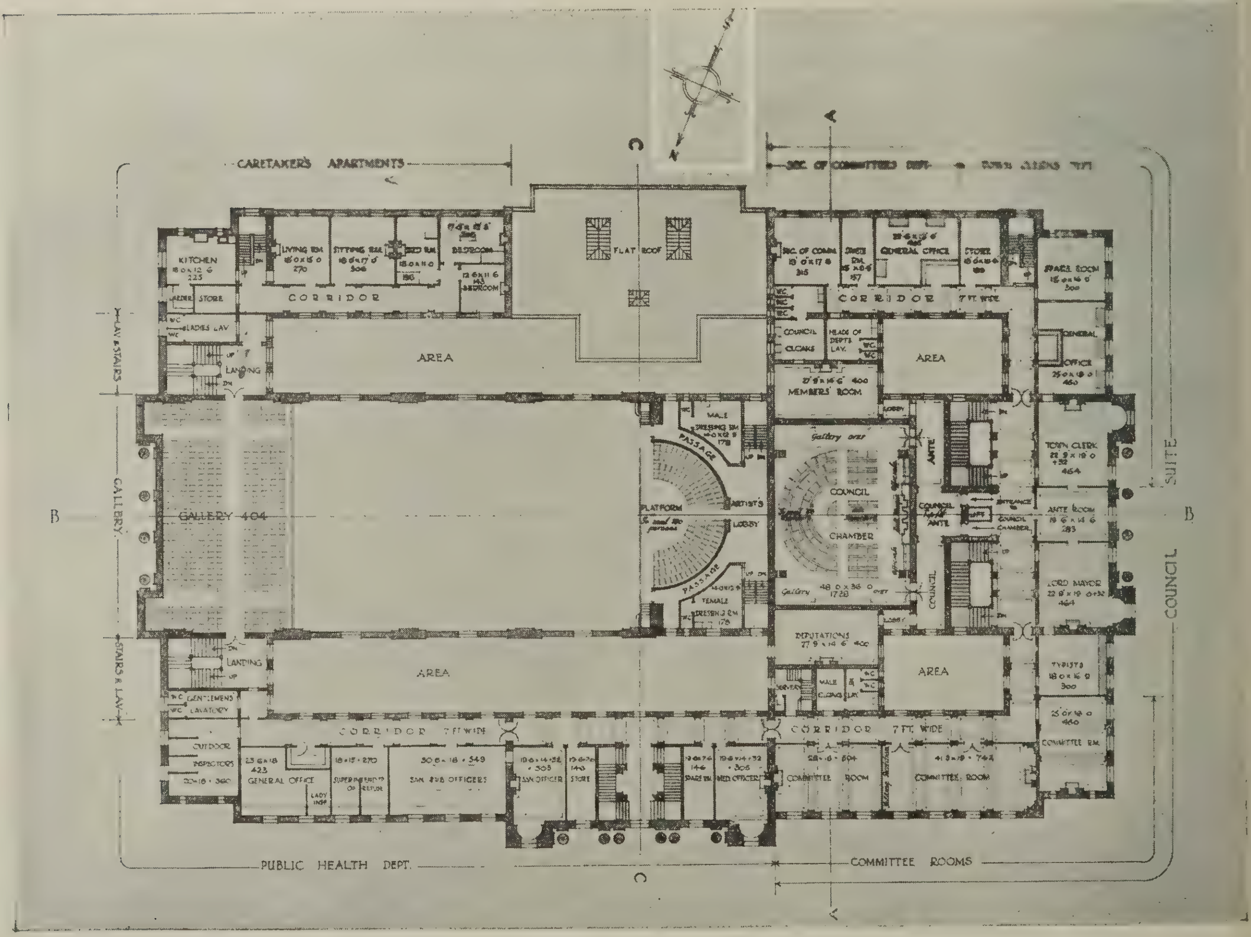


GROUND FLOOR PLAN

CORK CITY HALL AND MUNICIPAL BUILDINGS COMPETITION: FIRST PREMIATED DESIGN.
JONES AND KELLY, ARCHITECTS.

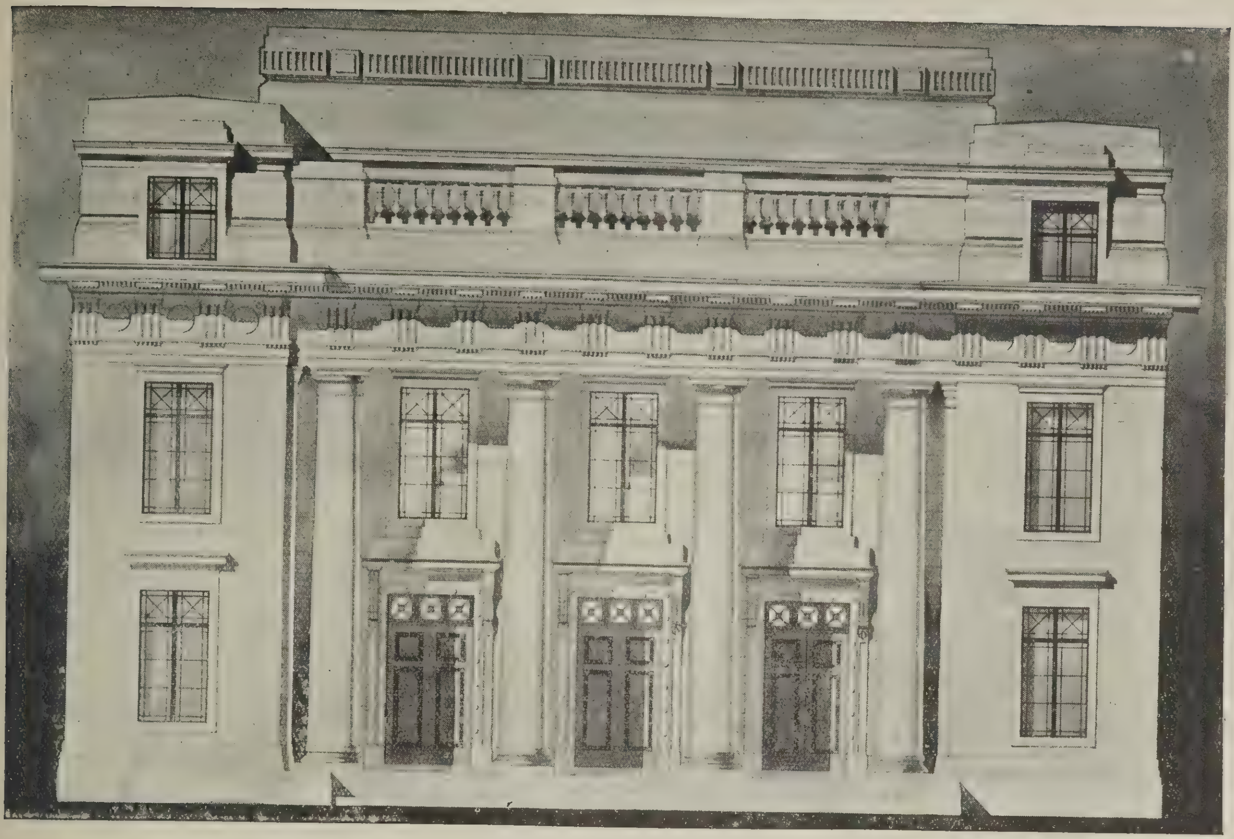


SECOND FLOOR PLAN.

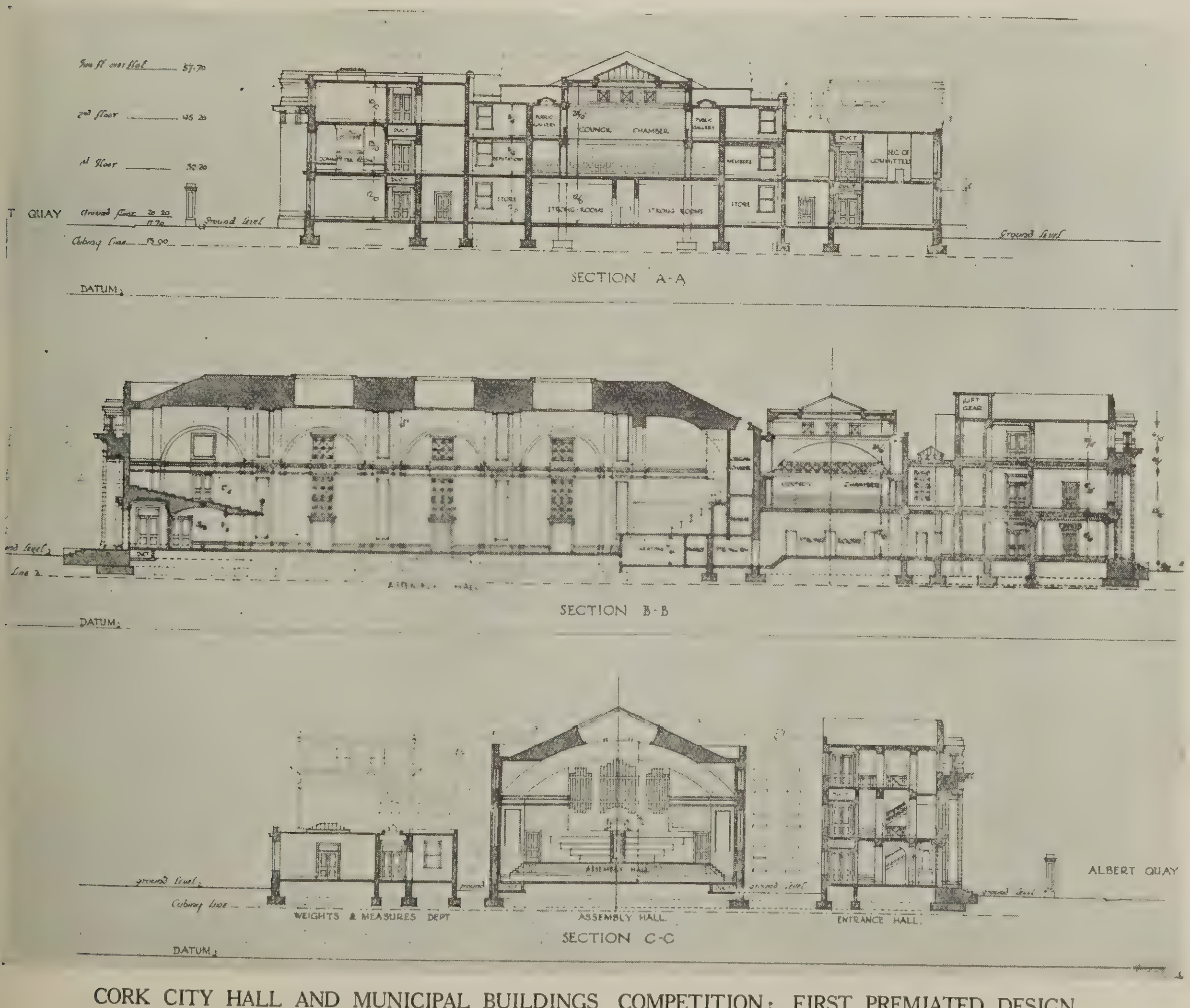


FIRST FLOOR PLAN.

CORK CITY HALL AND MUNICIPAL BUILDINGS COMPETITION: FIRST PREMIATED DESIGN.
JONES AND KELLY, ARCHITECTS.



DETAIL OF MAIN FRONT.



CORK CITY HALL AND MUNICIPAL BUILDINGS COMPETITION: FIRST PREMIATED DESIGN.
JONES AND KELLY, ARCHITECTS.

A photograph, taken from the Stadium end of the Central Avenue, with the entrance to the Exhibition in the background, showing the progress which has been made already. On the right is the Palace of Engineering, and on the left the Palace of Industry.

British Empire Exhibition: Progress of the Worl

John W. Simpson, PP.R.I.B.A., and Maxwell Ayrton, F.R.I.B.A., Architects

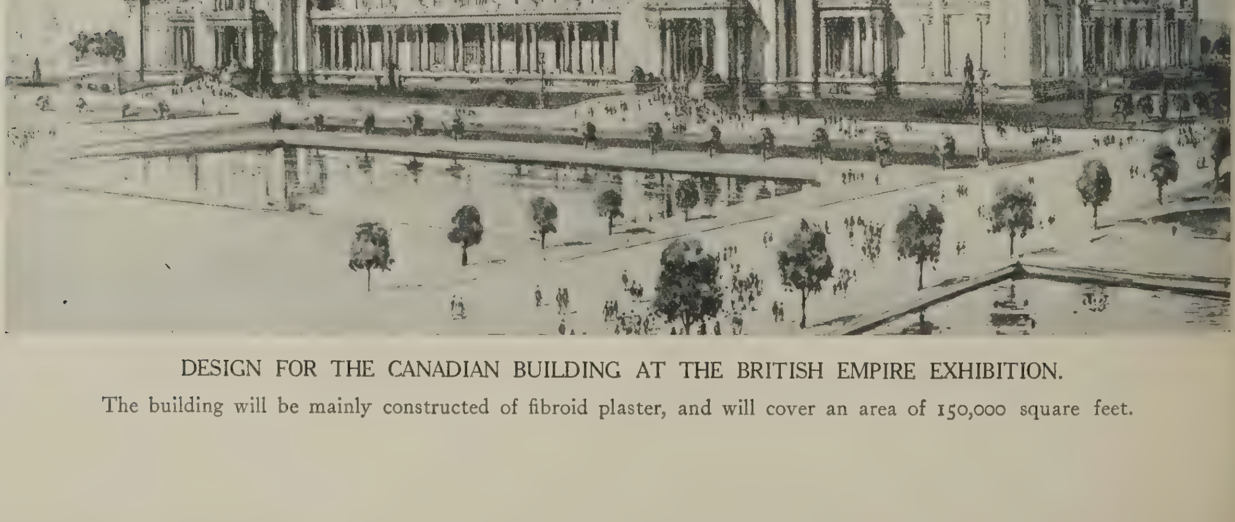
E. O. Williams, B.Sc., A.M.I.C.E., Engineer

"IF the British Empire Exhibition does not come to be classed as one of the wonders of the world, it will certainly deserve a place as one of the wonders of the Empire," said Sir Robert McAlpine, head of the firm of Sir Robert McAlpine and Sons, who are the contractors for the exhibition, in an interview on the progress of the work at Wembley. "Those who have had an opportunity of seeing the exhibition, even in its present skeleton form, are tremendously impressed with its size and scope. From an architectural point of view the exhibition has proved what can be done with steel and concrete. I think it is safe to say that concrete has been used to a greater extent and in a greater variety of ways at Wembley than in any other collection of buildings in the world. Everything that it has been possible to make in concrete has been made in concrete. Even the flagstaffs are concrete."

Two of the accompanying illustrations show the 75 ft. crane bays in the Palace of Engineering. Five adjacent bays are to be equipped with 25-ton electric travellers, giving a total area served of over 300,000 sq. ft. The reinforced concrete beams bearing the travellers are at 27 ft. 3 in. above floor level, and have a span of 25 ft. column centres. At th cross gallery two columns in each row are replaced by 75 ft. span arch in reinforced concrete. Each bay has railroad midway between the columns for its whole lengt The light steel roof gives 41 ft. 6 in. clear headway to tie i centre of bay.

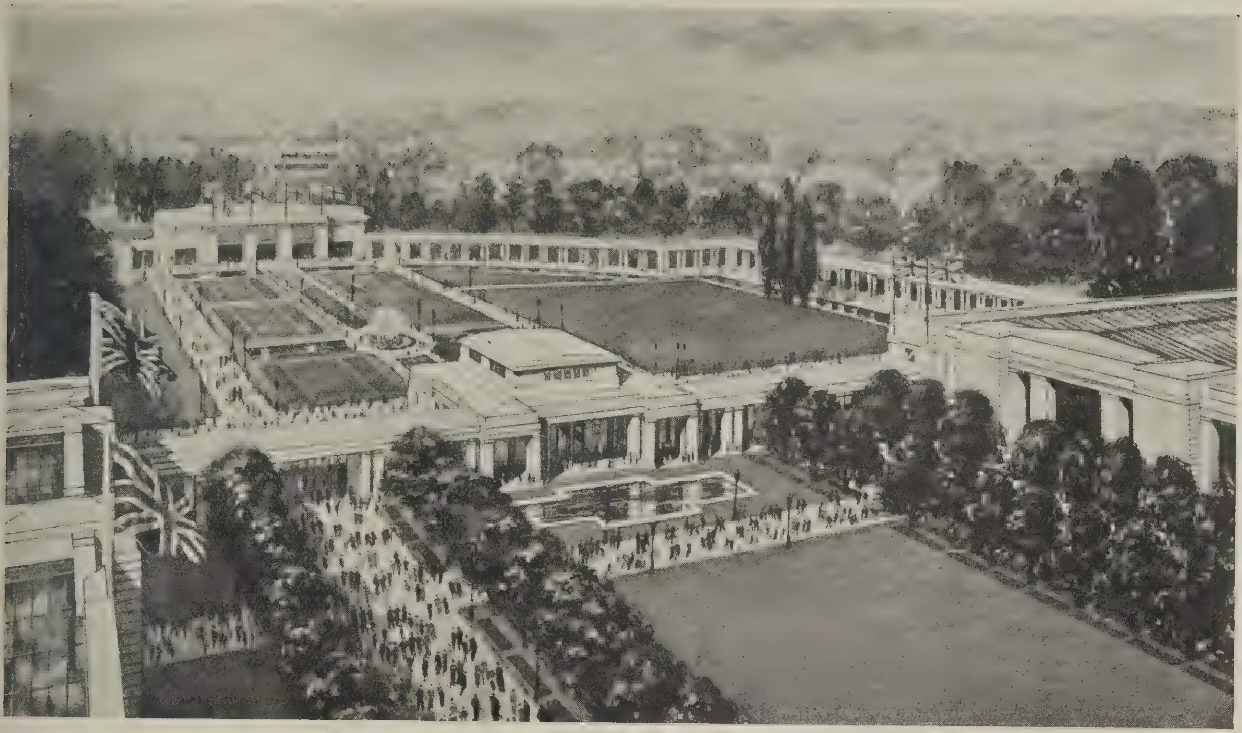
The whole of the steelwork in the Machinery Hall, Palac of Engineering, was carried out by the Deeside Brick an Engineering Co., and the whole of the 75 ft. span avenu in the Palace of Industry was supplied by Mr. W. Richards of Leicester. The cast-iron gutters to both buildings are b Burton Foundry Co., of Burton-on-Trent.

It is essential that the roofs of the Engineering Hall shoul be absolutely tight under all atmospheric conditions, an that the material employed should not conserve or radiat sun heat or external cold, and should be permanent withou requiring treatment or unusual maintenance. After exhaustive tests the Asbestos Cement Trafford Tile, manufacture by Messrs. Turner Brothers Asbestos Co., Ltd., Rochdal was selected, not only for the Engineering Hall, but for th main permanent buildings and the Stadium covered stand



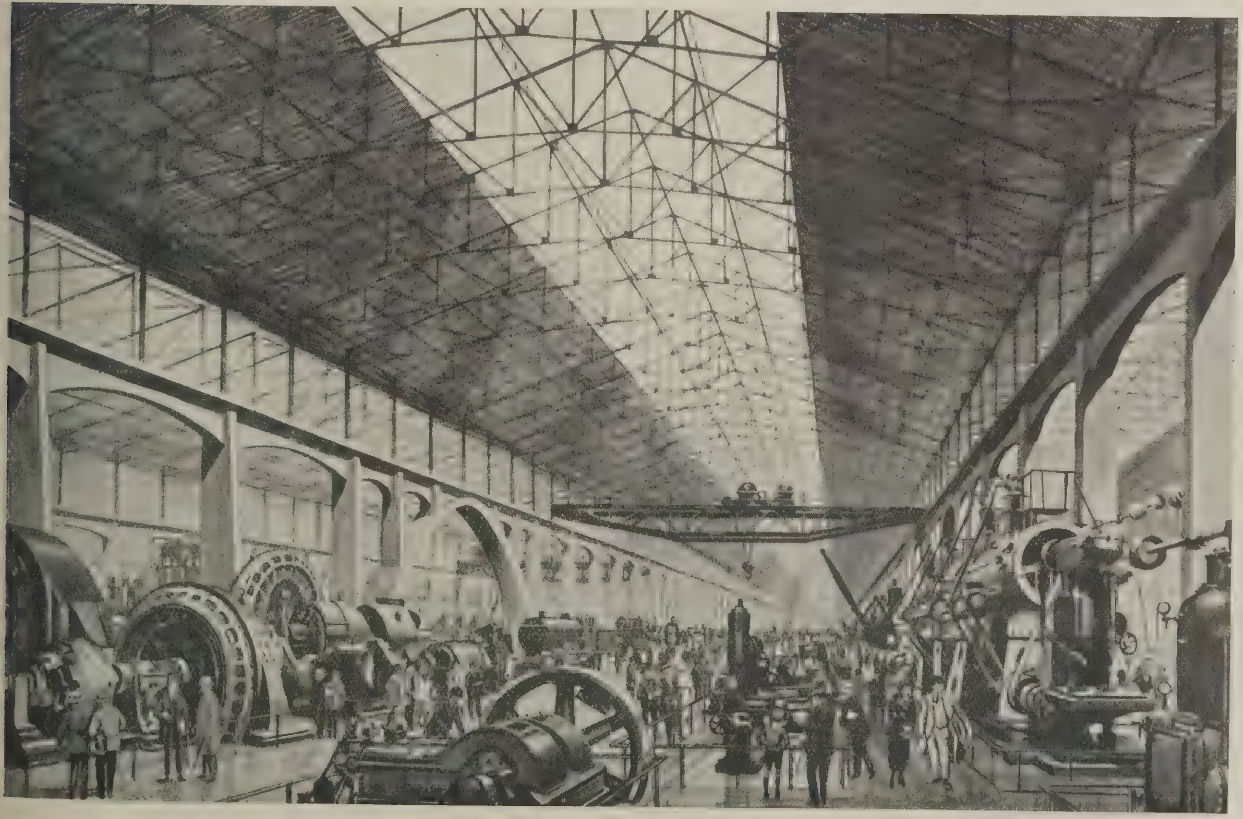
DESIGN FOR THE CANADIAN BUILDING AT THE BRITISH EMPIRE EXHIBITION.

The building will be mainly constructed of fibroid plaster, and will cover an area of 150,000 square feet.



VIEW OF THE NORTH ENTRANCE.

The above view shows the ornamental gardens, the colonnade of shops and the beginning of the Grand Central Avenue, with the north-west corner of the Palace of Engineering on the right and the north-east corner of the Palace of Industry on the left. It is the first picture illustrating this section of the Exhibition as it will appear when finished.



THE CENTRAL AISLE OF THE PALACE OF ENGINEERING.

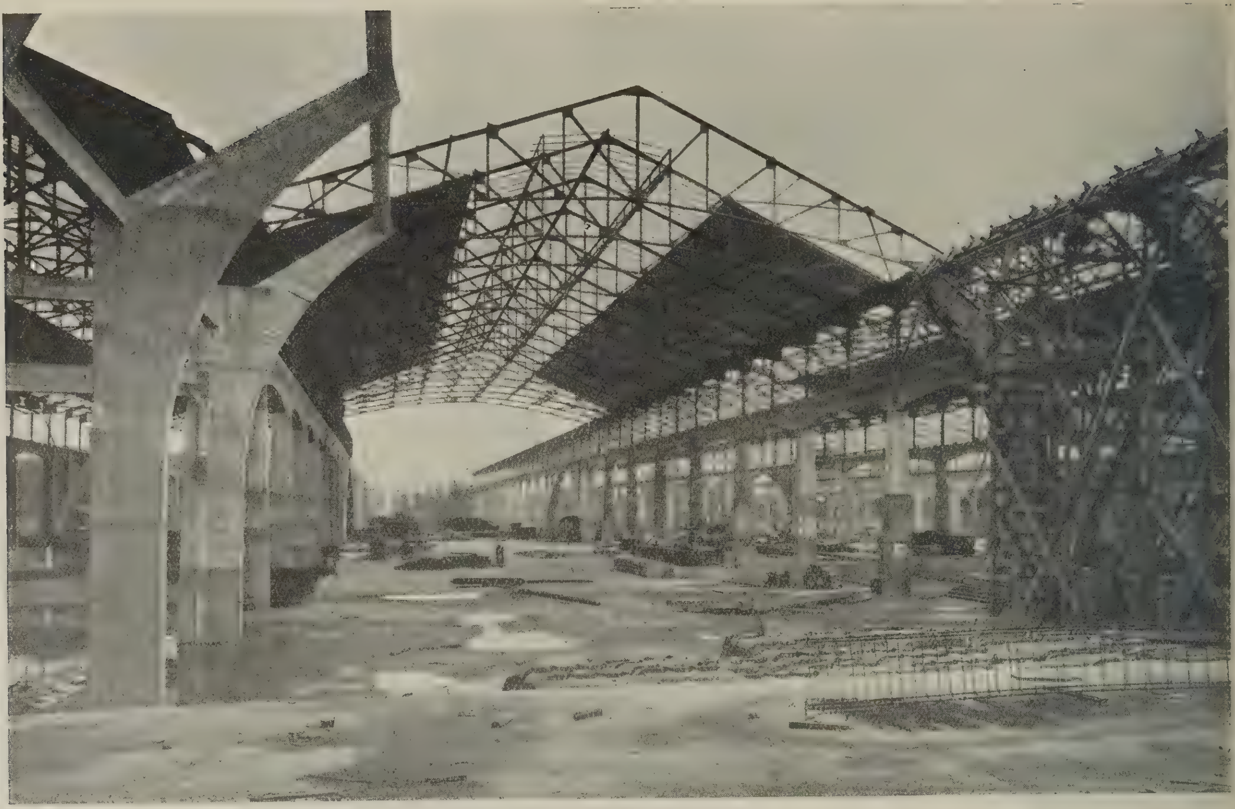
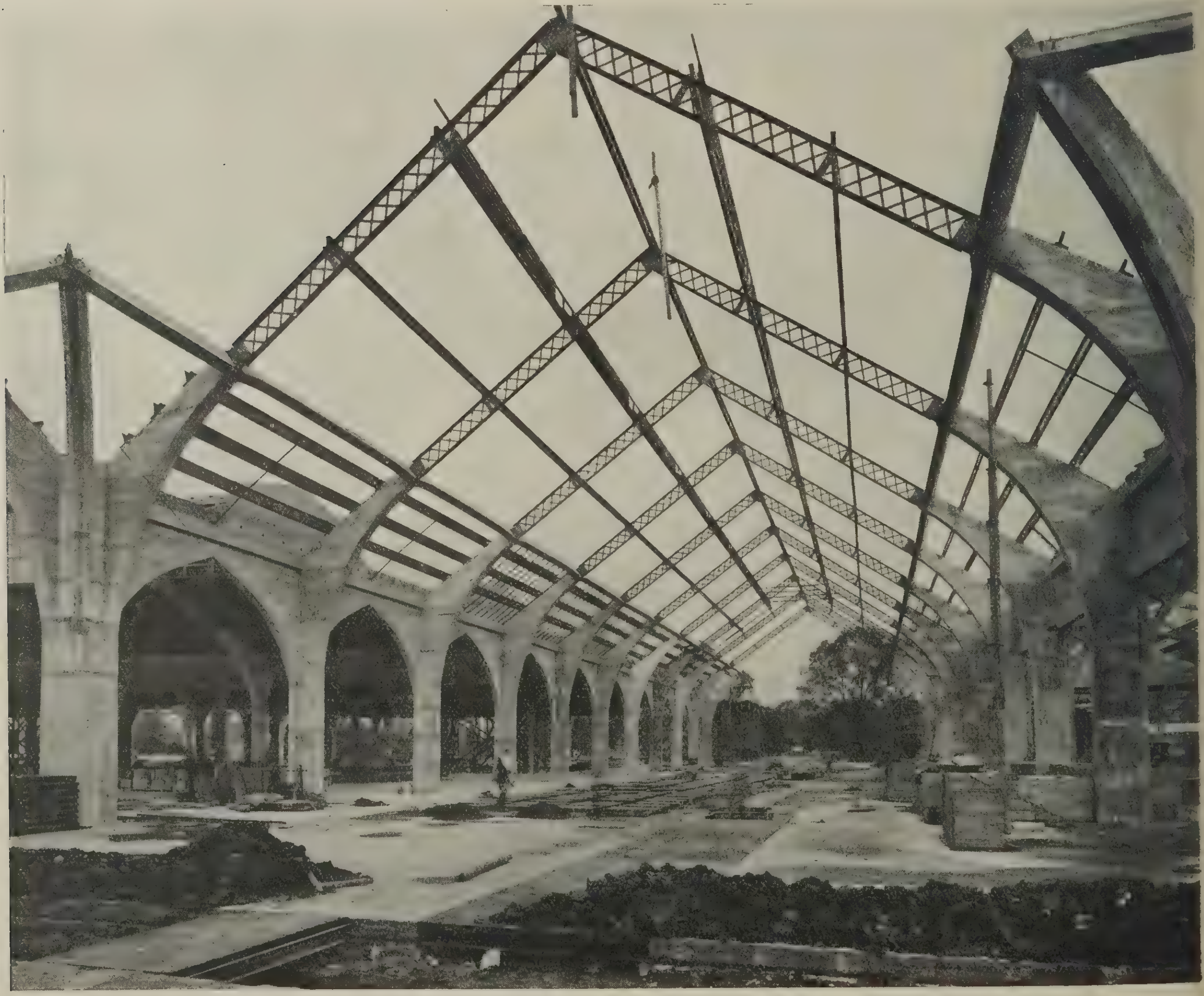
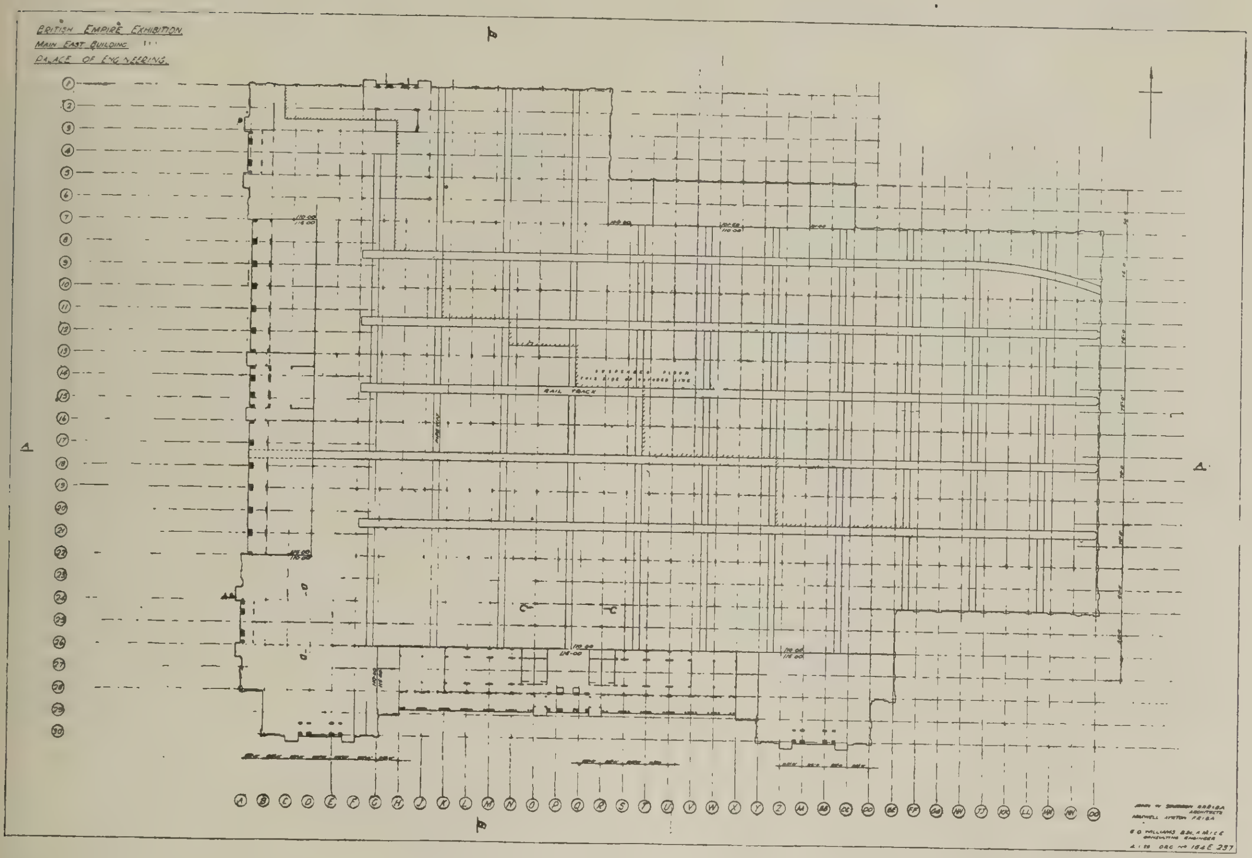
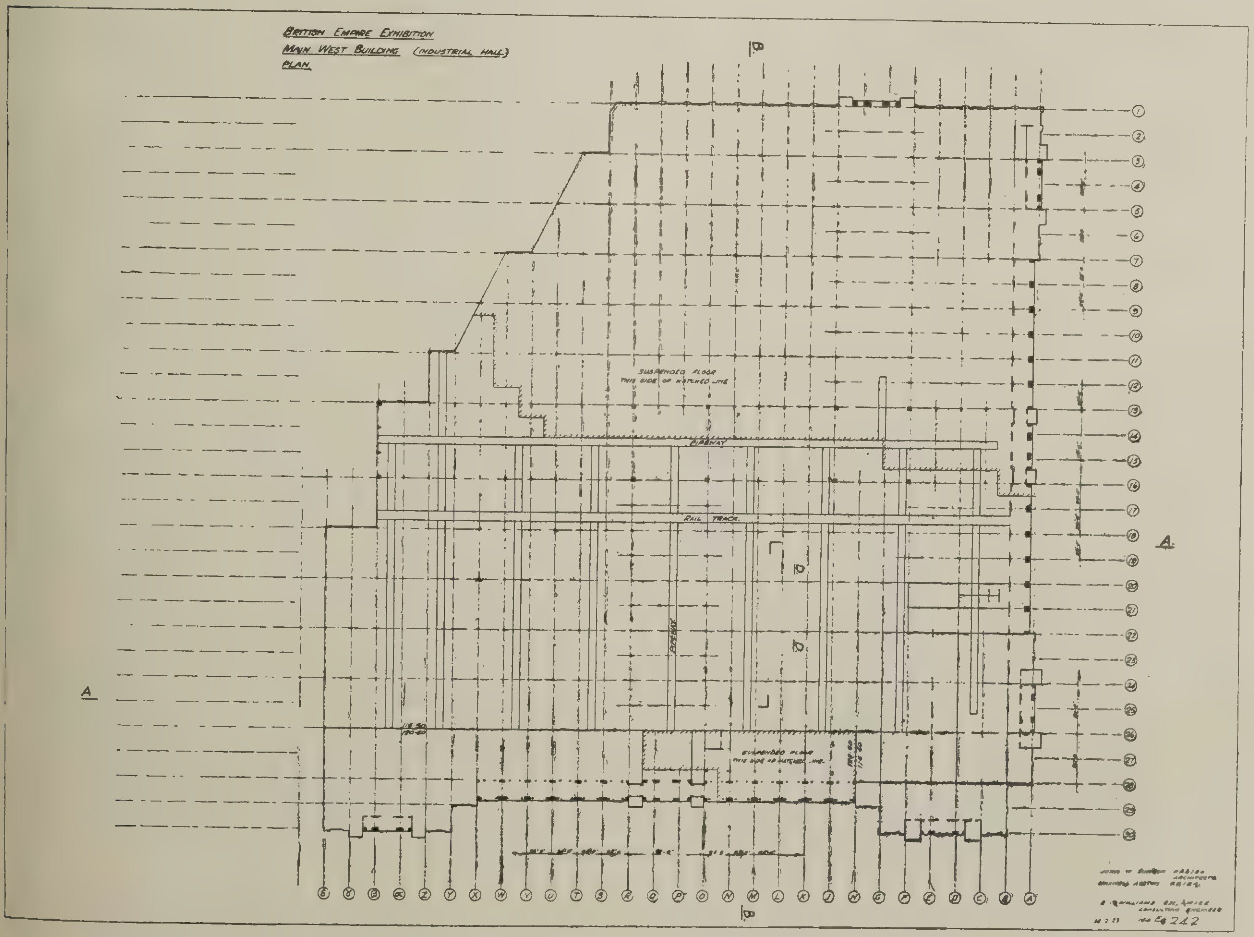


Photo showing progress of work on one bay of the Palace of Engineering, the gross area of which is nearly half-a-million square feet.



Interior view of one bay of the Palace of Industry. This hall covers an area of eight acres.




BRITISH EMPIRE EXHIBITION
MAIN WEST BUILDING (INDUSTRIAL HALL)
PLAN.
SUSPENDED FLOOR THIS SIDE OF HATCHED LINE
SUBWAY
RAIL TRACK
A
B
ARCHITECTS
CONSULTING ENGINEER
242

PLANS OF THE PALACE OF ENGINEERING AND THE PALACE OF INDUSTRY, WEMBLEY.

The Liverpool School of Architecture

Its Aim and Work

THE prospectus of the University of Liverpool School of Architecture for the ensuing session, which opens on October 4, has been issued. The school offers courses which are designed to provide a full professional education at a university standard for all who intend to practise as architects and who wish to acquire their training in an atmosphere of liberal studies side by side with the students of other professions. To meet the varied needs of architectural practice as they have now developed, the school offers courses of study leading, if preceded by matriculation, to the Degree of Bachelor of Architecture (B.Arch.), or, if not so preceded, qualifying for the Diploma in Architecture. These courses, which are identical both for the degree and for the diploma, extend over five years and are of three kinds—the pass course, the course with honours or distinction in architectural design, and the course with honours or distinction in architectural construction. The curriculum of the first three years is common to all three courses, whilst that of the fourth and fifth years in the case of students taking honours or distinction goes beyond the pass standard.

Each of the courses is devised so as to equip the student with the most efficient training possible for the vocational work he proposes to do. The study of design, beginning with exercises in the elements of architectural form, is finally carried to a stage at which it involves the solution of large and complex problems of composition. Construction is taught in its simplest aspects in the first year, and in that year, as in all the subsequent parts of the courses, is progressively related to the teaching of design. From the third year onwards students are required to develop carefully rendered schemes with the detailed and working drawings necessary for a contract. Throughout, stress is laid on logical planning as the basis of good architecture, and a large proportion of the subjects set in the school studios are planning problems. The lecture courses are arranged to run parallel with the work done under instruction in the studios.

Under the regulations governing the courses of study students are required to spend six months of their fourth and fifth years respectively in some approved form of practical work, usually in an architect's office where they can earn a salary. For some time past the school has established connections with certain of the best known architectural offices in New York. In consequence, students during the summer term and long vacation of their fourth year of study have the opportunity of securing temporary positions as paid assistants in these offices.

The school was the first to formulate and to present degree and diploma courses of a full professional kind to the Board of Architectural Education of the R.I.B.A., and was the first of the six schools now recognized by the Institute to secure for its graduates exemption from all subjects but one of the Institute's final examination.

A certificate is granted by the University at the end of the third year of either the degree or diploma course. Students who obtain this certificate are exempted from the intermediate examination for Associateship of the R.I.B.A., whilst students who obtain the degree or diploma are exempted from the whole of the final examination for Associateship of the Institute except in the subject of professional practice, in which subject, as the particular province of the Institute, they are required to take a paper set by the Institute's examiners. Last session, twenty-one students qualified for exemption under these conditions from the R.I.B.A. final examination.

The University offers a university studentship, of the value of £25 a year, to students over seventeen years of age who desire to take a full course in the School of Architecture.

Two Elmes scholarships are offered by the Elmes trustees in memory of the architect, Harvey Lonsdale Elmes. Th are entrance scholarships in architecture, one of the val of £30 per annum and one of £20 per annum, open in t first instance to students under twenty-three years of ag preference being given to candidates under ninetee belonging to certain Liverpool schools, including the Scho of Art. If no suitable candidate comes forward from the schools the scholarships are thrown open to public co petition. Subjects of examination : (*a*) Freehand drawin (*b*) plane and solid geometry; (*c*) simple projection a scale drawing; (*d*) English essay.

A Holt travelling scholarship of £50 for one year, designs and measured drawings, has been founded by M Holt. The scholarship is awarded on the review of t studio work in the third examination for the degree a diploma in architecture.

An annual travelling scholarship, of the value of £ and known as the Honan scholarship, is open to stude of the School of Architecture who join the Liverp Architectural Society as student members.

Viscount Leverhulme offers to the School of Architectu each year, two prizes of £15 and £10 respectively, architectural schemes for the improvement of a porti of Liverpool or other town to be designed in conjuncti with the work of students of the department of C Design.

An essay prize of £5, given by the proprietors of T ARCHITECTS' JOURNAL, open to students taking the deg or diploma course, is offered for competition annually.

Two John Rankin prizes in architecture, value £12 ea are awarded annually on the weekly sketch designs. Op one to all registered students of the fifth year in archit ture, and one to all registered students of the fourth year architecture.

Two Holland & Hannen and Cubitts prizes for work drawings, of the value of £15 and £10 respectively, given annually by this firm of contractors for the best s of working drawings prepared in the third, fourth, and fi years in the School of Architecture.

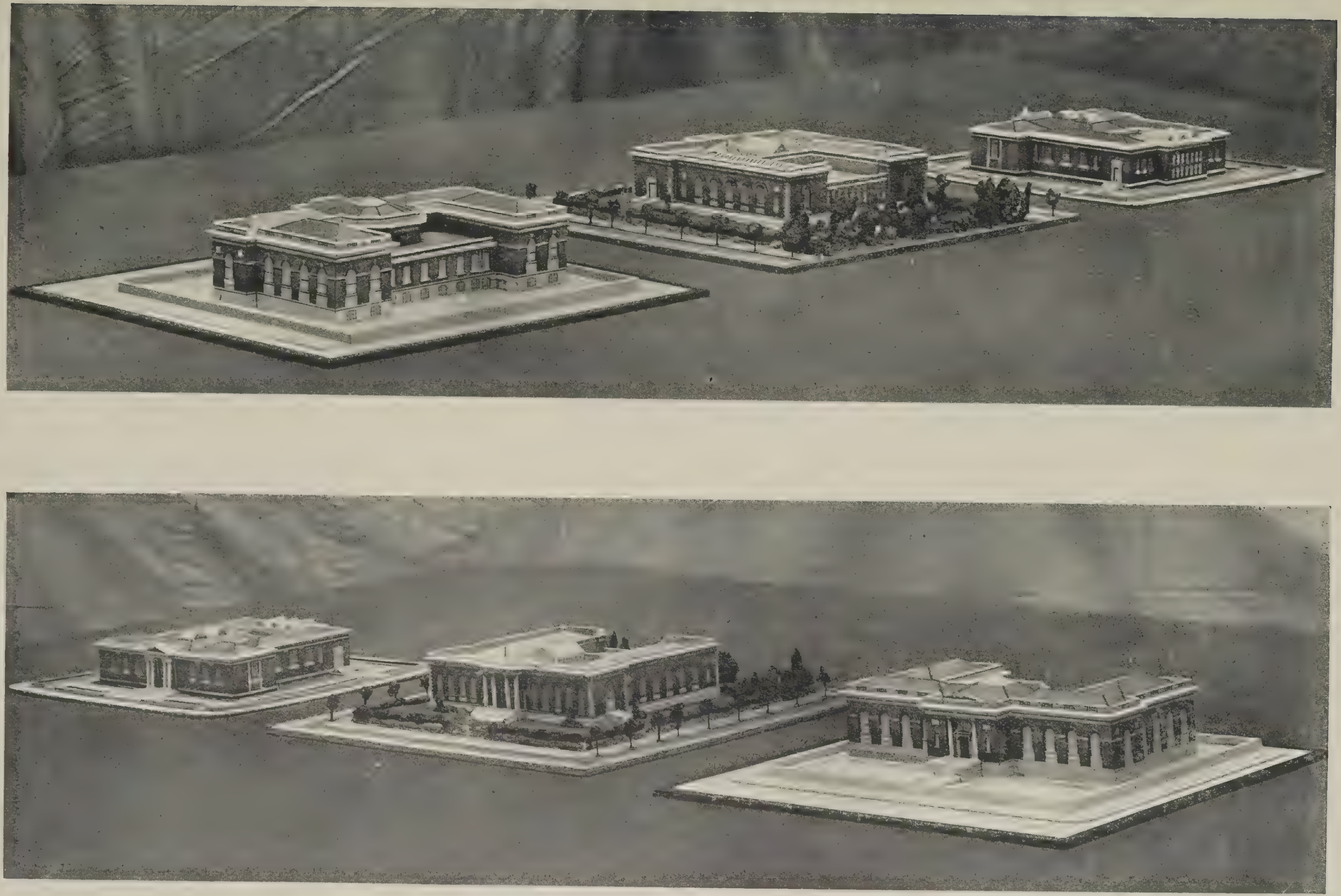
A White Star Line prize of the annual value of £10 is open to fourth and fifth year degree and diploma stude The prize is competed for in the autumn term of e session, and is awarded for a design for the decoration specified portion of the interior of a liner.

Since the foundation of the Rome Scholarship, stude of the Liverpool University School of Architecture h been amongst those selected for the final test on all the occasions on which the competitions have been held. three occasions the scholarship has been awarded t student of the Liverpool school, and on two occasions Henry Jarvis studentship has been won by students of same school. One hundred students are now taking five years' course.

All students who desire to avail themselves of R.I.B.A. exemptions, whether they propose to take degree or the diploma course in architecture, are requi before they can be admitted to these courses, either to have matriculated or to have received the school cer cates or testimonials from head-masters which are accep under the Institute's regulations as qualifying for regis tion as probationers, or (2) to pass an entrance examina in English (composition and dictation), arithmetic, alge and elements of plane geometry, elementary mechanics physics, geography and history, one language other t English. In addition to the alternative requirement (1) and (2) all candidates for exemption from the prelimi examination of the Royal Institute of British Architect required to pass an examination in geometrical or pers tive drawing and in freehand drawing.

The Department of Civic Design is intimately conne

Models of a Small Public Library



Modelling in cardboard forms a valuable part of the training at the Liverpool University School of Architecture, under the guidance of Professor C. H. Reilly, F.R.I.B.A. The models illustrated above were made by fourth-year students to their own designs.

with the School of Architecture, and the students of both pursue their studies together in the same building. This arrangement tends to exercise a beneficial influence on both, and indicates the belief that artistic design should be concerned with every aspect of town planning. The study of social conditions and the preliminary data upon which development should be based is also encouraged by connection with the School of Social Studies and the Regional Survey of the Geographical Department. The University grants a certificate and a diploma in civic design.

The staff is as follows :—

School of Architecture—Professor C. H. Reilly, O.B.E., M.A. (Cantab.), F.R.I.B.A., Roscoe Professor of Architecture in charge of school; L. B. Budden, M.A., A.R.I.B.A., senior independent lecturer and studio instructor; E. R. F. Cole, B.Arch., A.R.I.B.A., lecturer in rendering, perspective, and sciagraphy, and studio instructor in design; J. E. Marshall, B.Arch., M.S.A., lecturer and studio instructor in construction; J. W. Williams, lecturer and studio instructor in construction; B. A. Miller, A.R.I.B.A., junior lecturer and studio instructor in design; G. Gilbert Scott, R.A., F.R.I.B.A., reader in ecclesiastical architecture; C. J. Allen, recognized teacher of modelling, City School of Art; W. C. Penn, M.C., R.O.I., recognized instructor in drawing from life, City School of Art; Professor J. P. Droop, M.A., special lecturer in classical archæology; Professor P. G. H Boswell, O.B.E., D.Sc., M.Inst.M.M., F.G.S., specia lecturer in geology; Professor W. Mason, D.Sc., Assoc M.Inst.C.E., M.I.Mech.E., special lecturer in strength o materials; Professor L. R. Wilberforce, M.A., specia lecturer in physics.

Department of Civic Design—Professor L. P. Abercrombie, M.A., A.R.I.B.A., Lever Professor of Civic Design T. H. Mawson, special lecturer in landscape design; J. A Brodie, M.Eng., Past Pres.Inst.C.E., M.I.Mech.E., Associat Professor, special lecturer in civic engineering; S. A. Kelly F.S.I., special lecturer in civic engineering; H. B. Ward M.Eng., Assoc.M.Inst.C.E., F.S.I., special lecturer in civi engineering; Professor E. W. Hope, O.B.E., M.D., D.Sc. special lecturer in civic hygiene; J. J. Clarke, M.A., specia lecturer in the law of housing and town planning.

The illustrations in the prospectus of work executed b the students include a "Design for a Seaside Recreationa Centre" (Final Round, Rome and Jarvis Scholarships), b Edwin Williams, B.Arch., Jarvis Scholar, 1923; "Rail an Road Bridge over a Gorge" (Preliminary Round, Rome an Jarvis Scholarships), by Edwin Williams and by E. Maxwell Fry, B.Arch.; a working drawing for a "Repertor Theatre," by C. H. Hutton, B.Arch. (Hons. in Construction) and a "Composition of Detail," by A. C. Todd.

Leeds University Development

ONE of the most important departments of the University of Leeds is that which deals with agricultural education, for, while the University is situated in a great industrial city, it is also the centre of the largest agricultural county in England.

The unsuitability of the premises occupied by the department has long been recognized, and but for the war a new building would have been provided some years ago. The erection of this building has now begun. This has been made possible by the generous help received by the University from several sources. The late Mr. Walter Morrison gave for the purpose a sum of £10,000—a donation which, by his wish, remained anonymous during his lifetime—and gifts were also received from the late Mr. Henry Rutson, Major J. W. Dent, and Mr. J. Emmanuel.

A Treasury grant through the Ministry of Agriculture and Fisheries of £12,000, promised in 1914, has recently been increased to £15,000, and the Yorkshire Council for Agricultural Education has made a contribution of approximately £10,000. Without these munificent donations, the University, which provides the site and finds the balance of the money required, could not possibly have proceeded with the building. The many-sided activities of the department, with its headquarters in the University and at the Manor Farm, Garforth, are watched over by the Yorkshire Council for Agricultural Education, of which Major J. W. Dent has been chairman since 1907. The Yorkshire Council, which is an Advisory Committee of the University, was formed by the joint action of the County Councils of the three Ridings, and consists of representatives of those County Councils, of the University, and of the Ministry of Agriculture.

As long ago as 1914 plans were prepared for the intended agricultural building, and tenders were actually obtained. But, like other building works of that period, the scheme was naturally and necessarily set aside. A definite start, however, has now been made and a new tender (from Messrs. Armitage and Hodgson, of Leeds) accepted. The architect is Mr. Paul Waterhouse, PP.R.I.B.A.

Originally intended for a site on the Woodhouse Lane frontage of the University land, the building has, after weighing various considerations, been finally allocated to a position on University Road, west of the buildings of the Textile (Cloth-workers) group. A good street alignment is here available, and the building will occupy a plot 190 f long by 125 ft. deep. The pavement line here falls sharpl eastward, but the slope has been taken into consideratio and will be rather helpful than otherwise to the lighting c and access to the large basement, which is an importan part of the accommodation. While a great portion of thi basement is occupied by stores of various sorts, it also contains a students' common room, a locker room, bicycl racks, and a large machinery room and workshop.

On the ground floor the largest rooms are a big lecture room measuring 50 ft. by 24 ft., a smaller one measurin 35 ft. by 19 ft. (both of these have the auditorium raised i stages), a museum (50 ft. by 27 ft.), a library, secretari offices, and various small professorial or class rooms. Th biological department begins on the first floor, where are t be found a general laboratory and a research laboratory, staged lecture-room as below, research rooms of moderat size, and advanced laboratory, one or two private room and the necessary preparation—sterilizing, store, and othe rooms.

On the second floor are found a large students' laborator laboratories for chemical-nutrition research, balance-room (for staff and students), lecture-rooms large and small, an rooms for microscopy and other special purposes. Natu ally, the roof surface is also adapted for out-of-door an greenhouse work, and the staircase, which is large an central, is arranged so as to give the most direct and convenient access from floor to floor. It is also so arranged tha a lift (for passengers and heavy goods) can be put in required in the future.

The whole building has been designed as regards bot elevation and plan in such a way as to be the most dire expression of the needs of the department. Wall spac have been, on the external walls, reduced to a minimum window sizes have been increased to the maximum. T complete equipment and fittings of each room have bee worked out in connection with the general wall spacing.

The external materials will be stone and brick, but owi to the large window areas these are sparingly used, and t building will depend for its structural strength on a fram work of steel. There will be no irrelevant ornamentatio A simple attempt has been made at grouping and balanc but the design will tell its story more by mass than detail.

Great Liners' Decorations

The "Aquitania" and the "Leviathan"

Professor C. H. Reilly, writing in "The Liverpool Daily ost and Mercury," says: It is difficult for an inhabitant Liverpool not to feel the glamour of great liners wherever meets them, even when floating on the water of a com- ting port. The "Aquitania" and the "Leviathan" have en moored opposite one another in the Ocean Dock at uthampton. There they rode (though riding hardly seems e word for such enormous walls of steel), rivals to-day for e first time, though they were intended to be that ten years o, when first designed. They represented in those far-off e-war days not only the high-water mark in a great ship- ilding era, not since approached, but also the highest ort in the competition of two great nations, and they do the me to-day, though in the ownership of the "Leviathan" nerica has taken the place of Germany. These two ips are each the greatest of their kind, and this and e difference in their kind make them objects of interest en to landsmen.

The character of each ship externally is as different as, examination, that of their interiors proved to be. As we ow in Liverpool, from her rare visits, the "Aquitania" an extraordinarily graceful ship. In spite of her immense e, Kipling's words truly apply to her, "the liner she's a ly." You cannot say the same of the "Leviathan." though she towers over everything, she has, to the lay- in, the stocky square look of the tramp steamer—a super- mp, of course, in these days when super-things have ken the place of super-men. The way her bridge is built with two great square steel piers at either side of the ssel, joined by an immense beam, helps to give her this ong utilitarian appearance. I remember noticing it en, as a grey monster in the war, she arrived at the land- stage with a whole American army on board. It was ery impressive appearance then, but to-day it seems a le out of place in a luxury ship. Though she has four nels against the "Leviathan's" three, the "Aquitania" ms in comparison a gentleman's yacht. The long sweep- curves to her decks, as well as the rake of her funnels, aid in this effect. If the "Aquitania" is an English y, the "Leviathan" is certainly a Prussian junker.

The same difference appears in the interior, and it is the re strange when it is remembered that the interior of h vessel was designed by a partner in the same firm of hitects, Messrs. Mewès and Davis. The German boat s designed by the French partner, and the English boat the English, and on the strict condition that neither uld see the other's drawings. Indeed, it was only yester- , when Mr. Davis showed me over both boats, that he for the first time his partner's work.

et us take the "Leviathan's" interior first. The French hitect whom the Germans employed was a man of great entive genius. All his work shows that, and none more n this ship. He said to the naval architects who settle steelwork of the ship: "You must so arrange your oke stacks and your girders that I can have a great suite halls leading one from the other down the centre of the t," and the engineers agreed. The smoke was divided as eft the boilers, and travelled up the sides of the boat, ning together again, of course, before it entered the nels. This simple device, suggested by the land archi- t, at once freed the whole interior. A wide central ridor and vista were now possible on every deck, while the top deck the architect was able to plan, in fine con- sting shapes along a central axis, a great lounge like t of a very big hotel, and stretching from side to side of ship, an entrance hall, a palm court, and finally a great aurant with raised daïs. It is admittedly a magnificent l effect, and there the Frenchman seems to have left it, the detail, though largely executed by French workmen, s not compare in delicacy and charm with his partner's k on the "Aquitania." Everywhere it is relatively rser, and that in spite of the larger scale of the rooms and the greater height between the decks. The decorations are cruder, the paintings too bright, the mouldings too big, and the furniture not so carefully and consistently chosen. One apartment, however, with its oval of great Empire columns, the Ritz-Carlton restaurant, is magnificent—if one forgets one is on a ship, and if the ship forgets to roll.

The interior of the "Aquitania" is the reverse of all this. It has its great rooms, of course, but not all *en suite* down a central axis. They have side doors, and you can rest in them out of the line of traffic. Individually they are, in my opinion, much finer and in better taste than those of the "Leviathan." Some, like the great smoking-room, appear even bigger, but all have a more refined, more endearing character. They are designed more for comfort, less for parade. When one comes, too, to the second class, there is no great drop either in style or comfort as on the "Leviathan." To the layman it looks as if the Germans had strained every nerve for a great spectacular effect, while the English designers had relied on perfect finish and absolute comfort in every part of the boat. "The liner she's a lady" must have been their motto. I wonder what the German one was. "Deutschland über alles" perhaps; and with the American millionaires as the goal they might, except for the war, have been right.

Longer Working Week for Builders

The following award, made by Sir Hugh Fraser, arbitrator on the question of working hours in the building industry, has been issued by the National Allied Building Trades Employers and the National Federation of Building Trades Operatives, the parties to the arbitration :—

"I award and direct as follows :—

"1. That the present rule whereby 41½ hours per week are worked during December and January be rescinded, and that the working time of 44 hours per week shall proceed throughout the year, except during the period of summer time as determined by statute (approximately twenty-one weeks, for example, for 1923, on and from April 23 to September 17), when the working time shall be extended to 46½ hours per week by adding half-an-hour to each of the first five working days of the week.

"2. In December and January, on works where artificial light can be reasonably supplied, the interval of one hour for dinner shall be observed, but in those two months, on works where artificial light cannot be reasonably supplied, the interval for dinner shall be reduced to half-an-hour, so that work may terminate during those two months at 4.30 p.m. If, however, on any such works where artificial light cannot be reasonably supplied the majority of the operatives request that the interval of one hour for dinner may still be maintained throughout December and January, and that the working hours during that period may be consequently reduced to 41½ hours per week, the employer shall be at liberty to arrange accordingly, such shortened working hours thus becoming an occasional exception and not a general rule, as at present.

"3. Nothing in this award shall prevent employers and operatives in any town or area from maintaining by mutual consent the 44-hours week throughout the year.

"4. As it is not desirable to interrupt the existing working hours for a brief period of a few weeks during the present summer, this award shall not come into operation until September 17, 1923."

The assessors in the arbitration (Mr. B. I. Greenwood and Mr. A. G. Cameron) and the representatives of the respective parties in the arbitration have signed a statement calling for the loyal observance of the award by all parties interested throughout the country. It is officially announced that the award will be presented to the next meeting of the National Wages and Conditions Council, when instructions will be issued to all parties concerned regarding the application of the conditions contained in it.

Town Planning : Some Misconceptions

By J. HEMBROW, A.R.I.B.A.

People in the industrial areas are suffering seriously from the absence of intelligent planning of their towns in the past, and it is very strange that many of those who will in future years benefit most from the beneficial application of the Town Planning Act are amongst the opponents of that Act.

I have frequently been astonished at the misconceptions in the public mind on this subject, and I feel that if some simple statement is made as to what town planning really does mean, on broad untechnical lines, it may perhaps remove some of the misunderstanding which is preventing even now the full advantage of the Act being realized.

Many people have the idea that to adopt a town-planning scheme means the expenditure of vast sums of money on laying out and actually constructing great new roads, road widenings, etc., at once. Nothing could be further from the truth. So far as spending money is concerned, to "town plan" an area is the greatest public economy that can possibly be conceived. To adopt the Town Planning Act is, in point of fact, not to undertake necessarily any work that would not have had to be undertaken in some form or another whether a town-planning scheme was adopted or not, but it is to protect the later part of our generation and posterity from the absurd expense and inconvenience arising from the haphazard methods of the past. Every single street widening, every town improvement under the present system, made as they are at the maximum of cost, is an argument for intelligent planning of the remaining land. And all that town planning really means is that by carefully collected records the needs of the future may be judged and such unnecessary and unprofitable expenditure prevented in the future.

We will take, for example, the development and extension of a great industrial town. In the past the growth has taken place without any intelligent control. It follows, therefore, that when great developments have been made the new needs arising have had to be provided for; but these needs under our existing chaotic system can only be met at great expense. Now under a town-planning scheme these needs are foreseen and provided for, so that when they arise they are to be gained by the minimum of expense and not the maximum. It is always obvious to the well-informed that certain communal requirements must arise, and it is just as easy to provide for their being obtained at the lowest cost in the development of a town as it is in the growth of a well-managed business undertaking. To town plan, therefore, does not mean suddenly to plunge into the expense of great improvements, but to take the opportunity to provide for our proper needs at a convenient time and at a fair expenditure.

Another common error is to confuse housing with town planning. This probably arises from the fact that town planning was introduced into the law through what was partly a Housing Act. It would probably be better if the Town Planning Act could be separate, for it has only the same relation to housing as it has to the provision of factory areas or rail or water transport. Houses are not built under the town-planning scheme. The scheme provides a plan which sets aside the most suitable areas for housing; governs the number of houses that may be erected to the acre; protects the residential areas from being spoilt; reserves for factories those sites where the best transport facilities are available; but it does not build a single house, fence, road, or any other thing. It simply lays down a plan to provide that the future development of the district shall be on the most desirable and economical lines. Except for the actual preparation of the scheme it does not spend or cause to be spent one single penny.

I have heard it said that it is impossible for the country to contemplate the vast expenditure called for by cutting great new roads through the city of Manchester, or widenin such streets as Market Street and some of the approache to the city, and that therefore town planning must be pos poned until such time as the country can afford it. Th objector thought that town planning means razing area of vastly valuable property. But that is not town planning that is town improvement, and at the present time it ha really little to do with town planning proper. Setting asid the most complicated aspects of the Act, which will allo some built-up areas to be included, but which the scope this article cannot cover, the Town Planning Act onl affects "land likely to be used for building purposes. which may be taken to mean, broadly, land not alread built on. The hearts of Manchester and Salford and Stock port, therefore, are free from this beneficent monste Probably very little of the Salford area could at present included at all. At some time it will become feasible incorporate extensive town-improvement schemes wit large town-planning schemes, but even when this advanc is made it will only mean that when a block of buildings ha been razed in the ordinary course the new building lin will be decided in relation to the road's importance to th arterial life of the town. This is a very slight change fro what happens now. The difference is that the ratepaye will be better protected from the unscrupulous speculat and the improvements themselves will be more intell gently made. What the public should know is that oppose the town-planning movement is not to oppo extravagance but to hinder wise economy; not to preve reckless idealists from experimenting with cranky idea but to tend to prevent wise and practical men from impro ing the conditions of the people.

As to the objection of opponents that a scheme costs good deal of money to prepare, I wonder if these criti realize how small the cost is. Probably the most ambitio scheme in England to-day is that which has been unde taken by the Manchester and District Joint Adviso Town-planning Committee. When its work is complete will have saved the future inhabitants of the areas mar millions of pounds, many lives, and much amenity. It w cost something approaching one-tenth of a penny rate prepare !

[The foregoing article is reprinted from "The Ma chester Guardian."]

Book Reviews

"Architectural Building Construction."

With the recent appearance of the second part of Volur II of the above book by Messrs. Jaggard and Drury, th important work is now brought to completion.

The second edition of the first volume and the first pa of Volume II have already been reviewed in these colum (see THE ARCHITECTS' JOURNAL of January 24), wh occasion was taken to emphasize the merits of this excelle series of text-books, and at the same time to point out h successfully the authors have blended accurate techni knowledge with true architectural expression.

The present and final volume, which well maintains high standard of those which have preceded it, contai fifteen chapters in all. These comprise two on permane carpentry: (1) timber floors, and (2) roofs; partition temporary carpentry; roof coverings; external plumbe work; internal plumbers' work; drainage; four on joiner (1) doors; (2) windows and skylights; (3) stairs; and internal fittings; plastering and wall and floor tilin glazing and painting; and lastly, materials.

Text-books on building construction ordinarily conta a number of isolated examples having no definite relati to each other, with the result that the knowledge obtain cannot readily be applied to the actual design of a buildi even of the smallest dimensions, until the student h acquired a far deeper insight into the subject at a mu later date. In order, therefore, to obviate this disadvanta was decided to continue the method adopted in the first olume of this series, and relate all the items of construcion it was deemed desirable to illustrate, by applying them ationally within the scope of one or more buildings of a efinite character.

Those selected were a semi-detached suburban house and town warehouse, general contract drawings of which are ontained in the pocket of the cover. The volume itself ius becomes an illustrated technical analysis of these articular buildings, and the student is able to follow ie various stages of their development through all the ades, in a consistent and interesting manner.

This system seems to have much to recommend it, and ie way in which it has been carried out is beyond praise.

F. C.

"Architectural Building Construction." By Walter R. Jaggard, F.R.I.B.A., d Francis E. Drury, Fellow Institution of Sanitary Engineers. Vol. II, Part 2. ice 18s. net. Cambridge University Press, Fetter Lane, E.C.4.

A Glossary of English Architecture.

This book differs from Parker's well-known "Concise lossary"—which it otherwise too closely resembles—in ving more space to architectural terms used particularly connection with the English styles, and rather less space foreign styles. In his preface the author tells us that ore attention than is usual in books of this kind is devoted that part of the subject which bears on social and relious life. Thus more space is given to houses and churches, id proportionately less to purely architectural terms such capitals and vaults.

We think that many of the definitions are brief to the int of vagueness. Conciseness must, of course, be aimed in a work of this kind, but thinner paper might have en used, and the volume would still have been a handy cket one.

For instance, "Zigzag" is simply defined as "a shallow orman enrichment used chiefly on string-courses"—which poor in the extreme. Webster himself is fuller with moulding running in a zigzag line; a chevron or series of evrons." And, of course, it is misleading to say that the zag moulding is used chiefly on string-courses, when it is ed in the Norman arch just as frequently.

Moreover, the definition which Mr. Atkinson fits to Vebule Ornament ("a shallow Norman enrichment conting of a wavy line") would serve almost as much—or as tle—purpose.

The book can hardly be expected to supersede Parker's lucidity, comprehensiveness, and correct information.

A Glossary of Terms used in English Architecture." By Thomas Dinham Atkinson, hitect. London: Methuen & Co., Ltd. Price 6s.

The Cost of Building in Limerick

To the Editor of THE ARCHITECTS' JOURNAL.

SIR,—The review which appeared on p. 266 of your issue August 15, under the above heading, will doubtless erest a great many of your readers who have to deal h building costs in the Limerick district.

There are others, however, who would be grateful if neone with Mr. Sheehy's patience and experience would npile similar schedules applying to English conditions.

Yours truly, "CONTRACTOR."

The £6 Subsidy

he suggestion that the Ministry of Health is withding the new subsidy in the case of houses with parlours been officially denied. As announced in our last issue question arose over the refusal of the Ministry to grant subsidy to the Coombe and Malden Urban District incil. In a letter to Sir Rowland Blades, Bt., M.P., to ose notice the Urban District Council brought the tter, the Ministry state: The Ministry is not, as sugted in the resolution of the Council, withholding subsidy ler the new Housing Act in the case of houses with pars, or discouraging the provision of parlours. Such gestion is entirely without foundation as no such action has been taken or is contemplated by the Ministry. As a matter of fact, in many cases, proposals for subsidizing the erection of parlour houses have already been approved.

With regard to the particular case of the Malden and Coombe Urban District, you will be aware that the Housing Act requires that, before approving proposals submitted to him, "the Minister shall be satisfied that the need for such houses cannot be met without assistance under this Act." In the case which has been cited, the Minister, after full investigation, was not satisfied that the need for the proposed houses could not be met without assistance. On the contrary, clear evidence was submitted to him that builders in the district could obtain a fair profit for these houses without any subsidy at all.

The Architectural Schools of London

Londoners have exceptional opportunities to qualify for membership of the architectural institutions. In addition to the premier London schools, such as the Royal Academy School of Architecture, the Architectural School of the Royal College of Art, the A.A., and the University College School of Architecture, there are thirteen polytechnics, institutes, and schools, aided or maintained by the London County Council, in which day and evening instruction in architecture is given. Each school is under the guidance of qualified architects and engineers, and provision is made to meet the needs of students about to enter, or at present employed in, architects' offices. A pamphlet giving full particulars of the schools, the names of the lecturers, and the scope and cost of the courses, can be obtained from the County Hall, Westminster Bridge, S.E.1. No matter in what district the student lives or is employed, he will find a school at hand.

The late Mr. C. S. Smith

We regret to record the death of Mr. Charles Steward Smith, J.P., F.R.I.B.A., of Reading. Mr. Smith, who was born in 1858, was the eldest son of the late Mr. Charles Smith, J.P., F.R.I.B.A., of Reading, a well-known local architect and surveyor, and twice mayor of the borough, and on becoming qualified to practise as an architect carried on business first with his father and afterwards with his father and Mr. Harry Hutt, A.R.I.B.A., under the style of Charles Smith & Son. During the time Mr. C. S. Smith was a member of the firm, the firm designed and carried out many of the public buildings in the town, including extensions to the Royal Berkshire Hospital, Wantage Hall, and the library, gymnasium, and science and technical laboratories of University College and the borough education offices.

The Architectural Association Excursion

Further information has been issued by the Architectural Association with regard to the excursion to Avignon and district. The headquarters will be the Hotel du Louvre, Avignon. Members are requested to meet at Victoria, Continental platform, on Thursday, September 6, at 7.30 p.m. The party will leave Victoria at 8 p.m., and travel via Dover and Boulogne to Paris (5.15 a.m.). Train leaves Paris, Gare de Lyons, for Avignon at 8.35 a.m., arriving at Avignon at 7.34 p.m. Carriages will be reserved and arrangements made for the transport of the party across Paris. The party will leave Avignon on the morning of Monday, September 17, by the 10.41 a.m. train, arriving in Paris at 10 p.m., and leaving Paris, Gare du Nord at 11.45 p.m.; arriving in London on Tuesday morning, September 18, at 9.48 a.m. In Avignon, particulars will be issued of the most important places to be seen in the neighbourhood, together with details of trains, fares, etc. Members will be free to make their own arrangements, but excursions will be organized from day to day, according to the wishes of members.

The tickets for travel issued to members will be for second class on train, and first class on boat, and will be available for thirty-three days. Those wishing to do so may break the journey at Paris on the return, but the party must travel out together. Members will require passports, but visas are not necessary.

Competition News

The Hull Cenotaph.

The following awards have been made by the assessor, Mr. Stanley Hamp, in the Hull Cenotaph competition: 1 (£150), to Mr. T. H. Hughes, 28 Ashton Terrace, W. Glasgow; 2 (£75), Messrs. H. G. Hall and R. G. Cox, 4 Balliol Road, N. Kensington; 3 (£50), Messrs. Hendry and Schooling, 43 Doughty Street, London, W.C.1. Forty-four designs were submitted.

Bergen Bridge Competition Results.

Following are the results of the competition organized by the Municipality at Bergen in connection with the building of a new bridge over the Nygaardsstrommen. First Prize, Kr. 10.000, Dr. Moritz Ritter, Engineer, of Budapest; Second Prize, Kr. 8.000, Engineer F. Selmer, of Christiania and the Harkort Company, Duisburg. Architects, L. W. Wilhelmsen and Crawford Jensen, Christiania; Third Prize, Kr. 6.000, A/S Stoltz Rothing & Co., Bergen, and the Harkort Company, Duisburg.

Chiswick River Embankment and Promenade Competition.

The following notice has been issued by the R.I.B.A.: The Competitions Committee desire to call the attention of Members and Licentiates to the fact that the conditions of the above competition are not in accordance with the regulations of the R.I.B.A. The Competitions Committee are in negotiation with the promoters in the hope of securing an amendment. In the meantime Members and Licentiates are advised to take no part in the competition.

Members of the Society of Architects are notified that the conditions of this competition are not in accordance with the regulations, and they are requested not to take part in the competition without first ascertaining from the secretary that the conditions have been approved by the Council.

Clatterbridge Poor Law Institution.

The competition promoted by the Wirral Board of Guardians for designs for extensions to the Poor Law Institution at Clatterbridge, is limited to architects practising in Lancashire and Cheshire. The extensions will consist of: (1) female infirmary to accommodate 100 beds, with usual offices; (2) separate maternity ward for twenty cases; (3) separate infirmary for twenty-four children (with covered passage from existing children's infirmary); (4) twelve more bedrooms for the nurses. Plans are required of the floor plans, one elevation, and two sections drawn to a scale of 8 ft. to 1 in., and a block plan. The closing date is September 29. The successful architect will be paid £50, which will be calculated as part of his fees if the work is proceeded with. It is stated that "the Guardians will be the adjudicators of the designs, but they will ask the Society of Architects to nominate an architect to advise them on the plans." For further particulars and block plan apply to Mr. D. Bunting, Clerk to the Guardians, 54 Hamilton Street, Birkenhead.

Chiswick Embankment and Promenade.

Further particulars have been issued with regard to the competition, organized by the Chiswick Urban District Council, for the lay-out of a river embankment promenade, about 200 ft. wide, for a length of half a mile, adjoining the River Thames below Barnes Bridge. The existing pitching on the river bank will remain as at present, and no renovation works are to be included. The embankment immediately adjoining the river is to be not less than 17.5 ft. above ordnance datum. Provision must be made for at least 20,000 persons to view the Universities' boat race. There is to be no obstruction to a clear view of the river except a fence of sufficient height to the boundary of the river bank to prevent persons walking into the river. A paved walk should be provided, and also a carriageway, which should not be substantially below the highest part of the new embankment. Adjoining Barnes Bridge pr vision should be made for four boathouses.

Competitors must submit detailed estimates of the co of carrying out their designs, which must not exce £20,000, exclusive of the cost of constructing the surfa of the carriageway and all sewers, drains, etc. It is desir to keep the works of as rural a character as possible, and awarding the premiums consideration will be given to t question of cost. For conditions apply to Mr. Ernest Collins, Clerk to the Council, Town Hall, Chiswick, W.4.

List of Competitions Open

Date of Delivery.	COMPETITION.
Sept. 12	Masonic Temple in Broad Street, Birmingham. Premiums: £ , £300, and £200. Sir Banister Fletcher, F.R.I.B.A., is the asses . The competition is restricted to architects who are masons s scribing to Lodges in the Province of Warwickshire. Apply J. P. P. Dutfield, 65 Temple Row, Birmingham.
Sept. 30	Designs for a series of plaquettes in bronze illustrative of Londo the capital city of the Empire, or of one or more of her main archi tural features. Designs should be submitted in the form of mo in plaster. The following prizes are offered: One prize of 100 guin two prizes of 50 guineas, three prizes of 25 guineas. Apply Dep Master of the Royal Mint, London, E.C.1.
Sept. 30	The best colouring of a design for the vestibule connecting 315- Oxford Street with 17–19–21 Dering Street, Messrs. Thomas Par and Sons' new offices and showrooms. Prizes: 100 guineas guineas, 25 guineas, and five consolation prizes of 10 guineas e Assessors—Sir Edwin Lutyens, R.A., F.R.I.B.A., Sir David Mur R.A., P.R.I., H.R.S.A., Sir John Lavery, R.A., Mr. Frank Brang R.A., and Mr. E. Guy Dawber, F.R.I.B.A. Apply Competi Department, Messrs. Thomas Parsons and Sons, 315-317 Ox Street, London, W.1.
Oct. 1	The Student Welfare Committee, University of Glasgow, i Competitive Designs (limited to architects having an office in practising within the Municipal Boundaries of the City of Glas for a pavilion to be erected on the University Athletic Groun Westerlands, Anniesland, at a cost of £10,000. Assessor, Alexander N. Paterson, A.R.S.A. Apply Honorary Secre Student Welfare Committee, The University, Glasgow.
Oct. 1	Lay-out of the Bull Green Site and part of the centre of the Tow Halifax. Premium £50. Apply, with deposit of £1 1s., to Percy Saunders, Town Clerk, Town Hall, Halifax.
Oct 15.	Lay-out of a river embankment promenade, adjoining the Thames below Barnes Bridge, for the Chiswick Urban Dis Council. Premiums: £105, £52 10s., and £26 5s. Apply Mr. Collins, Clerk, Town Hall, Chiswick, W.4. Deposit £1 1s.
Nov. 5	Art Gallery for Hull. Assessor, Mr. John W. Simpson, PP.R.I. Apply, with cheque for £2 2s., to Mr. H. A. Learoyd, Town C Guildhall, Hull.
Jan. 1	The Imperial War Graves Commission invite architects who se during the war as members of the Military, Naval, or Air F raised in any part of the British Empire to send in their nam admission to a competition for the designing of the undermenti memorials to the missing to be erected in France by the Im War Graves Commission. The memorials to the missing pro are to commemorate those who fell in the war in France and Be but have no known grave, and will be in the neighbourhood following places, and will have inscribed on them the foll number of names: At Bethune, 20,000 names; at Arment 15,000 names; at Cambrai, 6,000 names; at Soissons, 5,000 n Applications for particulars of premiums and other regulations those desiring to compete are to be addressed to the Secr (Works Branch), Imperial War Graves Commission, 82 Baker S London, W.1, and must be received there not later than Janu 1924, and must be accompanied by a statement giving parti of the war service and professional career of the applicant clearly stating which of the memorials it is desired to co for. Deposit, two guineas for each set of plans. The Asses Sir Aston Webb, K.C.V.O., P.R.A.
No date	Extensions to the Poor Law Institution, Premium £50. Apply to the Wirral Board of Guardians.
No date	The Eastleigh and Bishopstoke Urban District Council invite d for the extension of their existing Council buildings, an erection of an assembly hall, on the site adjacent. Prem 50, 30, and 20 guineas. Apply, with deposit of £1, to Lawrence, Clerk to the Council, Council Offices, Eastleigh.

New Town Hall for Nottingham

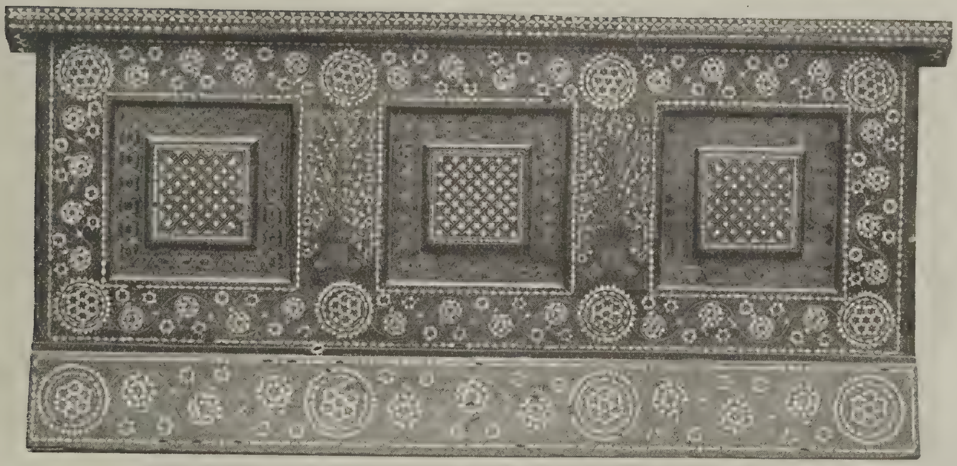
Now that the Nottingham Corporation Act has rece Royal Assent, an opportunity will be afforded of carr forward the Exchange site project. Practically the who the property on the area has been acquired, and the pa of the Act has made the final provision for securing the prop still outstanding. Being one of the finest areas in the with valuable frontages to Longrow, Cheapside, and market-place, the site will be invaluable for comme purposes. At the same time, the Corporation will hav opportunity of providing much-needed accommodation municipal purposes.

Wednesday, September 5, 1923.

Vol. LVIII. No. 1496.

THE ARCHITECTS' JOURNAL & Architectural Engineer

With which is incorporated "The Builders' Journal."

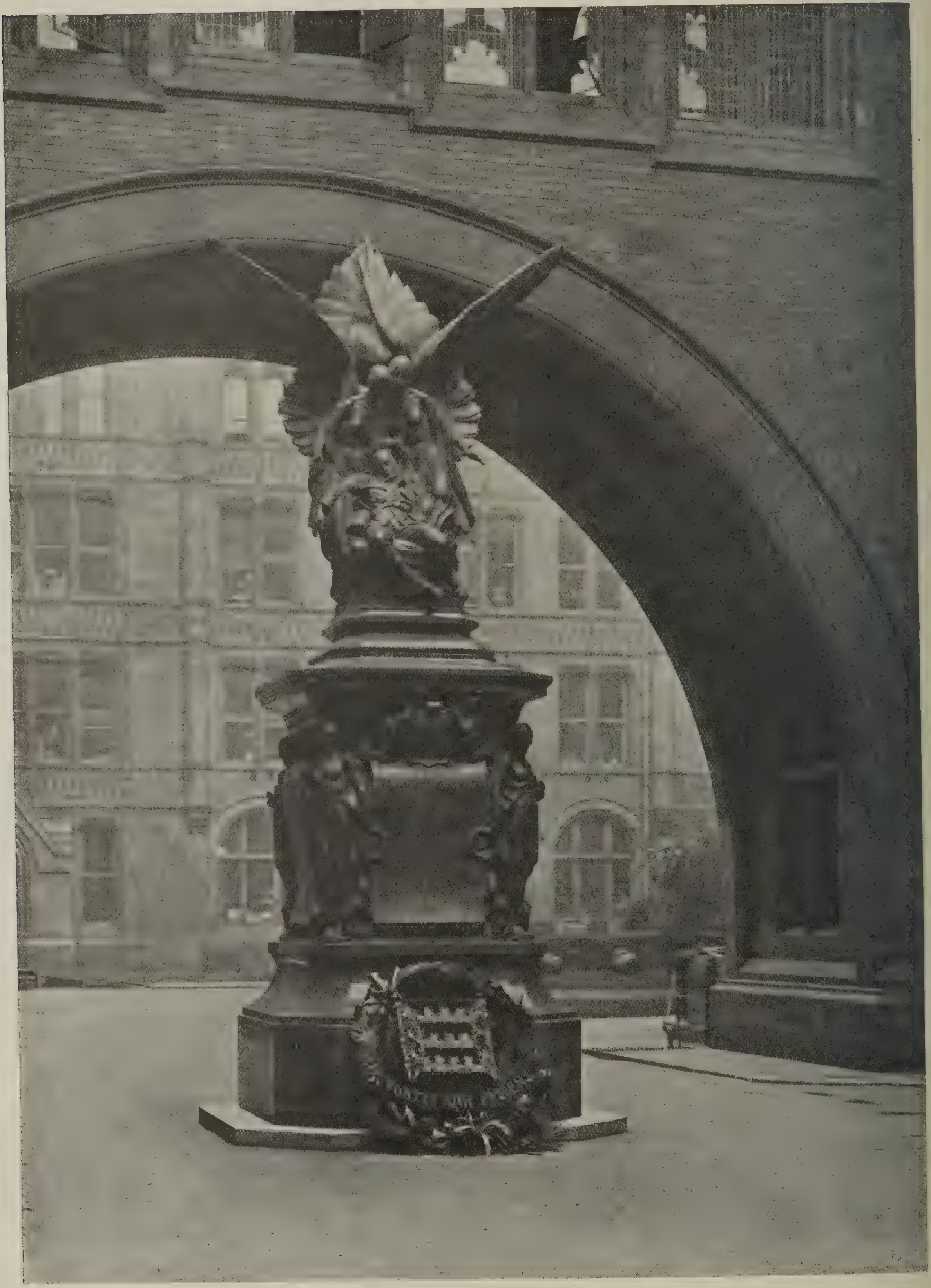


ITALIAN WOODEN COFFER, WITH INTARSIA OF IVORY AND COLOURED WOODS IN GEOMETRICAL PATTERNS. (CIRCA 1500.)
(Now in the Victoria and Albert Museum.)

27-29 Tothill Street, Westminster, S.W.1.

The Prudential War Memorial

F. V. Blundstone, R.B.S., Sculptor



This memorial is erected in the courtyard of the company's head office, Holborn Bars. The pedestal is of Peterhead red granite finely polished, surmounted by an allegorical bronze group representing winged figures hovering over a dead British warrior. At each corner stands a bronze figure representative of the Navy, Army, Air Force, and National Services. The memorial is 21 ft. in height.

THE

ARCHITECTS' JOURNAL

27-29 Tothill Street, Westminster, S.W.1.

dnesday, September 5, 1923

Volume LVIII. No. 1496

Who Shall Build ?

WHILE the question of whether the local authority or private enterprise shall be the principal factor in house production in the near future has now been fought out and for the time ing settled on political lines on the floor of the House Commons, it may be well as practical men to consider hat are the available agencies for the supply of small uses for rent or purchase. There is no doubt that ere is one class of tenant who will never be catered by the private builder, and that is the class known as he poorest of the poor." These unfortunate people, d many others of the lowest ranks of workers, who appears likely will not be able for years to come to y an economic rent, must be housed by the local authority, d the loss will have to fall on the rates. It is merely part the public health services of the town; and, put upon its ry lowest basis, it will pay any community to see that this ction of its population is adequately housed. But there nains the great mass of artisan population, to whom s now to be added the clerk and small shopkeeper, who longer can afford much above the minima of requirents. Who shall build for them? It is by no means rtain that the state of the market and the facilities offered the Government are going to tempt the old-time house ovider again to enter the field. Even with the extra osidies which local authorities have the power to give, ere is no great rush to build, and the £100 per house ered by Manchester and other cities, or even the £120 of istol, has not convinced the cottage-building trade that ey are to find an El Dorado. And there is going to be considerable doubt about local authorities taking on an known burden. When the unknown quantity was the air of the State there was plenty of activity, but now at the rates will reflect the building loss, the fear of the rdict of electors will determine many councillors. That ves the private owner to be considered. He will be nparatively small in numbers and uneconomical in eration, besides lacking the vision or the possibility combination which has made recent housing schemes, spite their financial failure, so great an advance upon evious work in the matter of site planning and architural effect.

What then is to be done to secure buildings which shall both economical and seemly? Town councils reluctant, culators suspicious, and individuals impotent! Can re not be a fourth way out? The object of this article o suggest that there is a fourth, and that it may be a nbination of the other three, with the introduction of the inary citizen of goodwill, who realizes some responsibility the good housing of the houseless, but is still chary of ting it into the hands of local councillors. This comation is possible by means of public utility societies, a ognized means of house production, and one which the vernment have decided to help in the present emergency. ore the war, such societies, aided by loans from public ds to an inadequate extent, and hedged about by repres- restrictions, were yet making substantial progress and wed promise of great advances to come. The greater t of the Hampstead Garden Suburb was built through such an agency, and at Liverpool the Wavertree Garden Suburb was entirely on the same basis; while in the neighbourhood of Birmingham, the estates at Harborne and Bournville had seen the promise of a ring of garden villages around the city. The war however checked these activities, and the experience of war-time societies was not such as to make future working easy. They built just when prices went up to the maximum and found themselves loaded with expensive houses on a deflated market. However, the Government has promised to come to their help, and despite financial difficulties of some societies, these are purely accidental and not likely to recur. The principle has been proved sound, and the fact that in Holland and Belgium the major portion of the housing work is done by these societies is evidence of the future usefulness which the system is capable of.

Public utility societies have as a basis the theory of co-operation between all parties to housing needs. There is first of all the occupier, who may be a tenant shareholder, and who, by possessing a financial interest in the scheme, will probably have greater concern for economic upkeep, and do for himself what otherwise he would transfer to the estate office or rent collector. The employer who needs houses for his workpeople may become an investor and secure proportionate accommodation. The local council, in addition to any facility which may be available under the present Act in regard to subsidy or grant, may invest in the society, may lend money to it, and have a direct interest in its management, while it can render considerable service in other ways, while avoiding the difficulties and responsibilities which in many people's eyes will be inseparable from public ownership. The builder will come in as the builder, for after all the houses have to be built, and the society as such will have to find a contractor. Then there are the local philanthropists and investors who desire to see their money used to best advantage, and by this means may contribute to the common weal. The landowner will often be found very sympathetic towards such organizations, and Lord Salisbury, among others, has set an excellent example at Wavertree, which is upon his land. It may be to the landowner's advantage to invest his land in a scheme, by taking up loan stock to the amount of its value, and thereby ensuring harmonious and also speedy development. The Government will lend a certain proportion of the approved value, but the remaining quota—which it is hoped will not be more than 25 per cent.—must be found from the three classes here mentioned—the tenant, the council, the investor, with the employer extra if it is an industrial scheme. And inasmuch as by reason of voluntary work these buildings are generally managed very economically, it should be possible with the Government assistance to secure to the investors a safe 4 or 5 per cent. return.

Without the prospect of such a return it will be next to impossible to secure investment, and without that missing percentage of cost the scheme cannot mature. It was the lack of this proportion which made abortive many very promising schemes in the early days, but the power given to local authorities to participate in societies' activities should enable great advance to be made. In every town of any size there are people socially minded who would help, some with finance, some with work, and there ought to be growing up a network of these organizations, which by combination and consultation should secure all the advantages of the big buyer, and by retaining competent advice should enable the building of cottages to be carried on in a manner which should provide real homes, and prevent the repetition of horrors which have justly become associated with the phrase "housing of the working-classes."

EWART G. CULPIN.

The Problem of the Large Empty House

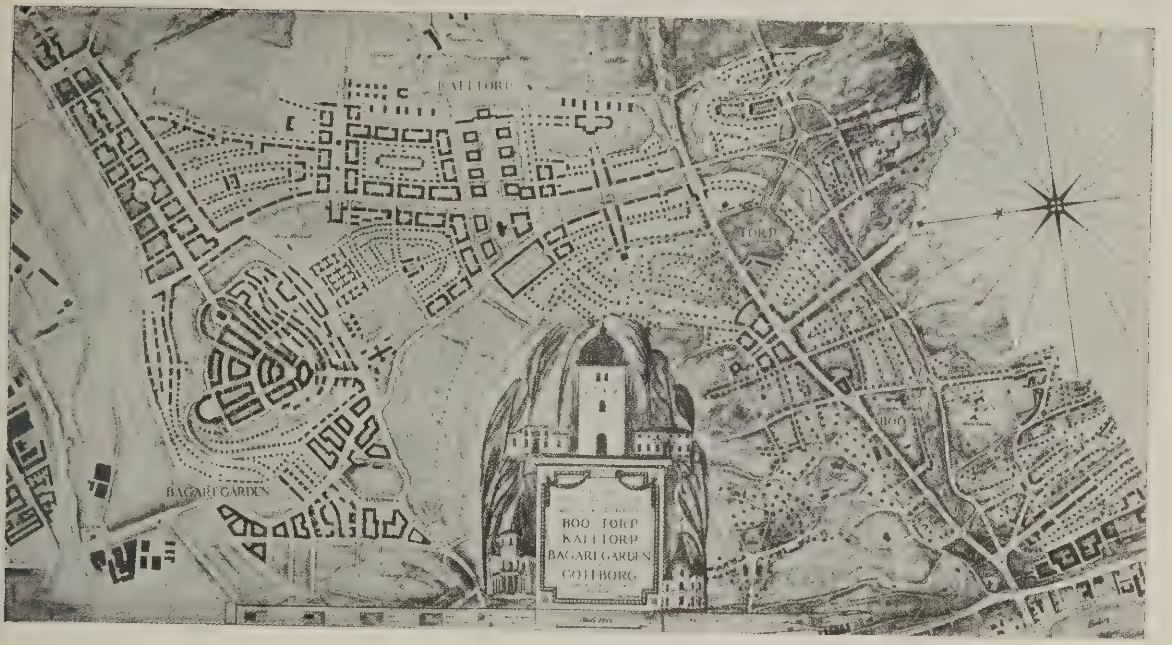
Like a drowning man clutching at a straw, many people are now grasping at the elusive prospect of a home of their own as a result of the suggestion that large empty houses should forthwith be converted into flats. That there are many such houses (some almost derelict, be it noted) in and around London and most other large towns cannot be denied. Their existence and present condition signify vitally changed domestic conditions and requirements. Mostly belonging to the mid- and later-Victorian periods, they were built for the man who conceived it a social obligation to provide a large family for the upper rooms and a staff of domestic servants to look after them in the basement. In a period when the ruling ideal is "no family and a maidservant," there can obviously be little use for such houses. So why not convert them into flats and give them a new lease of useful life? The idea is not without objections of one sort or another. The ground landlord may object because the covenant in the lease stipulates that the house must be occupied by a single family. Adjoining owners may object because conversion would lower the social tone of the neighbourhood. Then, again, cost may be prohibitive. Local authorities, under the Housing Act of 1919, certainly have the power to acquire and alter such houses to make them suitable for habitation by the working and middle classes, and there are already numerous instances of this having been done—on the whole with success. There seems to be little reason, if the cost of conversion is not found to be prohibitive, why the practice should not be extended to take in all large houses (in suitable neighbourhoods) which are definitely proved to be unlettable. Whether or not people who go into such flats would be content to stay there when small houses become available is another question. The man who can afford it naturally prefers a self-contained house of his own.

Seaside Architecture

Why is it that year by year our popular seaside resorts, especially those that are developing rapidly, seem to become more and more depressing? Because, we imagine (as in the case of inland towns), there is a complete lack of competent control over the architectural character of building developments. The influence of the big town is as potent to-day as it was just over a century ago, when so many of our seaside towns, then little more than fishing villages, began to expand and grow prosperous as a result of the new fashion of the seaside holiday, which his Majesty King George III, of gracious memory, did so much to popularize. (The town council of Weymouth, it may be noted, were so grateful to the monarch for his patronage that they went so far as to erect a monument to him on the sea front.) The influence of the big town upon these coast resorts was very considerable, as may still be seen by a casual glance at such places as Ramsgate, Margate, Hastings, Brighton, Weymouth, and so forth. And the influence was all to the good, if we still have any appreciation of the delights of bow windows and gracefully proportioned verandahs and balconies. What a pity that this seaside tradition should have been so completely lost. To-day almost any big seaside town is merely a repetition of ugly suburbia. Thus does history repeat itself! And the pity of it is intensified a thousandfold when the place happens to be one of great natural charm—such, for example, as that wonderful stretch of Hampshire coastline between Christchurch and Poole. We merely mentio this particular spot because it happens to be fairly typica of what has happened elsewhere; in its general developmen it is no better and no worse than a score of other seasid places. Thomas Hardy's description of "Sandbourne," i "Tess," written when the place was newly sprung from th pines, already has a curiously old-fashioned flavour; he call it "a fairy place suddenly created by the stroke of a wand and allowed to get a little dusty. . . . By the midnigh lamps he (Clare) went up and down the winding ways o this new world in an old one, and could discern betwee the trees and against the stars the lofty roofs, chimneys gazebos, and towers of the numerous fanciful residences o which the place was composed. It was a city of detache mansions; a Mediterranean lounging place on the Englis Channel." The "fanciful residences" are still there looking more dusty than ever and not a little out of date just as, in a few years' time, those very new suburban looking villas which stretch for miles through the pine-cla slopes east and west of Bournemouth will begin to look a if they had seen a better day. Everywhere, if we mistak not, is the trail of the speculative builder. Popular place like Bournemouth must develop (more's the pity!). The will continue to develop until they become so congeste that people will be only too glad to get away from ther for the sake of a little privacy and fresh air. Then, pe haps, these variegated villas will become overgrown wit verdure and stand tenantless amid the stillness of th pines. We can imagine for them no better fate. Th moral of it all is that seaside development, like cit development, must be a regulated, not a fortuitou growth; and the sooner our architects and town-planne have a voice in the matter the better.

An Interesting Housing Experiment

The question of housing is not unrelated, we believe, t another question of some importance, namely, the lack public interest in architecture. The great majority of th people of this country live in houses that are not their ow Consequently it is not reasonable to expect them to tak much interest in these houses. How much less reasonab is it to expect them to take an interest in building or arch tecture in the abstract? But the moment a tenant becom the owner of a house he automatically becomes intereste in it, first of all from the point of view of its stability- for above all else he wants it to last—and then, by a logic process of development, in its appearance, which he wi compare with that of others to satisfy himself, so far as is able, that the house is not only right, but looks righ And the moment he gets to this stage he is interested architecture, though he may not know of the spiritu change that has taken place within him. If this reasoni is sound, then the sooner every man owns his own house t better. Possibly without thinking much about archite tural æsthetics, Lord Londonderry is doing something help the cause in his collieries at Durham. He has arrang to build a number of houses which he will sell by hire pu chase to any official or workman in his employment w wishes to acquire a house of his own. The purchaser w pay a deposit of £5 on account of the price, and will g the benefit of the Government subsidy, which is calculat at about £75 per house. The cost of the house, less t deposit, and after giving credit for the Government su sidy, will be payable by weekly instalments of 10s., whi will pay for both principal and interest in a period of fou teen years. This period may be shortened by a larg weekly payment. The experiment is one that has distin possibilities in several directions. It is calculated to pr mote thrift, to give a number of men a material stake the country, to produce that mental satisfaction whi inevitably goes with the knowledge of a sure roof to one head, and, last but not least, to stimulate the interest private citizens in building and architecture. We wish th other big property owners would follow Lord Londonderry example.



GOTHENBURG, BÖÖ, TORP, KALLTORP AND BAGAREGÄRDEN: PLAN BY ALBERT LILIENBERG AND ERIK FRIBERGER; 1922-23

he International Town Planning Conference and Exhibition at Gothenburg

By G. L. PEPLER

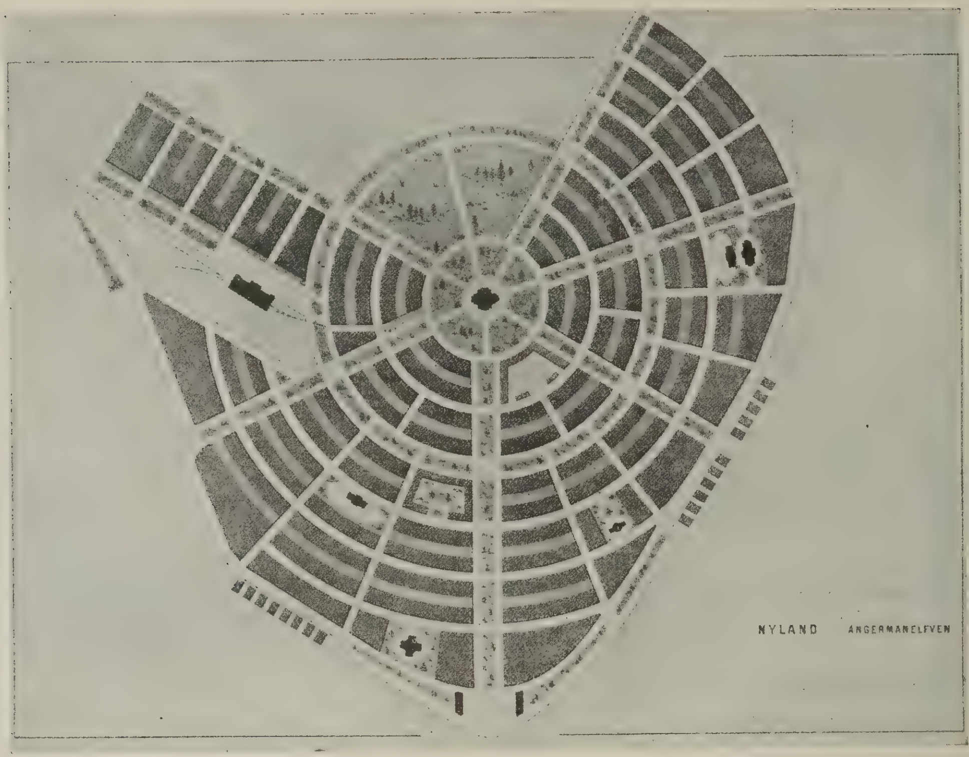
THE City of Gothenburg is an ideal place in which to house a Town Planning Conference and Exhibition, for the city is itself a notable example of a town that was planned at its birth (1620), and ose Governors had the foresight to have a plan prepared guide the form of each marked stage of its extension. cause the City Fathers have, through the centuries, so ed and cared for their town, the citizen and visitor of day enjoy the advantages of a fine belt of parkland, on site of the old fortifications, embracing the heart of the y, of some splendid boulevards and wide streets and of venient communications, etc. A pleasing and noticeable racteristic of Gothenburg is that almost every house in outskirts appears to have a flagstaff and also there are ny in the "places" inside the city. The display of bunting ds a spirit of gaiety over the town, and the English itors felt too that the decorative value of this feature town furnishing had not been sufficiently appreciated at ne.

ppropriate as was the place, that in itself would not e been enough to ensure a successful conference. The ation of place and people is the core of the creed of n planners and at Gothenburg this is well illustrated, for charm of the town is exemplified and amplified in the ple. The welcome extended by Dr. Lilienberg (Chief y Engineer) and his friends and the excellence of their angements for the success of the conference and the oyment of the delegates could not have been bettered.

he conference was held at the Town Hall, under the pices of the International Garden Cities and Town nning Federation, and was attended by representatives sixteen nations. The President, Mr. Ebenezer Howard, present—to the delight of his disciples—and among the nbers of the Town Planning Institute who attended, in ition to Mr. Howard, were Messrs. Gibbon, Halloran stralia), Nolen (U.S.A.), Pepler, Purdom, Stubben rmany), and Unwin. Papers were read by Dr. Lilienberg, Dr. Sjöstrand, A. F. Enström, of Sweden, Mr. H. Andersin (Finland), Mr. John Nolen (U.S.A.), Mr. Gustav Langer (Germany), and Mr. R. Unwin and Mr. G. L. Pepler (Great Britain).

The exhibition formed a temporary section of the great Jubilee Exhibition of the City of Gothenburg, and was splendidly staged, under the direction of Dr. Hegemann, who also prepared the catalogue, in particular the edition published in English. This English edition of the catalogue should be specially mentioned, as in it are reproduced plans, diagrams and studies from many countries and there is a summary of the town planning activities in each country (twenty in all). Copies can be obtained on application to "The Jubilee Exhibitions Catalogue Bureau," Gothenburg 5, Sweden; price 8s., including postage.

Among the general impressions gained from the conference and a comparative study of the plans were: (*a*) that, generally speaking, on the Continent and in America, the technical man is given greater scope than he is allowed in England and that where this applies the results are beneficial; (*b*) that, as a rule, on the Continent the town plan is made primarily from the standpoint of the general efficiency of the whole town and the owner is expected to conform; in contrast to the British practice, which is, perhaps, based rather on co-ordinating the development of different ownerships; (*c*) that, in most countries, the housing shortage is such a powerful irritant that the necessity for immediate palliative remedies is unfortunately to a considerable extent obscuring the wider issues of town planning, so that there is a danger of the part being treated as though it were greater than the whole; (*d*) that the planning of towns in northern Europe, where the houses are built of wood, is, as a result of bitter experience, influenced to a considerable extent by the necessity to prevent the spread of fire; (*e*) that an International code of town planning notation is urgently required so that the language difficulty may be overcome and town planners of all



NYLAND : ONE OF THE MOST INTERESTING OF THE OFFICIAL MODEL PLANS OF 1874.

countries may be able to read each other's plans to their mutual advantage. A short paper on this question was read at the conference by Mr. Pepler.

The exhibition was arranged according to nations. Perhaps this is inevitable in an International exhibition, but for purposes of study, classification according to subject is more convenient. Limits of space prevents any detailed description of the plans exhibited. They included plans both old and new, in some cases affording a most interesting study of town evolution. The following brief notes are arranged primarily according to subject :—

Civic Survey.—The huge traffic diagram of the Manchester and District Joint Town Planning Advisory Committee dominated a large section of the exhibition. Other examples of civic survey from Great Britain were the plans and diagrams of the South Wales Regional Survey Committee, the series showing the evolution of Newbury, etc. From other countries, one noticed a set of diagrams from Stockholm that illustrated survey statistics in a very graphic way. Of particular note was the vivid notation of the series of survey diagrams prepared by the City of Hamburg to show (*a*) Ownerships; (*b*) Open Spaces; (*c*) History of Growth of City Limits; (*d*) Marshy Areas; (*e*) Density of Traffic; (*f*) Communications by road, by rail and by water; (*g*) Educational Institutions; (*h*) Public Buildings. Amsterdam supplied an ingenious time zone map, indicating time distances at intervals of ten minutes from ten to sixty minutes, distinguishing by colour whether services were by railway, tram, bus, or boat. Some interesting American studies were exhibited, and also a pretty complete study of conditions at Helsingfors, Finland.

Regional Planning.—It was instructive to compare the British examples of joint town planning committees such as Manchester and District, Doncaster Region, Deeside, South Teeside, West Middlesex, etc., with such a scheme as that prepared by the Regional Planning Association for the Ruhr coal district. The latter scheme embraces twenty-nine local authorities whose representation on the Regional Association is according to population. The association works through three sub-committees : (*a*) Traffic, (*b*) open spaces, (*c*) settlements, each in charge of a permanent expert official. Its expenses are met by precept on the constituent authorities, in proportion to rateable value. Except for right of appeal to the State Minister, the Regional Association has complete control over town planning, so that it h
much wider powers than any joint town planning committ
formed so far in Great Britain. The association was form
voluntarily and given these powers by the local authorit
concerned, some of them of considerable size and impo
ance, because they were public-spirited enough to put t
welfare of the Region above parochialism. The town pl
for Greater Berlin was exhibited, also portions of pla
prepared by the three competitors placed first in the co
petition, from which the adopted plan was evolved. T
preliminary studies for the Region of New York a
Environs (5,500 square miles), made an interesting co
parison. Mention might be made, too, of the new Regio
Plan for Copenhagen, comprising decentralization throu
the development of satellite garden towns, although t
plan is apparently unofficial and legislation would be
quired to make it operative. One noted also a joint sche
comprising Eindhoven and five adjoining communit
(Holland), and including a ring road.

Town Plans, City Development Plans, Zoning.—It
noticeable that England apparently stands alone in
cluding the cores of towns from the town plan. In all ot
cases the plan of development deals with the whole ci
It was interesting, however, to see the bold plan for
internal re-development of Leicester, in addition to
official town plan, an indication that English planners ap
ciate that their schemes must be comprehensive, eve
other powers than are provided by the Town Planning A
are required for dealing with the central parts. Ot
features in which British practice appears to be pecul
are that our zoning is a good deal less precise than it i
other countries and also apparently in our country m
more initiative is allowed to the owner.

The plans for Gothenburg comprise considerable inte
reconstruction, including dock extensions and a high le
bridge—they were illustrated by a magnificent model.
existing buildings were modelled, but where they wer
be cleared for dock extension, etc., the future plan
painted over so that both the present and proposed fut
use could be seen simultaneously and what was involved
the proposals could be appreciated at a glance. The
has followed a policy of extensive land purchase, which
been found greatly to facilitate sound development.
very interesting exhibit was the set of sixteen model pl

ɛpared by the Swedish Government to facilitate the com- lsory town planning required by the law enacted in 74. These model plans include a sheet indicating alter- tive methods of laying out minor roads inside the tangular system of main roads. It is impossible even to ntion all the interesting town plans that were exhibited t many are illustrated in the catalogue. Reference must made to the magnificent models of Upsala (Sweden) l Munksnas-Haga, Helsingfors (Finland), and of the ɛellent plans for Tromso and other Norwegian towns, ere levels afford difficult problems, admirably sur- unted; for the extension of Hague (Holland), of Prague echo-Slovakia), Elberfeld and Konigsberg (Germany). e plans of Milan and Turin indicated that Italy had vn planning legislation in advance of England, and that od use had been made of it in these two towns.

Garden Cities and Suburbs.—The garden cities of Letch- rth and Welwyn were well illustrated, also Mariemont S.A.); many interesting garden village projects such Heyplaat (Holland), Finbergaasen (Norway), were dis- yed and garden suburbs and housing schemes in England, ance and every other country. The satellite town eme for the region of Copenhagen has already been erred to and mention must be made, too, of one of the miated competition plans (1923) for the extension of slau on satellite lines.

Parks and Open Spaces.—The effect of the new Prussian for the wholesale preservation of picturesque woods l riverside walks was evidenced in the predominance of en colour on many of the German plans. Vienna's lles of green were already familiar to town planners, but English delegates could hardly avoid a feeling of envy the apparent simplicity and economy with which these irable amenity reservations are made in other countries he world. This may partly account for the, what seemed some of us, rather prodigal allowance of frontage land to ks, although clearly to tuck parks away behind buildings, iscriminately, is to greatly reduce their value to the zens.

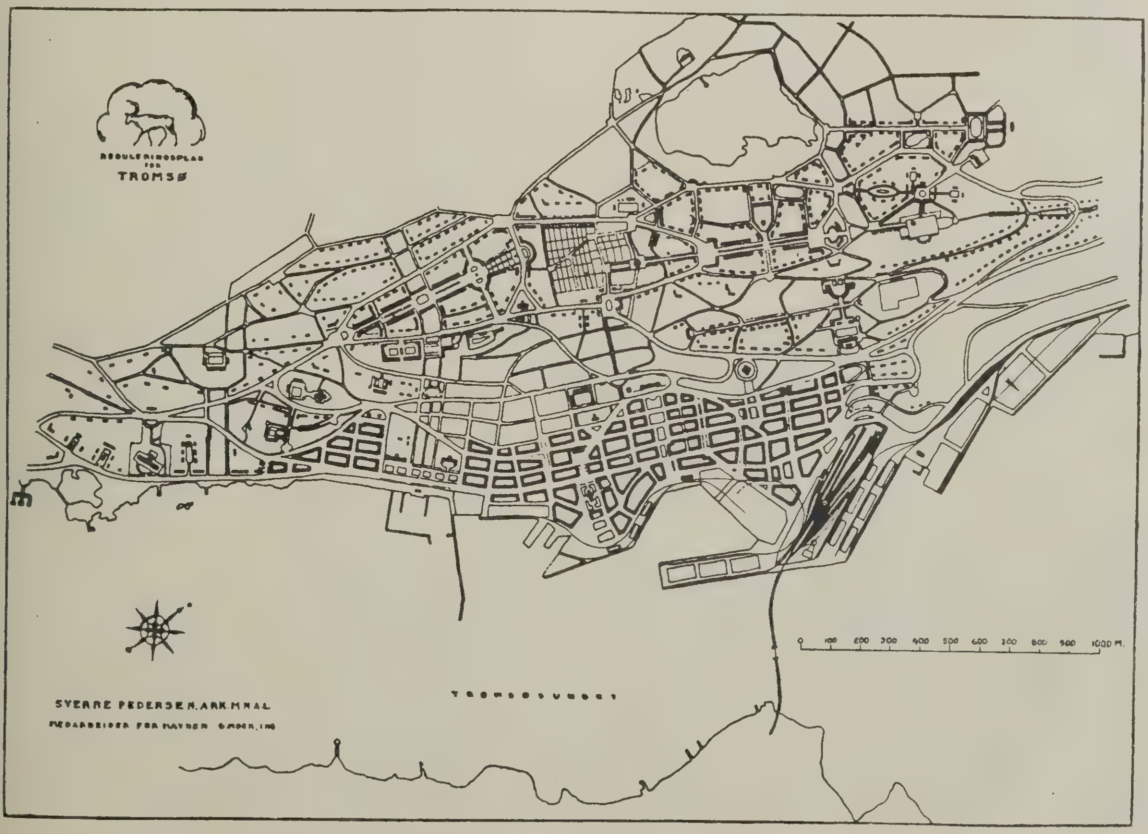
he chief impression that remains is of the kindness of hosts and next of the great value of such an exhibition and conference. Town planners must be learning all the time and to exchange experience with colleagues of other countries is an immense help to this end. Many of the plans and papers can no doubt be seen in publications, but much more is gained from informal and friendly intercourse—by no means confined to "talking shop."

The English edition of the catalogue is monumental in its scope. In it are reproduced plans, diagrams, and studies from most of the countries that have ever been concerned with town planning, and there is a summary of the town-planning activities in each of the twenty countries. The task of compiling such a catalogue must have been prodigious, and the editor is to be understood in introducing it in the following way:—

"The data to be used in making up the catalogue had been invited to arrive in Gothenburg not later than May 15. Most of them arrived in July, quite a number of them during the latter part of the month.

"Many of the data had to be translated into English from languages not familiar to the editor. Excellent as some of the translations were, most of them had to be made by professional translators unacquainted with the terms and ideas of town planning. The results often were puzzling and required much investigation. As the exhibits described were not under the eyes of the editor while making the catalogue the wording of the text was frequently a matter of conjecture, and the chances that ideas foreign to the exhibitor have been introduced into the catalogue are considerable. In one case a text that came especially late has been inserted with the wording as supplied by the exhibitor; this example may stand as an illustration of the difficulty referred to.

"Another source of errors is the fact that quite a number of the manuscripts came in handwriting. To quicken the activities of the editor such manuscripts were copied for him on the machine. The result may be illustrated by this P.S. sentence found at the end of a letter containing information to be used in the catalogue: 'Let me rum if you vant me to bung any slides. I do not propore to do so unless you wisti it.'"


TROMSØ
SVERRE PEDERSEN. ARK. MNAL
0 100 200 300 400 500 600 700 800 900 1000 M.

TROMSO: TOWN PLAN BY ARCHITECT SVERRE PEDERSEN.

Cut Mill, Bosham, Sussex

DARCY BRADDELL, F.R.I.B.A., and HUMPHRY DEANE, Architects

Photographs by F. R. Yerbury.

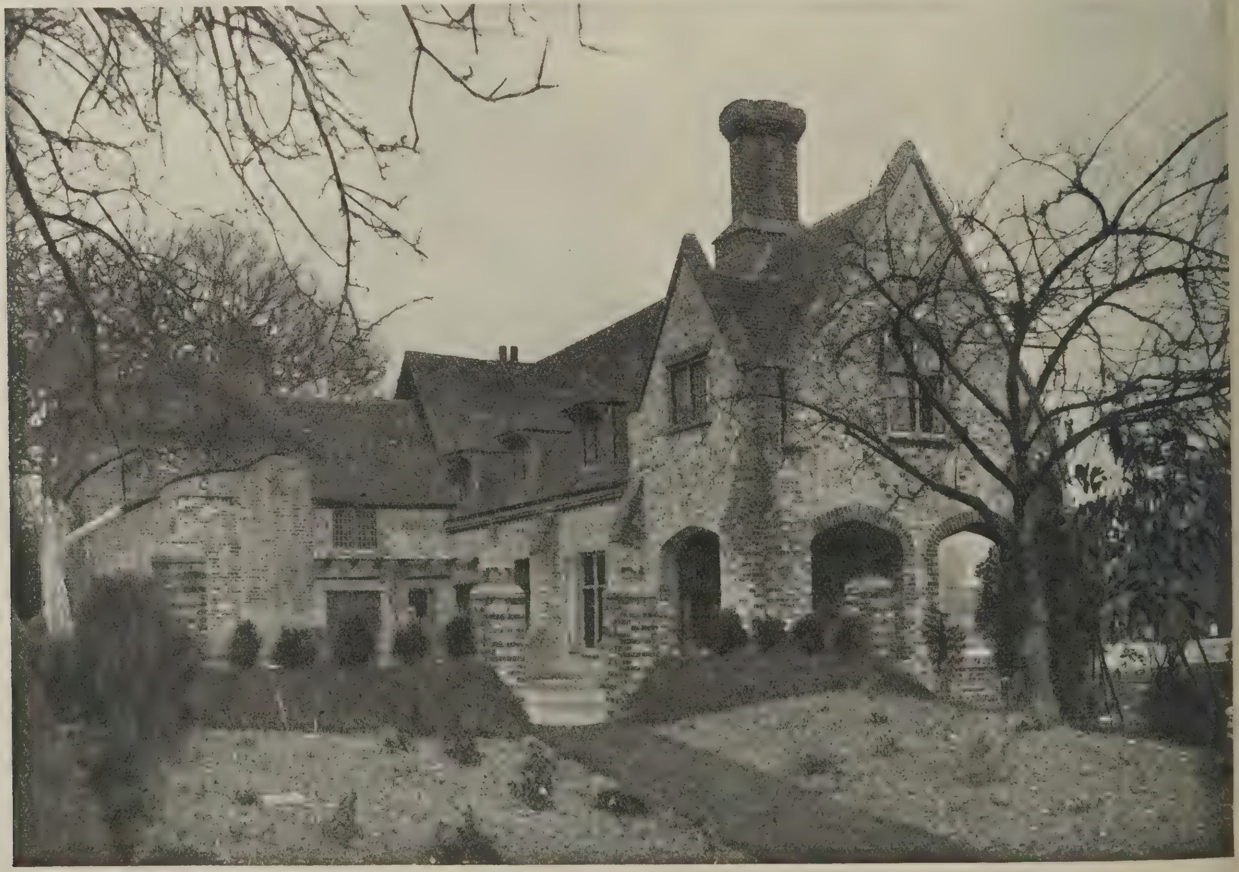
THERE originally stood on the site which this house now occupies an ancient water-mill which local tradition says was built in the reign of Henry VII. This mill worked till about a hundred years ago, and the wheel is still standing. Behind it stood the Mill House of late Tudor building. At the time the present owners, Captain and Mrs. H. M. Harwood, bought the property, the place was being used as a duck farm, and where the new wing now stands was once a ramshackle weather-boarded barn of no particular interest.

Water flows round the whole house, which is really on an island site. To the right runs a canal or cut, from which the place derives its name. This canal fed the mill wheel and went out to Bosham river and so to the sea. The whole of the old buildings were in a dreadful state of repair, and the first thing done was to dam the mill stream and restore the ancient buildings. The mill wheel enclosure and rooms over are pure oak timber construction; the little house at the back is brick.

The walls of the new wing are built of flint with red brick dressings, and the roof covered with old tiles gathered from the neighbourhood. In the angle formed by the old and the new wing a rather elaborately paved garden has been made with a fountain in the middle. The front door is unusual for its coloured "weather" dolls, exquisitely carved by Mr. Symonds, of puppet-show fame, and a lead panel beneath bears in gilded letters a delicious comment by the owners: "Building is a sweet impoverishing On entering the house the black and white floor, co structed of wood, gives a somewhat Dutch air, which accentuated by the fact of two doors being axially opposi each other, with a view right through the house to t loggia outside the dining-room.

On the left of the entrance is the new sitting-ha panelled in sycamore, and floored in the same way as t entrance hall. A panel, designed by Mr. Frank Brangwy R.A., in inlaid and coloured woods is fixed over the mant piece of Hopton-wood stone. The house is amply acco modated with bathrooms, radiators, and the usual co comitants of modern life.

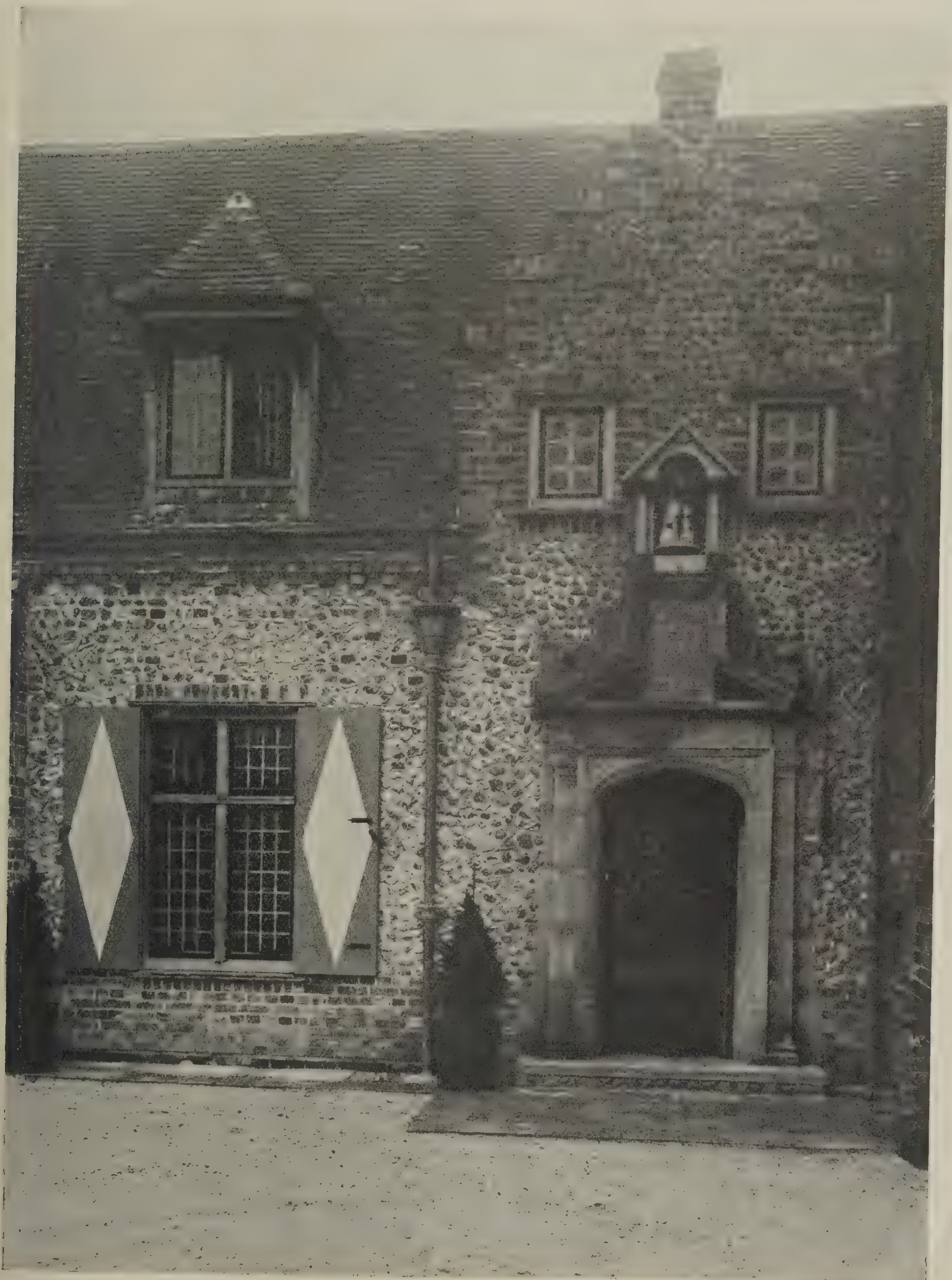
Although planning is difficult when old work has to retained, the existing building in this case lent itself to t making of a good plan. The dining-room, for instan can be readily entered either from the sitting-hall or garde and the domestic offices are well placed. Perhaps t pantry would have been better at the kitchen end of t dining-room, but owing to the stairs that could not contrived. The new rooms are exceptionally well lighte without the exterior being made to appear "all glas The room styled the "sitting-hall" has a spaciousness th has been gained not only by its 20 ft. by 16 ft.: the cro lighting adds to the sense of largeness. The Brangw panel over the fireplace (illustrated on page 358) is, course, something which alone would give distinction the apartment.



A GENERAL VIEW

Modern Domestic Architecture. 55.—Cut Mill, Bosham, Sussex: The Entrance

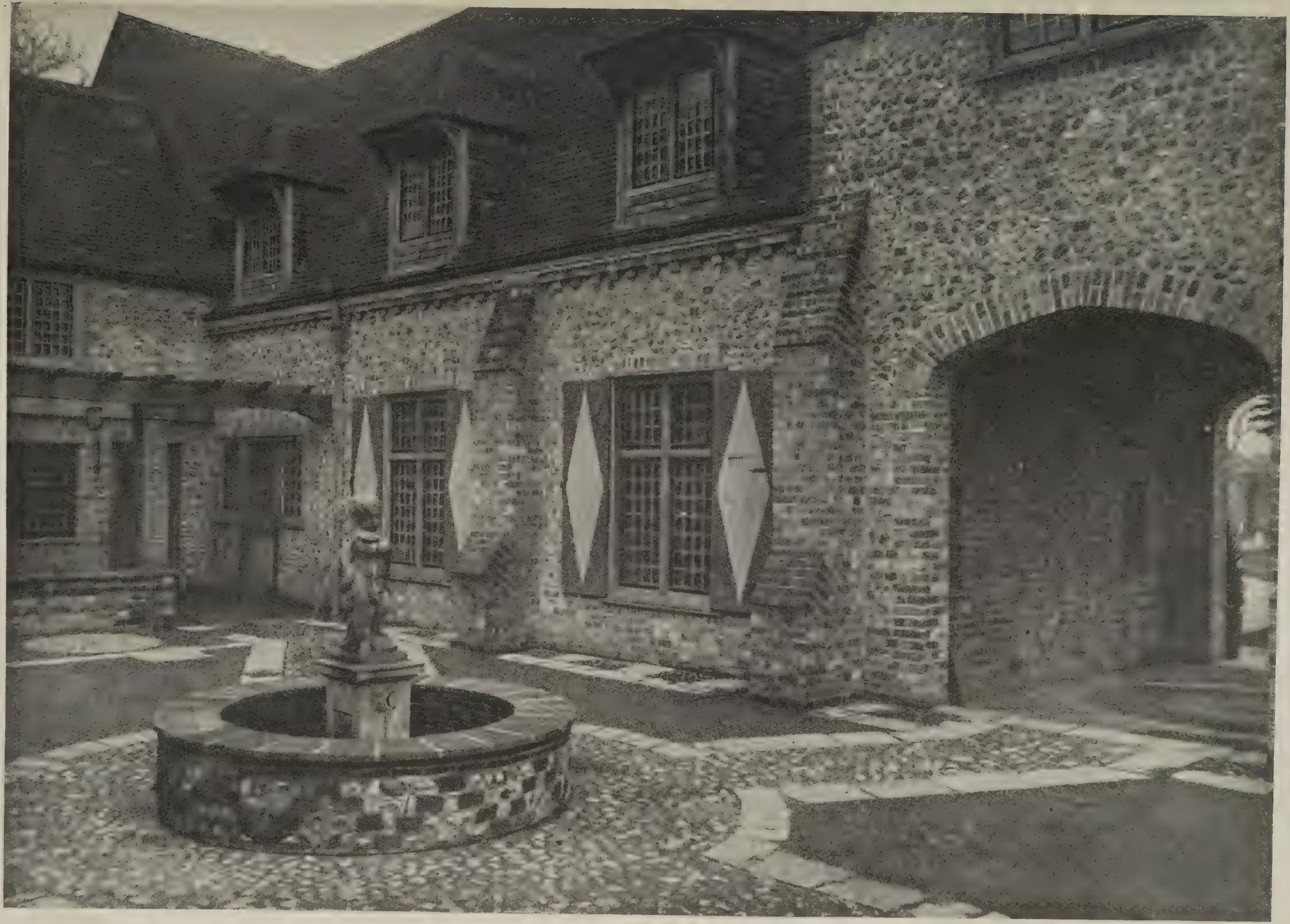
Darcy Braddell, F.R.I.B.A., and Humphry Deane, Architects



The front door of Cut Mill is a welcome departure from the ordinary. Above are the old-fashioned weather-dolls, and a lead panel bearing, instead of the hackneyed "Nisi Dominus," the comment, "Building is a sweet impoverishing."

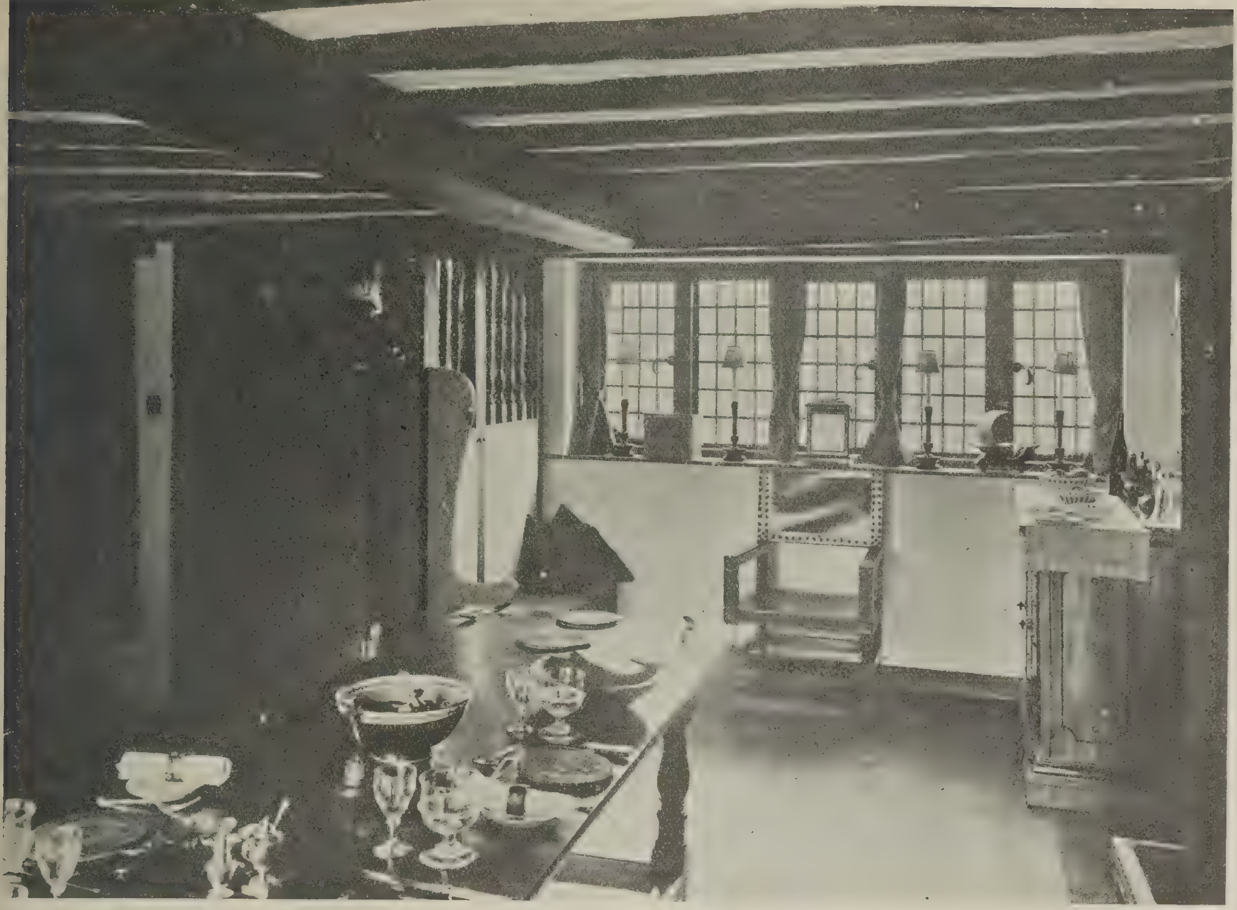
THE LIBRARY
OF THE
UNIVERSITY OF ILLINOIS

Darcy Braddell, F.R.I.B.A., and Humphry Deane, Architects

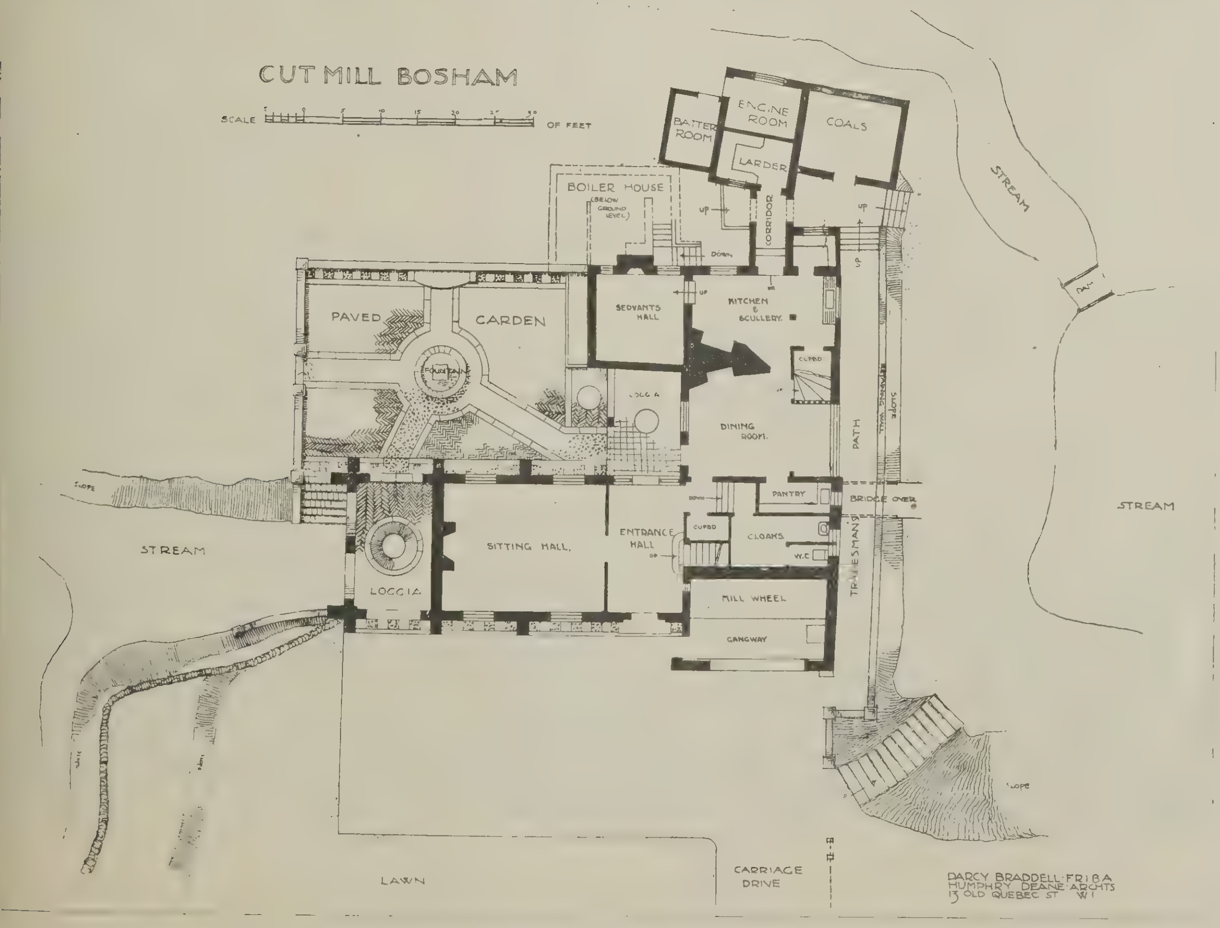


The Paved Garden is formed in an angle at the back of the house, and is overlooked by the Sitting-Hall and Dining-Room.

THE LIBRARY
OF THE
UNIVERSITY OF ILLINOIS

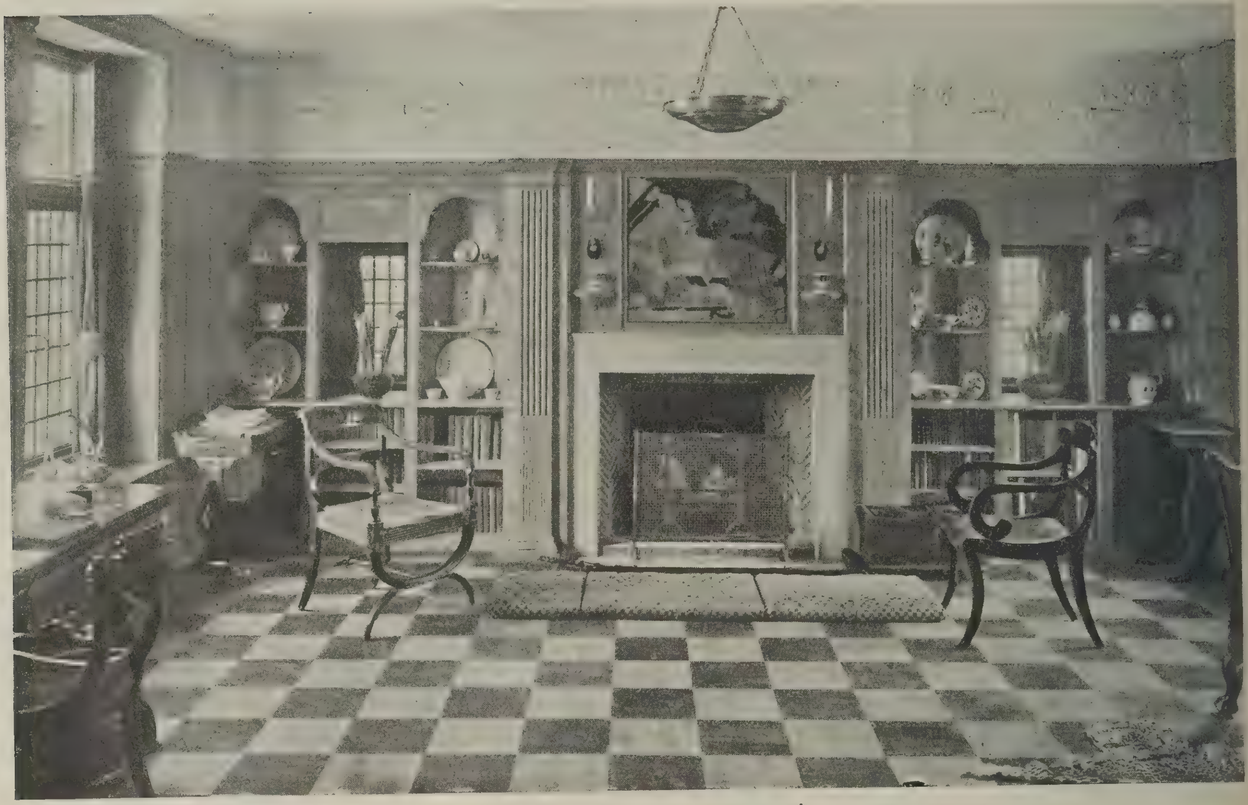


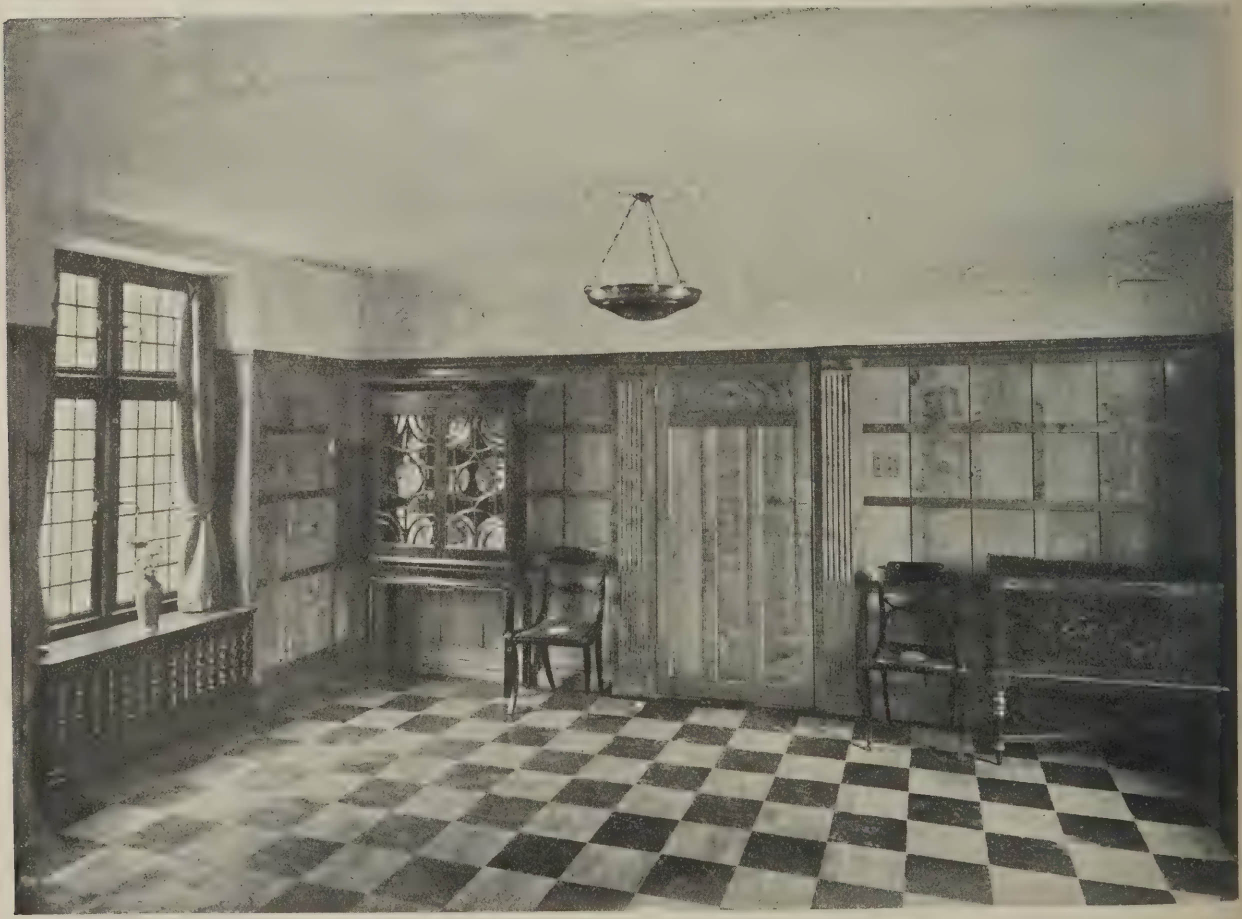
THE DINING-ROOM.



PLAN.

CUT MILL, BOSHAM, SUSSEX. DARCY BRADDELL, F.R.I.B.A., AND HUMPHRY DEANE, ARCHITECTS.



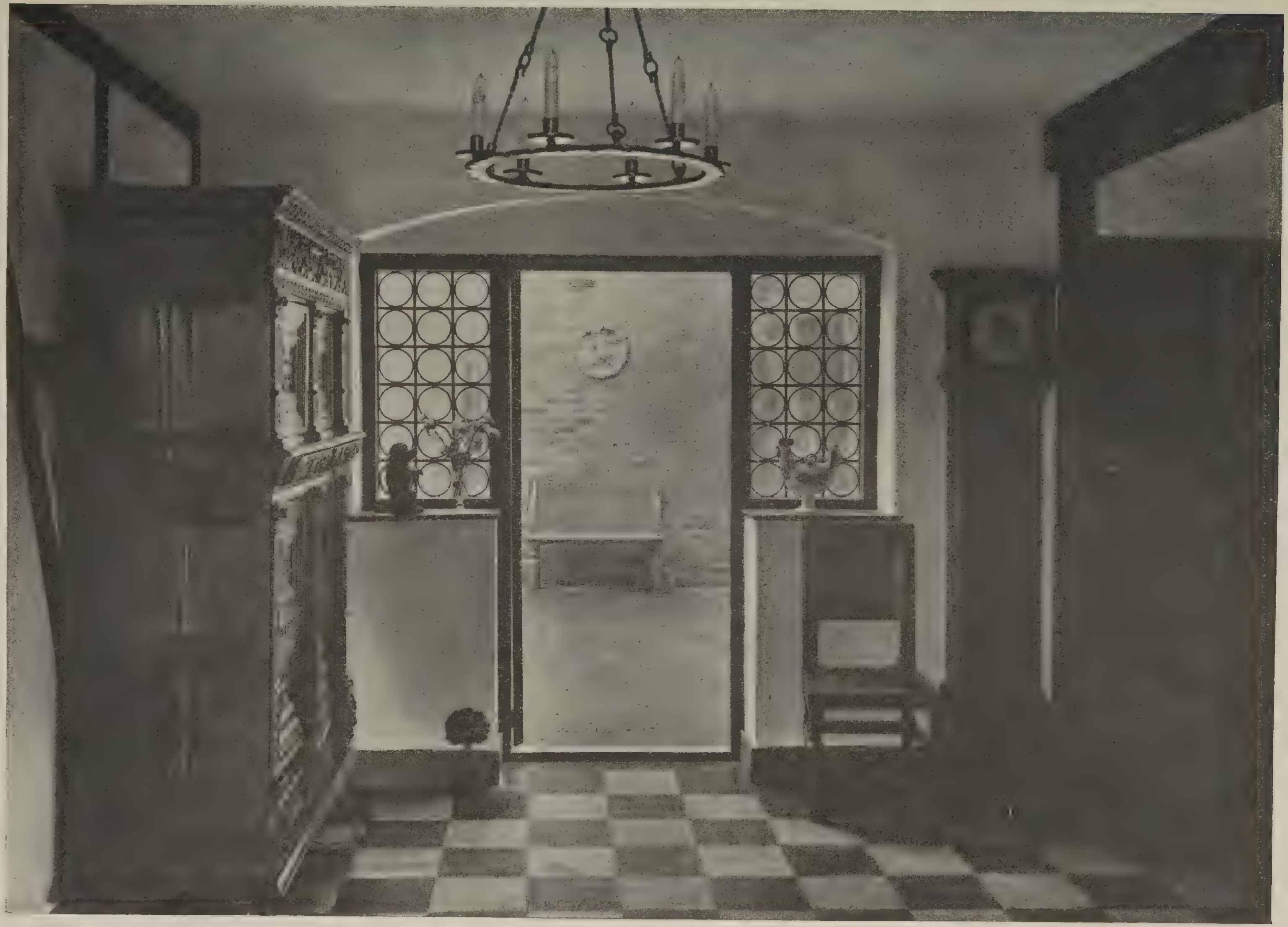


TWO VIEWS OF THE SITTING-HALL.

CUT MILL, BOSHAM, SUSSEX.
DARCY BRADDELL, F.R.I.B.A., AND HUMPHRY DEANE, ARCHITECTS.

Modern Domestic Architecture. 57.—Cut Mill, Bosham, Sussex : The Entrance Hall

Darcy Braddell, F.R.I.B.A., and Humphry Deane, Architects



Upon entering, a vista is obtained through the hall to the loggia outside the dining-room. The paved garden is to the left of the loggia.

THE LIBRARY
OF THE
UNIVERSITY OF ILLINOIS

Skyscrapers: the London Problem

By an American Architect

IN the following article, which appeared in a recent issue of "The Times," an English architect, who some years ago went to America and carried out much work, gives his views upon the much-vexed question of whether higher buildings should be erected in London. Like Mr. Cass Gilbert and other American architects who have designed New York "skyscrapers," the writer thinks that very tall buildings are certainly not desirable for London, though asserting that the present building laws are out of date and that there seems to be a vital necessity for considerable changes.

* * * * *

When the long-awaited and much-needed changes in the London building laws have been effected, a continuous transformation such as has been witnessed in other great cities may be London's lot also.

New York, Paris, and other important centres are notable for the shifting styles of their public and commercial structures. The spirit of evolution pervades their architectural appearance. The writer, upon his return to the States from England, was more impressed than ever by the transition which is almost daily taking place in New York. Englishmen arriving at the portals of the chief seaport of the New World for the first time cannot but be impressed by the height of the buildings of the Island of Manhattan. These structures formerly suggested many-towered Camelot, or a group of Towers of Babel, but the new ones now kindle in the imagination visions of the Pyramids or the hanging gardens of Babylon.

In the interesting discussion on proposed modifications of the building laws for London, held recently by the Royal Institute of British Architects, the opinion was expressed by an American speaker that high buildings for London were absolutely unpractical. As an Englishman who has designed many of America's great buildings, I feel that the limit has been reached by the "skyscraper" of the States, and that the limiting zoning law now enforced in several American cities came on the Statute Book not a second too soon. It may seem inconsistent that I should hold such a view, considering my own relations to the development of the great structures in the States, but these have been erected largely in new cities, and certainly not in places where human beings are congregated, like London, which grew to its present size with its streets of a width and direction suitable to accommodate only buildings of approximately four stories as a maximum.

Very few of London's thoroughfares have been widened in conformity with the increase in height of the buildings or the increase in the volume of traffic. In the southern end of New York City, where the streets are narrow and gorge-like, the "skyscrapers" turn day into night on the lower stories. In fact, in many of these dark streets there are buildings which are really not suitable for the requirements of modern life. The atmosphere is depressing and the sunlight seldom properly penetrates. The streets are totally inadequate for the pedestrians, even eliminating all other traffic, as often has to be done.

The Zoning Law.

Conditions such as these caused the New York architects to move for extensive changes in the Building Acts, and led to the adoption of the so-called zoning law, which regulates height, type, and use of all structures in different sections of the community. Under the provisions of this law, adopted in 1916, the height of all buildings must be in proportion to the width of the street on which the building stands. The structure can only be reared as sheer perpendicular walls to a certain height. If the owner desires to go higher he must have the upper stories of the structure set back, and for every foot which it recedes from the frontage in the street he may go so many inches higher. Thus the tops of the buildings are becoming stepped or terraced, and give a pyramidal effect, which suggests the lines of the American poet Longfellow :—

> The mighty pyramids of stone,
> That, wedge-like, cleave the desert airs,
> When nearer seen, and better known,
> Are but gigantic flights of stairs.

There was naturally much opposition on the part of the property owners to the adoption of the zoning law, which certainly did constitute a drastic restriction on the height and amount of rentable space possible in buildings that might be built on certain of their properties. The blue sky was no longer the limit—to use a picturesque American phrase. The ancient easements of light and air, so well known to every Englishman, are non-existent in the New World, and in the epoch of the "skyscrapers'" early development were practically not at all considered. While in some cases these zoning laws may work hardships to owners who have been trying with might and main to squeeze all that is possible in earning power from property without consideration of anyone else, it is evident that the community and the surrounding property are, as a whole, greatly benefited by the greater access to light and air and the more even distribution of the citizens throughout the city, and the general easement on tax-earning value of all land is more stabilized, so that all reap some advantage from this new regulation.

A Blessing in Disguise.

Within the few years since this law came into effect the physical appearance of certain parts of New York has been altered entirely. The large cornice has been eliminated, as the theory of getting better light and air by reducing height and setting back is entirely opposed to the use of such light-arresting ornamentation, and practically all those who originally opposed the zoning law now regard it as a great blessing in disguise.

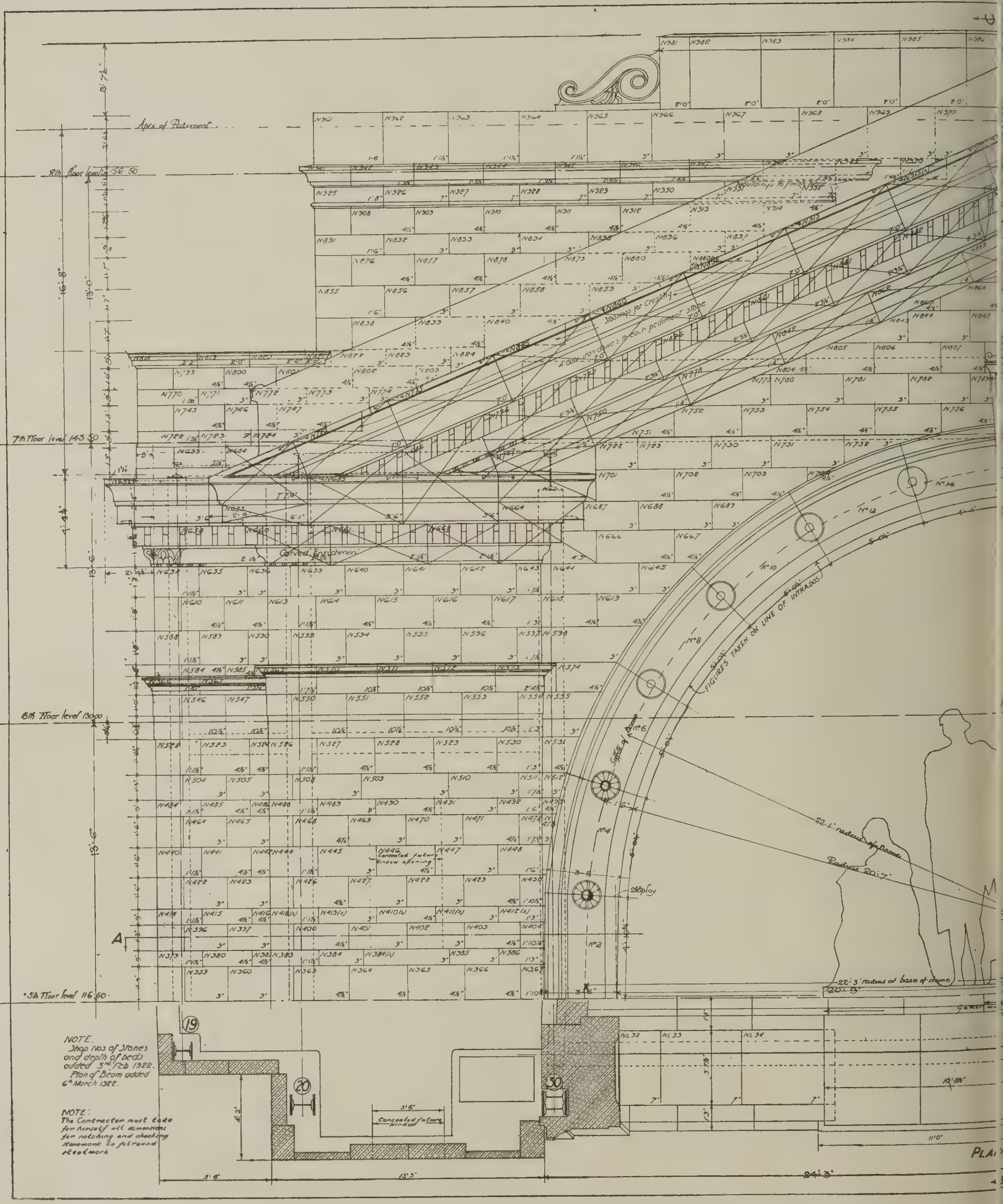
What is the solution of the building and traffic problems of London ? How must the demands of changing conditions be met ? The present building laws, in the opinion of a great many architects and owners, are out of date. If I may venture an opinion, there seems to be a vital necessity for considerable changes. Very tall buildings are certainly not desirable for London, but other countries, not limited by older laws, have developed improvements in the planning of structures and the handling of materials, while at the same time erecting buildings in accordance with requirements of efficiency and economy. Foreign architects, builders, and engineers make a great effort to regulate the amount of material really necessary in the construction or space needed for special details rather with regard to the actual need than as suggested by precedent.

There is often a tendency in England to follow precedent and to use more material than is needed either to create a beautiful building or to supply the structural strength required. With our increased knowledge to-day can we not save or prevent waste both of labour and of the money so sorely needed in other channels ?

Of course the world finds inspiration in the beauty of English architecture, but it does seem that the time has arrived when Great Britain might profit from the example of those countries where older customs and laws have not hampered the free reign of the imagination or the constructional ingenuity of the men responsible for the accommodation of the inhabitants of great cities.

Architects' Working Drawings. 69.—The Bush Buil

Helmle and



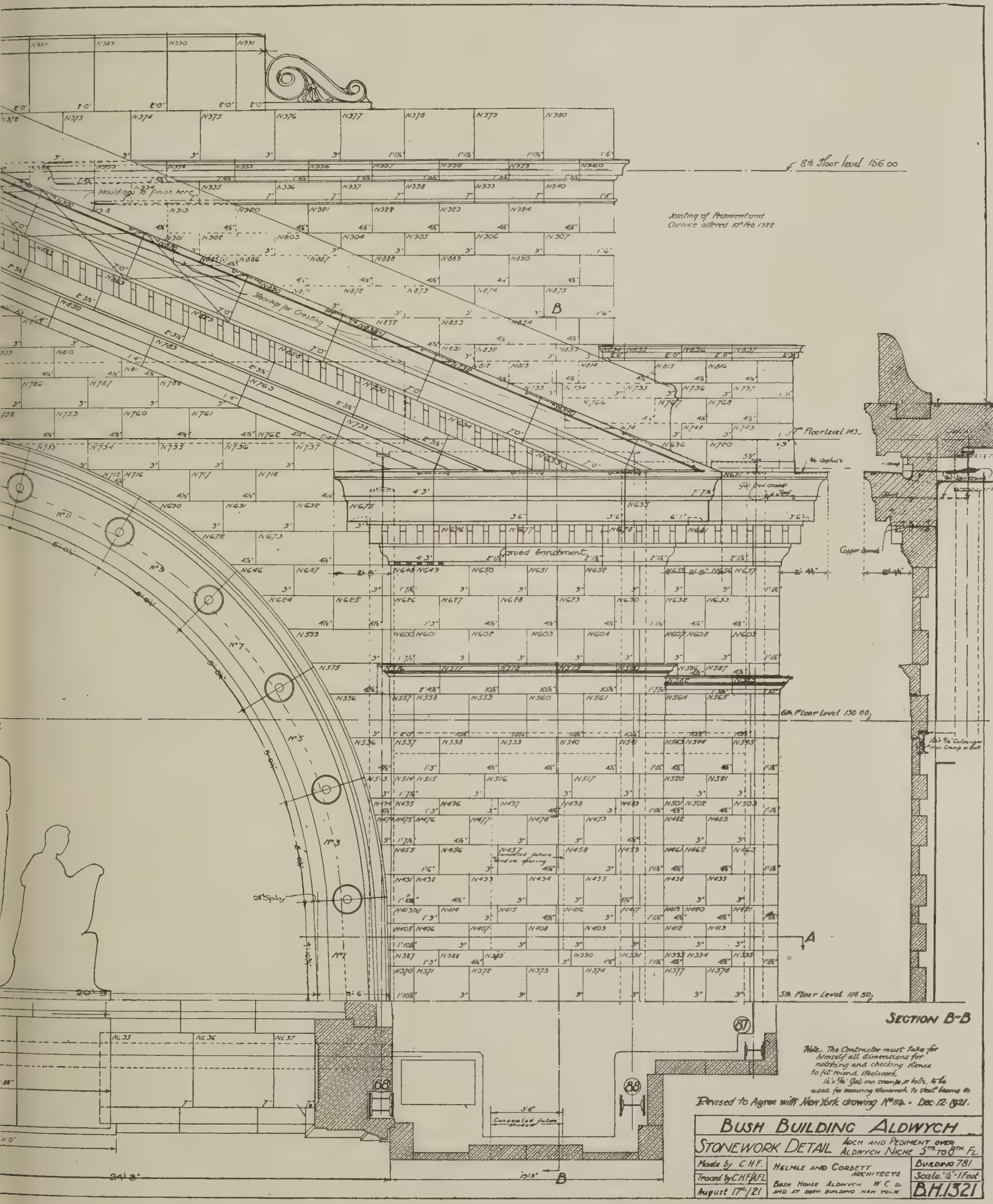
NOTE.
Shop Nos of Stones and depth of beds added 3rd Feb 1922.
Plan of Beam added 6th March 1922.

NOTE:
The Contractor must take for himself all dimensions for notching and checking stonework to fit round steelwork

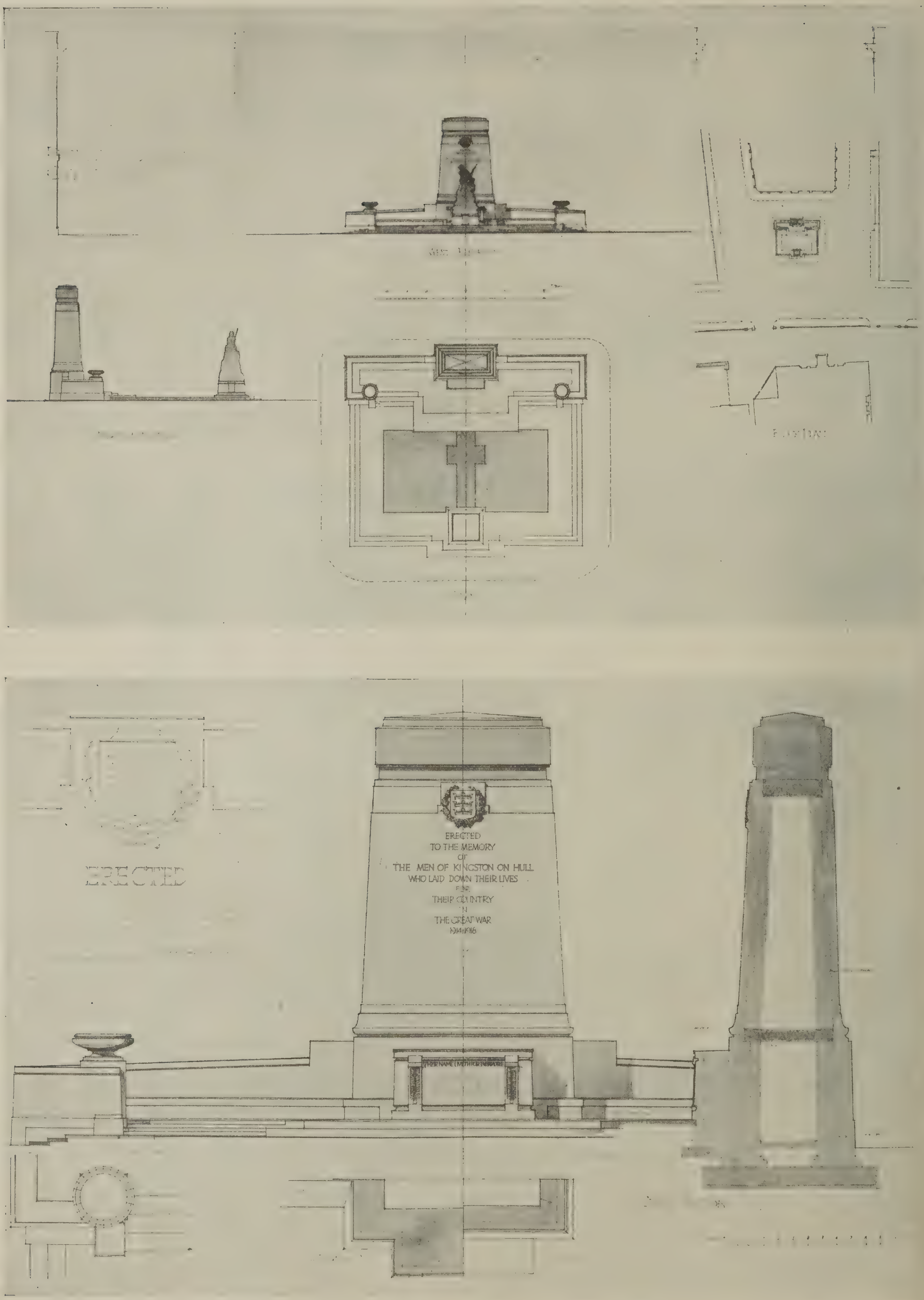
The arch and pediment, details of which are shown above, are striking features of the Aldwych front of Bush House.
effect of the statuary a model was designed, photographed to a

tail of Arch and Pediment over the Aldwych Niche

.A., Architects


8th Floor level 156.00
Jointing of Pediment and Cornice altered 10th Feb 1922
Mouldings to finish here
Soffits for Cresting
Carved Enrichment
7th Floor Level 143
6th Floor Level 130.00
5th Floor Level 116.50
2½" Splay
B
A
Section B-B
Note. The Contractor must take for himself all dimensions for notching and checking stones to fit round steelwork
1½" x 5/16" Gal. iron cramps or bolts, to be used for securing stonework to steel beams to
Revised to Agree with New York drawing No 114. - Dec. 12. 1921.
Bush Building Aldwych
Stonework Detail Arch and Pediment over Aldwych Niche 5th to 8th Fl.
Made by C.H.F.
Traced by C.H.F./A.F.L.
August 17th/21
Helmle and Corbett Architects
Bush House Aldwych W.C. 2. and at Bush Building New York
Building 781
Scale ½" = 1 Foot
B.H. 1321

of fourteen voussoirs only and the keystone, the masonry used being of considerable weight and size. To determine the
d on cardboard and wood, and set up in position on the building.


ERECTED
TO THE MEMORY
OF
THE MEN OF KINGSTON ON HULL
WHO LAID DOWN THEIR LIVES
FOR
THEIR COUNTRY
IN
THE GREAT WAR
1914-1918
THEIR NAME LIVETH FOR EVERMORE
ERECTED

HULL CENOTAPH COMPETITION. FIRST PREMIATED DESIGN: T. HAROLD HUGHES, F.S.I., A.R.I.B.A., ARCHITECT.

(*See also page* 372.)

he Royal Academy School of Architecture

The Policy of the School and the Work of the Students

THE Royal Academy School of Architecture, Burlington House, is one of three schools under the patronage of the Royal Academy of Arts.

The architectural school is an evening school, is primarily for the benefit of assistants who are engaged ng the daytime in the offices of practising architects who desire to pursue their studies further. The other —the painting and sculpture schools—are for day lents.

dmission to the school can be obtained at any time. re is no age limit, and there are no fees. A prospec- student should apply to the secretary of the Royal demy for an application form, which, when filled in, ıld be delivered to the school, together with a port- of drawings as evidence of the student's ability and ly.

he work required from the applicant should consist of vings of the Orders, measured work, shaded or rendered vings, any sketch books, and it is essential that one or e original designs are submitted.

hese studies are examined by the visiting academician, decides whether the work is of a sufficiently high dard for admission. Certain applicants, however, who able to produce a certificate of fair proficiency from any itution of architectural education will be admitted as pationers without the necessity of submitting the port- of drawings.

n being admitted he serves a probationary period, king on the current design subject with the other nbers of the school, and at the completion of this subject drawings are placed before the council of the Academy heir examination.

If the drawings are approved he then becomes a student for a term of three years, which may be extended for a further period of two years, should his progress, in the meantime, have been satisfactory.

The student is expected to attend the school regularly, on an average of three evenings a week, especially those evenings on which the visiting academician attends to criticize the work.

The most important feature of the course of instruction is the great benefit a student may derive from the personal advice and criticism of the architect academicians.

Five subjects have been set by the following visitors during 1922:—

Sir Aston Webb, P.R.A.—A London Street Frontage.

Sir Reginald Blomfield, R.A.—A Gymnasium.

Sir Edwin L. Lutyens, R.A.—A Processional Avenue, one mile in length, with an Imperial Palace at one end and a Triumphal Arch at the other.

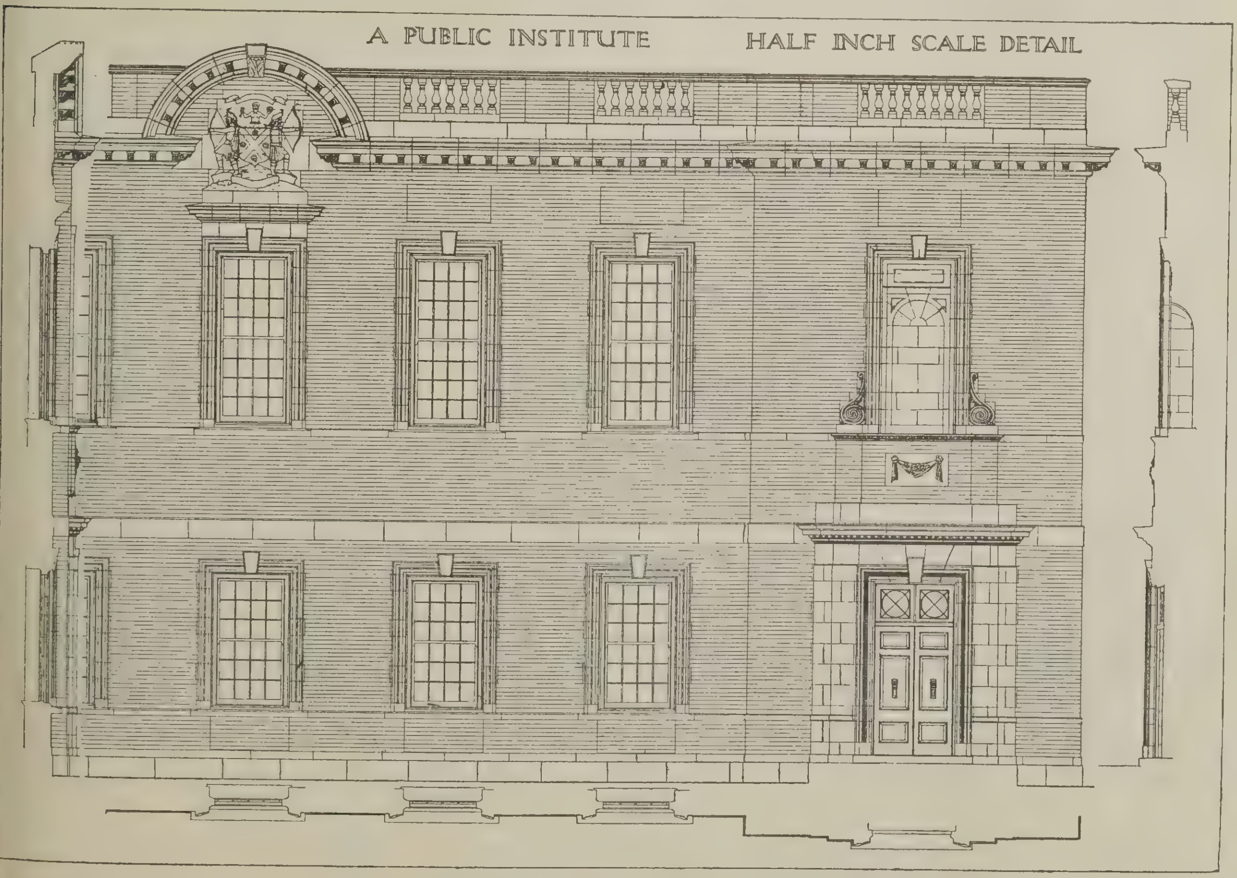
Mr. G. Gilbert Scott, R.A.—A Seaside Hotel adjoining Golf Course.

Sir John J. Burnet, A.R.A.—An Arts and Crafts Exhibition Building in a Public Park.

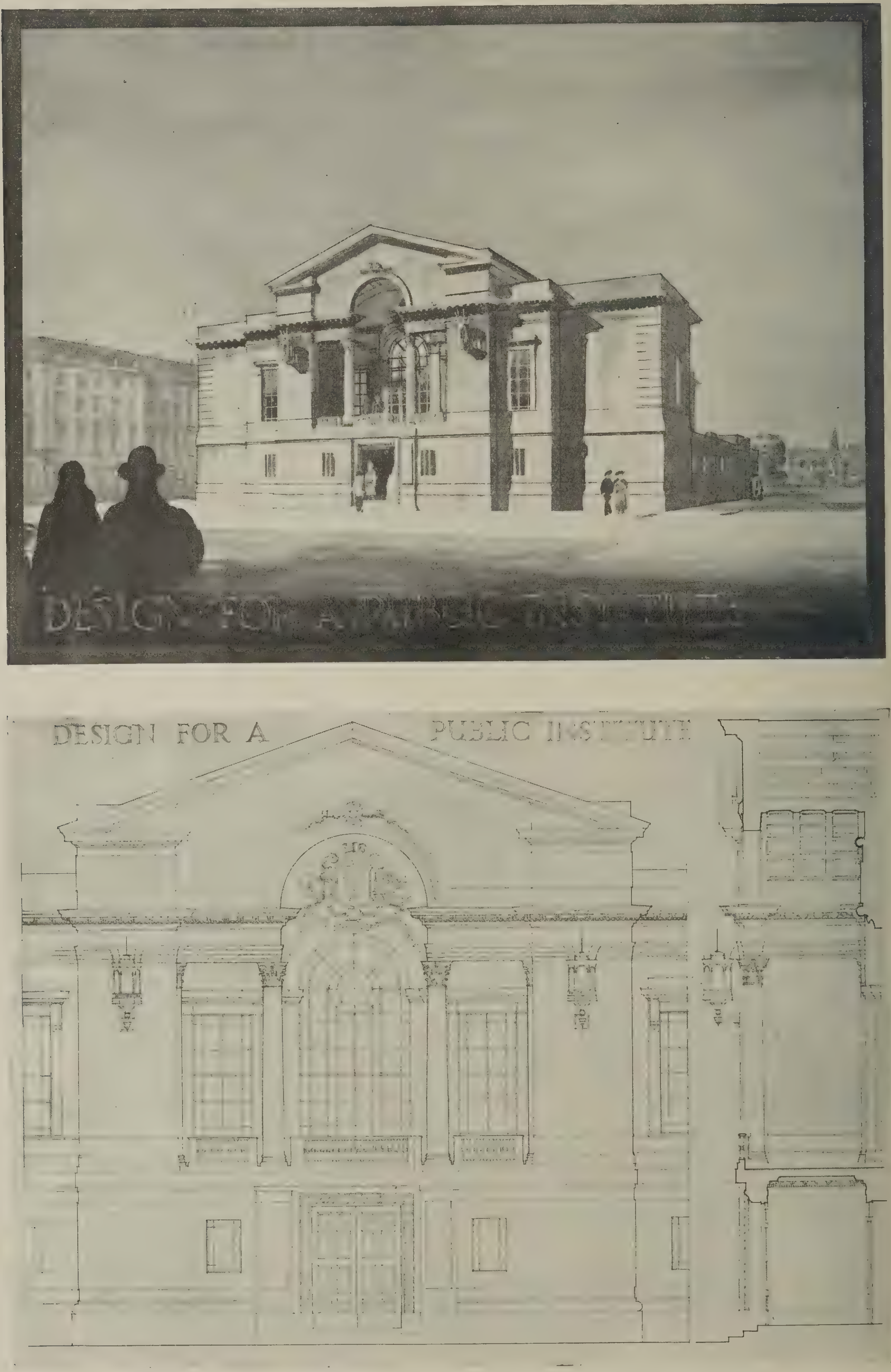
Each year a number of medals and money or book prizes are awarded to students who are under thirty years of age.

Students in their first year may compete for the Silver Medal and £15, and the Bronze Medal and £10, for an architectural design, and in their second year for the Silver Medal and £20. They then become eligible for the biennial competitions, the Gold Medal and Travelling Studentship,

(*Continued on page 368.*)

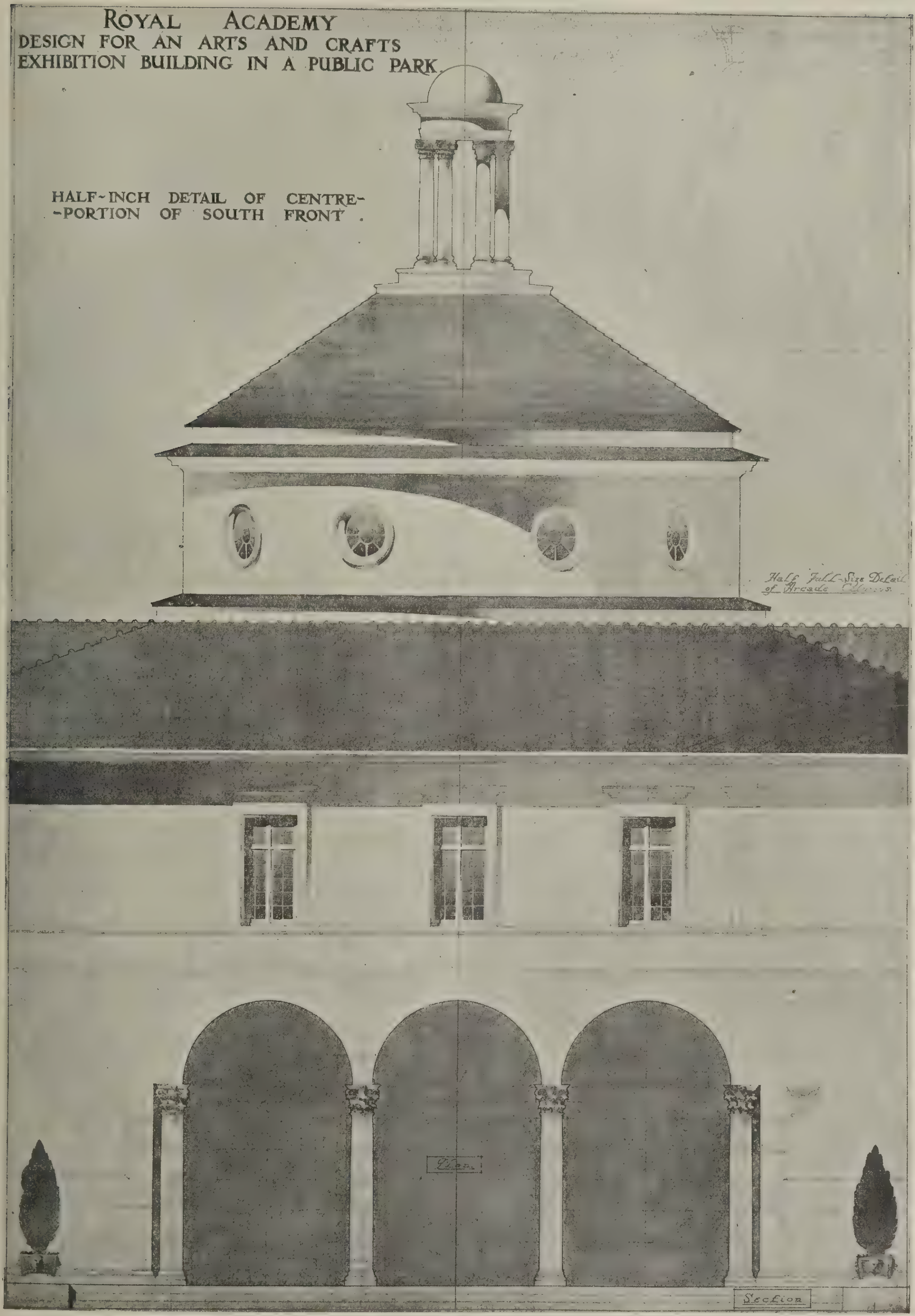


DESIGN FOR A PUBLIC INSTITUTE.



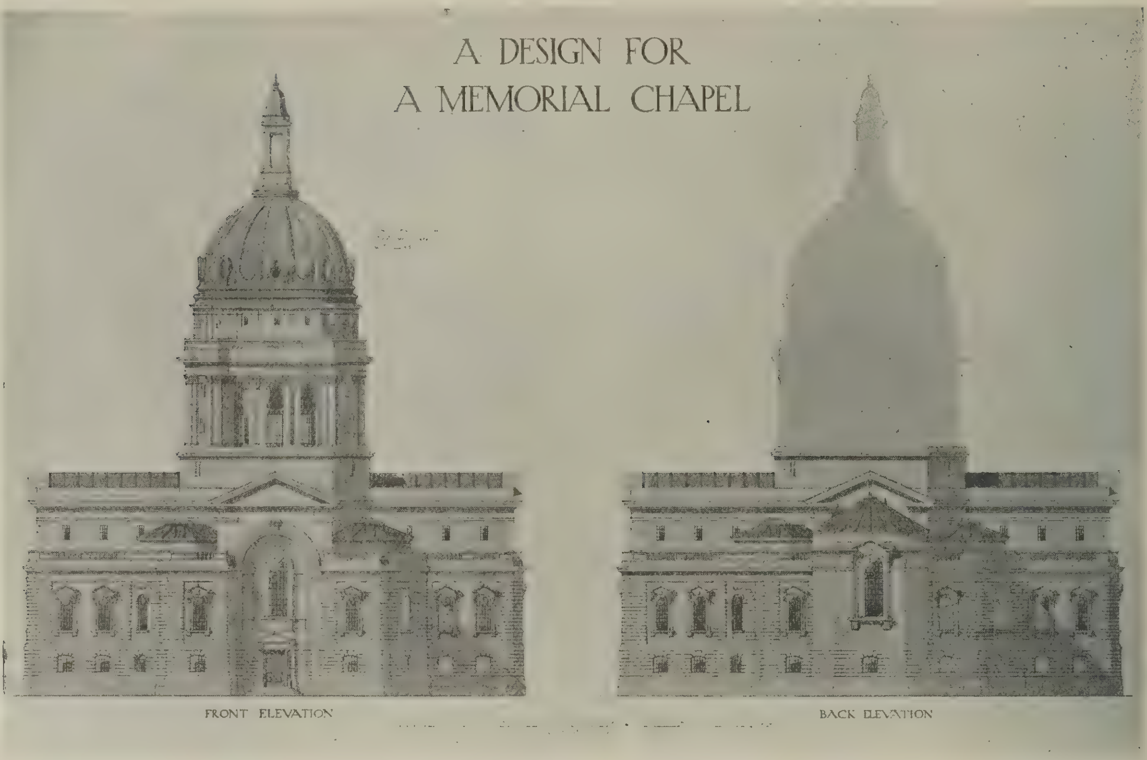
DESIGN FOR A PUBLIC INSTITUTE, BY ALAN GEORGE MACFARLANE.

(British Institution Scholarship, 1922: Royal Academy School of Architecture.)


ROYAL ACADEMY
DESIGN FOR AN ARTS AND CRAFTS EXHIBITION BUILDING IN A PUBLIC PARK.
HALF-INCH DETAIL OF CENTRE-PORTION OF SOUTH FRONT.
Half Full-Size Detail of Arcade Columns.
Plan
Section

DESIGN FOR AN ARTS AND CRAFTS EXHIBITION BUILDING: ELEVATION WITH DOME TREATMENT. BY SIDNEY HAROLD LOWETH.

(Silver Medal and £15, 1922: Royal Academy School of Architecture.)



A DESIGN FOR A MEMORIAL CHAPEL BY ROMILLY BERNARD CRAZE: ELEVATIONS.

(*Continued from page* 365.)

value £200, for study abroad, and the R.A. Travelling Studentship, value £60, for study in England.

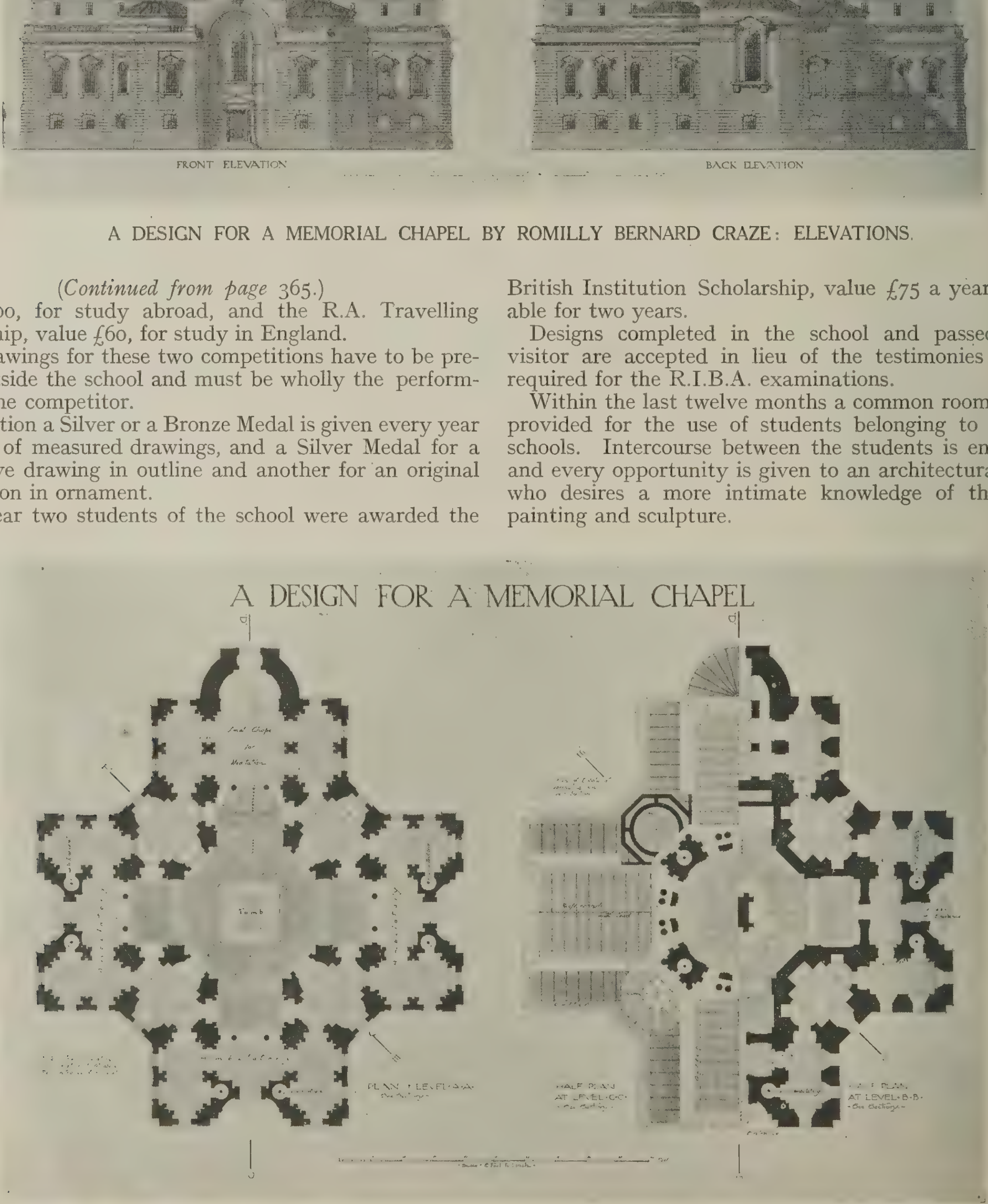
The drawings for these two competitions have to be prepared outside the school and must be wholly the performance of the competitor.

In addition a Silver or a Bronze Medal is given every year for a set of measured drawings, and a Silver Medal for a perspective drawing in outline and another for an original composition in ornament.

This year two students of the school were awarded the British Institution Scholarship, value £75 a year and te- able for two years.

Designs completed in the school and passed by t visitor are accepted in lieu of the testimonies of stu required for the R.I.B.A. examinations.

Within the last twelve months a common room has be provided for the use of students belonging to the thr schools. Intercourse between the students is encourag and every opportunity is given to an architectural stude who desires a more intimate knowledge of the arts painting and sculpture.



A DESIGN FOR A MEMORIAL CHAPEL, BY ROMILLY BERNARD CRAZE: PLANS.

(*Royal Academy School of Architecture.*)

The Practical Design of Steel Beams and Pillars in Buildings.—I

By W. BASIL SCOTT

THIS series of articles will treat of the practical design of steel beams, steel pillars, and combinations of these with their connections as employed in modern building construction. The methods f explanation and demonstration adopted will follow, as early as possible, those in vogue in a structural engineering rawing office. Assumptions of previous knowledge of the ubject or of mathematics beyond simple algebraic equaions will not be made. Keeping the above limitations in iew, the general idea is that the series of articles will form little treatise, containing a sufficiency of information on he theoretical and practical considerations affecting the esign of the structural members specified.

The constant practice of the design of building steelwork or many years, and contact with others engaged in it, has ed me to the conclusion that this particular branch of the ubject is beset with difficulties peculiar to itself and troubleome to the experienced as well as to the inexperienced. Jnfortunately, some of these difficulties are unsuitable or demonstrating the laws of theory, and for this reason hey are not favourites in technical literature. Theoretical aws are based on ideal conditions. It is important to bear his in mind. Rational formulæ (formulæ derived from ure reason) involve preliminary assumptions. Empirical ormulæ (formulæ derived partly or wholly from experinent) are based on experiments conducted under ideal r laboratory conditions.

For example, beam flexure and pillar crippling formulæ re respectively the products of rational and empirical nethods. In both cases assumptions are made or ideal onditions striven for, which, in their entirety, are unlikely o be met with in practice. This will be reverted to at a ater stage, meanwhile the point emphasized is that theoetical laws are based on ideal conditions.

It is not uncommon for beginners in the practical design f steelwork for buildings to encounter difficulties not reviously met with in technical classes or text-books, and o conclude hastily that theory is useless or that it is wrong. uch a conclusion, of course, is erroneous. Theory is not rong, but it is incomplete, and because of its incompleteess it has its limitations. The difficulties encountered nerely illustrate the fact that while theoretical laws are ased on ideal conditions there are no conditions in pracice more remote from the ideal than those of beams and illars in buildings.

Nothing is more disheartening to the beginner than to be old that in cases where theory and practice apparently iverge, experience is the only guide. How is he to acquire hat experience? He may not be in touch with men of xperience either willing or able to assist him. Then steelork is only one of the many subjects of an architect's udy. He has not time to devote to a general course of eel structural engineering (such as required by a civil gineer) in the hope of acquiring from the mass the ecific details of knowledge he wishes. There is also the oubt if the exact type of detailed information required is irectly attainable by this method.

This series of articles, therefore, is an attempt to fill the ap. The attempt is not unambitious, but while I am fully ppreciative of the many excellent technical classes and xt-books available, I also understand why it is almost npossible for them to deal with certain subjects as they ay be dealt with, by means of the expression of a personal pinion if necessary, in a series of articles of a more or less iscursive nature, such as this.

Take the case of an author of a general text-book on the eory and design of structural steelwork. The subject is vast and inclusive of such monumental structures as the Forth Bridge, but the work must be kept within reasonable limits of size. In the first place, he enunciates and expounds established theory. This cannot be done completely without the use of mathematics, including the calculus, not at everyone's disposal. Frequently, assumptions of previous knowledge are made, which, if not warranted, throw the reader back to some other book of reference or line of study before he can proceed intelligently. Always bearing in mind that theoretical laws are based on ideal conditions, when the author comes to practical design he is compelled to select examples and assume data, not always practicable, but necessarily suitable for demonstration purposes. In this respect, the resolution of assumed forces of known value by graphic methods (reciprocal diagrams) and the practical design of a framed or articulated structure, such as a roof truss or lattice girder railway bridge, are well-known examples. On the other hand, beams and pillars in buildings under load are not good subjects, as the complete analysis of their stresses requires advanced mathematics and much more space than the general text-book affords. Then practical exceptions to the ideal conditions of theory are so many and varied that the author must leave them alone. He must be content to state the established laws and demonstrate them by selected data and examples.

Paradoxical as it may appear, the limits I have set to the scope of these articles give me a freedom not enjoyed by such an author as I have cited, because I am concerned less with the elaboration of theory than with the practical methods of solution of some of the difficulties of design.

The complete theoretical analysis of stress in a simple beam or pillar is most complex, but I can say that anyone limiting his desire to ability to design arrangements of beams and pillars in buildings, efficiently and economically, has no more need to make such an analysis than the daily user of the multiplication table has to prove that two multiplied by two equals four and no more or no less. Certain formulæ may well be taken on trust in the same way. Then I am not bound to choose examples in support of any particular theory; my object rather is to show what is best to be done where theory and practice seem, as it were, "to fall out."

The following are two general samples of such cases which will be dealt with in more particular form as they arise in course of the series.

By a strict application of the rules contained in the R.I.B.A. report on reinforced concrete, it may be shown that the combined strength, as a beam, of a rolled steel H section embedded in concrete is less than the strength of the steel by itself. The theoretical explanation of this is as follows: the same assumption is made as in concrete reinforced with round steel rods, that the whole area of the H section is in tension and acting at its centre of gravity or area. The criterion of the strength of the combined beam is the compressive strength of the concrete above the neutral axis. Usually this is less than the strength of the H section by itself, that is to say, the area of concrete in compression is unable to develop the area of steel in tension. Therefore the strength of the combination is, in theory, less than the strength of one of its parts. In support of this theory it is argued that the compression concrete will have failed before the full strength of the steel has been exercised. Even so, it is not obvious how the failure of the concrete can lessen the inherent strength of the steel. We are not compelled to take the concrete into account, but if we do the result is loss instead of increase of strength as might reasonably be expected. Here is seeming divergence between theory and practice. The R.I.B.A. theory is correct, but it is not intended to apply to self-supporting steel sections capable of resisting both tension and compression. In this respect, it has its limitations. No theory of general acceptance has been devised as yet to meet the case, but if it is admitted, as it should be, that rolled steel H sections when embedded in concrete, as in a floor, are not weakened, but in all probability are stiffened or strengthened, then a reasonable method of calculating the increase of strength may be shown, as it will be, in the notes on "Beams in Concrete."

The question of what is the best theory or formula for the design of the steel pillar in practice is a vexed one which, in due course, will be dealt with at some length. It is a question which architects in this country outside the scope of the London County Council (General Powers) Act, 1909, have to settle almost entirely for themselves, as this is the only British Act of Parliament prescribing working stresses for mild steel pillars in buildings. The formula on which these stresses are based is an excellent one, and perhaps it is a pity that its provisions are not compulsory beyond London. The perfect pillar formula, however, has not yet been devised, and as is well known with regard to the L.C.C. regulations, there is the difficulty of interpretation of the meaning in practice of the conditions of the ends of pillars, the terms "fixed" and "hinged" having been derived from the laboratory. Apart from the condition of pillar ends, it is possible to arrive at some surprising results by the application of pillar formulæ.

As an instance, suppose that in a building of steel skeleton construction in London, a pillar having both ends hinged is required to support a concentric load of 5 tons on a height of 14 ft. 3 in. The L.C.C. Act is applicable, so with its working stresses try H beam 14 in. by 6 in. by 46 lb. per foot. The length of the pillar equals 171 in. The least radius of gyration of the trial section is 1·26 in., making the ratio of length to least radius of gyration (ratio of slenderness) 136 approximately, for which, by interpolation, the allowable working stress is 0·2 ton per sq. in. As the area is 13,533 sq. in., the allowable safe load is only 2·7 tons, or little more than half of that required.

Assuming that for some architectural reason the breadth of the pillar must not exceed 6 in., the first natural idea is to try a heavier section of greater area. The heaviest British Standard H beam with a 6 in. flange is 16 in. by 6 in. by 62 lb. per foot, for which the least radius of gyration is 1·22 in., and the ratio of slenderness 143 approx. Now the L.C.C. "hinged-end" stresses fall to zero when the ratio of slenderness reaches 140; it follows that when the ratio is 143 there is no allowable stress. In other words, on a height of 14 ft. 3 in. a 16 in. by 6 in. H, which is 16 lb. per foot heavier and has fully 4·5 more sq. in. of sectional area than the 14 in. by 6 in. H theoretically will support nothing, although the latter and lighter beam may be used as a pillar to support 2·7 tons. The expected increase of strength corresponding to increase of section not having materialized, the cause of the deficiency must be looked for. All the physical properties of the 16 in. by 6 in. H., i.e., area, flange, and web thicknesses, moments of inertia, etc., are greater than these of the 14 in. by 6 in. H with one exception—the least radius of gyration—these being 1·22 and 1·26 respectively. The least radius of gyration of the 14 in. by 6 in. H bears a higher proportion to its area than that of the 16 in. by 6 in. H. As the least radius of gyration is the determining factor of the stiffness of a pillar, and is the only physical property used in calculating the ratio of slenderness for the L.C.C. tables of working stresses, this is evidently the reason for the theoretical deficiency of strength.

Apparently the next step is to select for trial the H beam of 6 in. flange width having the highest value for its least radius of gyration. Inspection of a list of H beams and their properties shows that these values increase (although not regularly) as the weights per foot and areas decrease. Try the lightest H beam having the required flange width of 6 in., viz., 8 in. by 6 in. by 35 lb. per foot. The least radius of gyration is 1·32 in., making the ratio of slenderness 130 (approx.), for which the allowable L.C.C. stress is 0·5 ton per sq. in. As the area is 10·293 sq. in., the allowable safe load is slightly over 5 tons, therefore the 8 in. by 6 in. H is suitable, but the 16 in. by 6 in. H, weighing nearly double per foot run, is not.

At first sight this seems merely absurd, but if looked at properly it is seen to be a case of theoretical limitation, not theoretical error. Two objects of the L.C.C. rules are to provide good and convenient working rules for pillars as commonly used in buildings, and to increase the factor o safety for the less common long, slender pillars where ever a slight alteration of the concentricity of the load no provided for may prove disastrous. In the L.C.C. tables o working stresses, the values decrease rapidly for ratios o slenderness beyond what are considered reasonable anc clearly defined limits. It is not possible to keep these rapic decreases directly proportionate to the variations of the ratios of least radius of gyration to area, hence the possibility of such an aberration as has been noted.

At the same time, it may be said that the theoretica inconsistency performs a good office in practice, as it almos automatically draws the designer's attention to the fac that he is treading on dangerous ground and lessens th probability of the use of inefficient sections.

The question of efficiency allied with economy will b considered carefully, meanwhile the examples of "beam in concrete" and "slender pillars" are sufficient to illus trate my point that some of the difficulties peculiar to th design of simple steelwork for buildings may be discusse more easily in this somewhat unconventional manner tha in the stereotyped style of text-books.

The next article will enter into detail, commencing wit a summary of the theoretical and practical information it i necessary to include for the purpose in view.

(To be continued.)

Correspondence

Bush House

To the Editor of THE ARCHITECTS' JOURNAL.

SIR,—With the publication of your excellent study c Bush House (August 15) is it possible to ask a questio regarding the orientation of the monster? As one i standing in the centre line of Kingsway at almost an point looking southwards, or travelling in a vehicle goin north or south, the building seems twisted in relation t the angles at the bottom of Kingsway. At no point ca it be seen symmetrically as shown in your plate on page 23 Its centre line seems to be at a slight angle to the west c the line of Kingsway. Is this really so?

According to the plan of the site on page 234 the centra building appears to be not centred to the line of Kingswa Its western face is continuous with the western side c Kingsway, while its eastern face is not continuous with th eastern side of the street. There seems no reason why should not have been centred to Kingsway, as the remain ing portions are not symmetrical, nor can they be. I bears no symmetrical relation to St. Mary-le-Strand. I the event of the plan you publish being of too small a scal to judge the point, may I ask whether an optical illusio is produced by the angles of the building, at the south c Kingsway not being symmetrical?

As the building will take some time to accommodat itself to the public eye it seems unfortunate that addition pain should be caused by its faulty orientation.

WILLIAM L. HARE,

"Joint Editor, Garden Cities and Town Planning.

[Our contributor pointed out in his article that Bus House was slightly *désaxé* from Kingsway. Mr. Corbe has himself explained that this is so because he considere it important that his Strand façade should conform to th minor axis of the Church of St. Mary-le-Strand.—ED. A.J

The Week's News

Proposed Smallpox Hospital for Skipton.

It is proposed to erect a smallpox hospital on a site at irton, near Skipton.

New Pavilion for Ryde.

Plans have been accepted by the Ryde Town Council of a avilion which it is proposed to erect on the eastern esplanade. he cost is estimated at £6,000.

The Condition of St. Mary's, Shrewsbury.

£1,900 has been raised towards the £5,000 required for the epair of the church of St. Mary, Shrewsbury. The money is equired to repair the Norman tower and the lower portion f the spire. It will be recalled that £7,000 was spent on relacing the top of the spire which fell in 1894.

The Rebuilding of Westminster Station.

It is expected that the reconstruction of Westminster Station, hich was commenced in January of the present year, will be ompleted by about the end of September. Westminster and he Houses of Parliament will then have an entirely new station hich will increase the working capacity of this busy centre by t least 50 per cent.

New Mission Hall for Blackburn.

The Wesleyans of Blackburn are building a central mission all, costing £42,000. The Connexional Chapel Committee ave granted £5,000, an anonymous donor has given £10,000, nd another anonymous contributor has now undertaken to ubscribe £1 for every additional pound collected. This offer epresents a gift of £7,000.

Re-decorating Buckingham Palace.

Buckingham Palace is now in the hands of the decorators. he railings surrounding the forecourt have been re-painted nd the spearhead tips are being re-gilt. At the same time, ecessary painting inside and outside the Palace is being arried out, and will be completed in time for the return of e King and Queen in October.

The Cost of Building.

The Health Ministry has issued its fourth annual report, and entions in regard to housing that since the original scheme ame into operation over 154,000 houses have been completed y local authorities under it. The total capital cost of assisted ousing schemes will be about £190,000,000, or about £1,080 er house. On the subject of town planning it is stated that a reat deal of work had been done by the Department in addion to dealing with applications submitted to them. The revention of unemployment and the central supervision of e relief of distress consequent upon unemployment had continued to preoccupy the Department. Out of about £24,000,000, which local authorities were authorized to borrow for expenditure on public works, over £8,400,000 was for works certified to have been undertaken with a view to the provision of employment.

Strand Widening Scheme.

The scheme for the widening of the Strand by the removal of the buildings on either side of the New Tivoli will develop as the leases of the old houses fall in. It is hoped to begin the work during the coming autumn months. Under the London County Council improvement scheme the Westminster City Council has arranged to carry out the work whenever it is determined upon.

A "Street" Church in Danger.

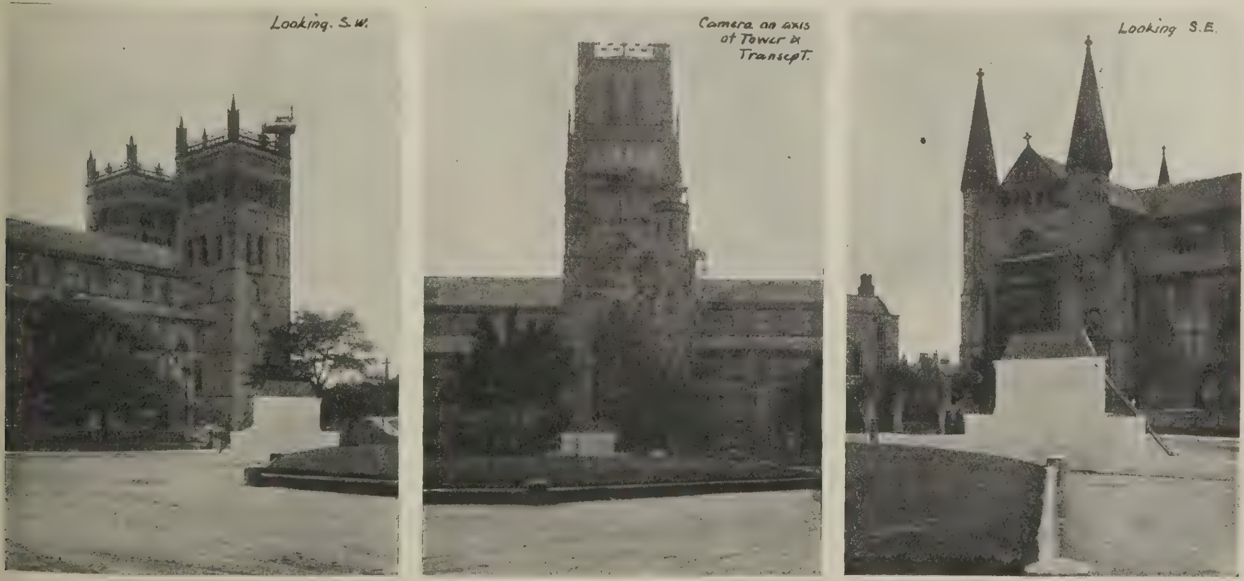
An appeal has been issued for £1,000 to restore the exterior of the fabric of St. John's Church, Torquay. The Somerset stone used for the mullioned windows and arched porches is crumbling and in some parts necessitates replacement. The remainder must be treated with a preservative preparation. The church is regarded as a fine example of the work of the late Mr. Edmund Street, R.A.

The Late Mr. G. Y. Mills.

We regret to record the death of Mr. George Yates Mills, of Derby, architect. He was, many years ago, on the architectural staff of the Midland Railway, but left to commence business upon his own account. Mr. Mills was the architect for many important local buildings and for Nestlé's Ashbourne and Tutbury factories. He was also an expert in the designing of "midlings," and had been largely employed by the Burton brewery companies.

Rate of Interest for Small Dwellings.

According to the Ministry of Health (Rate of Interest) Amendment Order, 1923, just issued, the rate of interest on advances made on or after August 14 under Section 1 of the Small Dwellings (Acquisition) Act, 1899, (*a*) shall be five per cent. per annum, and the provisions of the Ministry of Health (Rates of Interest) Order, 1921,(*b*) and the Ministry of Health (Rates of Interest) Amendment Order (No. 2), 1922,(*c*) relating to the rate of interest on advances under that Act, shall be modified and have effect accordingly. The Orders specified in the schedule, The Letchworth Urban (Rates of Interest) Order, 1923; The Borough of Llanelly (Rate of Interest) Order, 1923; The City of Manchester (Rates of Interest) Order, 1923; The Borough of Bolton (Rates of Interest) Order, 1923, are revoked, but nothing in this Order shall affect the rate of interest on any advance made by a local authority before the date of this Order.



THE PROPOSED DURHAM COUNTY WAR MEMORIAL.

The above photographs have been sent to us by a correspondent who suggests that a suitable title would be "The Towers and the 'Terror' at Durham."

The Week's News—*continued.*

Proposed Bridge across the Severn.

It is proposed to construct at Beachley, the Monmouthshire village on the banks of the Severn, a combined road and rail bridge across the river which would have the effect of bringing London 40 miles nearer to South Wales, and Bristol, the Midlands, the West of England, and Southampton 70 miles nearer. At present the road bridge nearest the sea is at Gloucester, which means a detour occupying three-and-a-half hours for the great volume of motor traffic between Bristol and South Wales. A bridge at Beachley would enable this journey to be accomplished in fifteen minutes.

Liverpool's New Empire.

The new Empire Theatre (Moss's Empires) in Lime Street, Liverpool, will be ready for opening in October or November next year. It will have a seating capacity of about 3,000, and every member of the audience will have a clear view of the stage. This uninterrupted view is made possible by two novel features—only one tier, which will seat 1,200 or 1,300 people, and the absence of boxes. This tier, being entirely cantilever, will not impede the view of any of the occupants of the stalls. The architect is Mr. T. R. Milburn, of Sunderland, who has already re-built the Cardiff Empire (also Moss's Empires).

London Tube Extension.

Lots Road Power Station, which supplies the power for the Underground railways of London, is to be strengthened in view of the Tube extensions now in progress. At present there are two 15,000 kilowatts generating sets in operation, and a third is to be installed. When the third set is completed, the station will be generating over 100,000 kilowatts. Lots Road is at present one of the largest generating stations under one roof in the world, and, though the additions now being made will provide for the needs of the immediate future, further plant will be required when the new lines recently sanctioned by Parliament are proceeded with.

Limehouse Parish Church.

The same destructive wood-boring beetle which worked such havoc in the roof of Westminster Hall has been busy also in the roof of Limehouse parish church. To repair the damage thus caused and to carry out sundry repairs to the church clock, said to be the highest church clock in London, has involved the parishioners in a bill of over £1,000. St. Anne, Limehouse, is one of Hawksmoor's finest works, and is familiar to all Dickens lovers, both in "Our Mutual Friend" and in "Dombey and Son." Here was Miss Abbey Potterson baptized, and here it is claimed that Captain Cuttle, with his formidable hook, assisted the verger in maintaining order. Contributions towards the cost of the repairs should be sent to the Rev. J. G. Birch, Limehouse Rectory, E.14.

Scottish National War Memorial.

Intimation has been made to the Scottish National War Memorial Committee that the Cabinet has granted permission to proceed with the erection of the memorial within the precincts of Edinburgh Castle. The scheme adopted includes the conversion of the modern buildings for the purposes of a Hall of Honour. An apsidal shrine will be abutted on to the north elevation, but of such a height as to make no material alteration to the existing skyline. The old rubble finish of the walls will be preserved, but the bareness of the existing wall will be relieved by stonework of a distinctly Scottish character. In order that the maintenance of the fabric may not be a burden on the country in the future, the committee have arranged to pay over a capital sum sufficient for this purpose.

Competition News

Southsea Common Lay-out Competition.

Members of the Society of Architects are notified that the conditions of this competition are not in accordance with the regulations, and they are requested not to take part in the competition without first ascertaining from the Secretary that the conditions have been approved by the Council.

Hull Cenotaph Competition.

The following awards have been made by the assessor, Mr. Stanley Hamp, F.R.I.B.A., in the Hull Cenotaph competition: 1 (£150), to Mr. T. Harold Hughes, F.S.I., A.R.I.B.A., 27 Ashton Terrace, W. Glasgow (Design No. 16
2 (£75), Messrs. H. G. Hall and R. G. Cox, 4 Balliol Road
N. Kensington (Design No. 11); 3 (£50), Messrs. Hendry an
Schooling, 43 Doughty Street, London, W.C.1 (Desig
No. 15). Forty-four designs were submitted.

The winning design takes the form of a simple cenotap
flanked by screen walls with seats. The existing Sout
African War Memorial is to re-fixed with a new pedest
on the axis of the cenotaph at the western edge of the sit
Between this memorial and the cenotaph there will be
plot of grass in the centre of which it is proposed to plan
shrubs to form an evergreen cross. The grass plot i
surrounded by a stone pavement and steps, linking up th
old and new memorials.

In his report the assessor says: "The author of th
design placed first has submitted a satisfactory solution c
the problem presented, and I am of opinion that it wi
form a dignified memorial. In addition to the premiate
designs I consider that the following are to be commended
Design No. 34, Design No. 36."

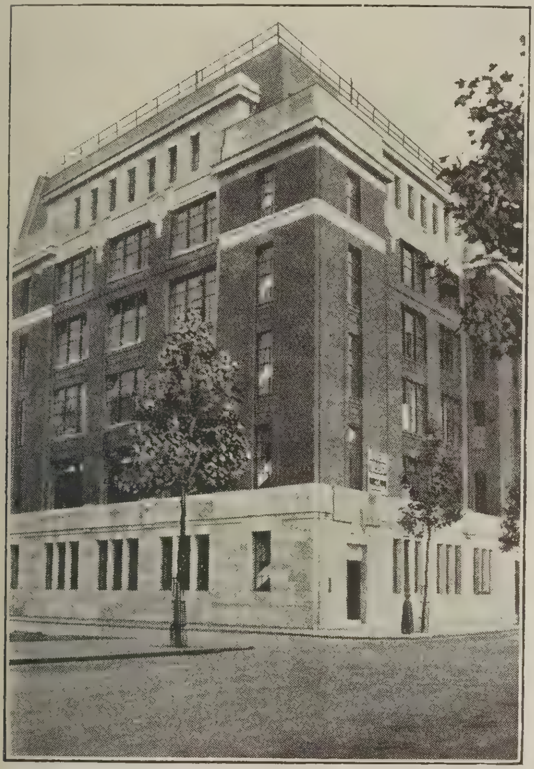
List of Competitions Open

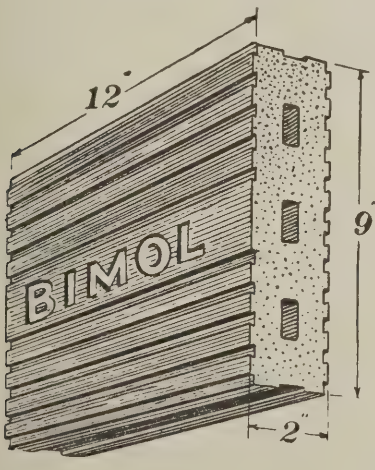
Date of Delivery.	COMPETITION.
Sept. 12	Masonic Temple in Broad Street, Birmingham. Premiums: £50 £300, and £200. Sir Banister Fletcher, F.R.I.B.A., is the assess The competition is restricted to architects who are masons su scribing to Lodges in the Province of Warwickshire. Apply M J. P. P. Dutfield, 65 Temple Row, Birmingham.
Sept. 30	Designs for a series of plaquettes in bronze illustrative of London the capital city of the Empire, or of one or more of her main archite tural features. Designs should be submitted in the form of mode in plaster. The following prizes are offered: One prize of 100 guinea two prizes of 50 guineas, three prizes of 25 guineas. Apply Depu Master of the Royal Mint, London, E.C.1.
Sept. 30	The best colouring of a design for the vestibule connecting 315–3 Oxford Street with 17–19–21 Dering Street, Messrs. Thomas Parso and Sons' new offices and showrooms. Prizes: 100 guineas, guineas, 25 guineas, and five consolation prizes of 10 guineas eac Assessors—Sir Edwin Lutyens, R.A., F.R.I.B.A., Sir David Murra R.A.,P.R.I., H.R.S.A., Sir John Lavery, R.A., Mr. Frank Brangwy R.A., and Mr. E. Guy Dawber, F.R.I.B.A. Apply Competiti Department, Messrs. Thomas Parsons and Sons, 315–317 Oxfo Street, London, W.1.
Oct. 1	The Student Welfare Committee, University of Glasgow, invi Competitive Designs (limited to architects having an office in a practising within the Municipal Boundaries of the City of Glasgo for a pavilion to be erected on the University Athletic Ground Westerlands, Anniesland, at a cost of £10,000. Assessor, M Alexander N. Paterson, A.R.S.A. Apply Honorary Secreta Student Welfare Committee, The University, Glasgow.
Oct. 1	Lay-out of the Bull Green Site and part of the centre of the Town Halifax. Premium £50. Apply, with deposit of £1 1s., to M Percy Saunders, Town Clerk, Town Hall, Halifax.
Oct 15.	Lay-out of a river embankment promenade, adjoining the Riv Thames below Barnes Bridge, for the Chiswick Urban Distr Council. Premiums: £105, £52 10s., and £26 5s. Apply Mr. E. Collins, Clerk, Town Hall, Chiswick, W.4. Deposit £1 1s.
Nov. 5	Art Gallery for Hull. Assessor, Mr. John W Simpson, PP.R.I.B. Apply, with cheque for £2 2s., to Mr. H. A. Learoyd, Town Cle Guildhall, Hull.
Jan. 1	The Imperial War Graves Commission invite architects who serv during the war as members of the Military, Naval, or Air For raised in any part of the British Empire to send in their names admission to a competition for the designing of the undermention memorials to the missing to be erected in France by the Imper War Graves Commission. The memorials to the missing propos are to commemorate those who fell in the war in France and Belgiu but have no known grave, and will be in the neighbourhood of t following places, and will have inscribed on them the followi number of names: At Bethune, 20,000 names; at Armentièr 15,000 names; at Cambrai, 6,000 names; at Soissons, 5,000 nam Applications for particulars of premiums and other regulations fr those desiring to compete are to be addressed to the Secreta (Works Branch), Imperial War Graves Commission, 82 Baker Stre London, W.1, and must be received there not later than January 1924, and must be accompanied by a statement giving particul of the war service and professional career of the applicant a clearly stating which of the memorials it is desired to comp for. Deposit, two guineas for each set of plans. The Assessor Sir Aston Webb, K.C.V.O., P.R.A.
No date	Extensions to the Poor Law Institution, Premium £50. Apply Cle to the Wirral Board of Guardians.
No date	The Eastleigh and Bishopstoke Urban District Council invite desig for the extension of their existing Council buildings, and t erection of an assembly hall, on the site adjacent. Premium 50, 30, and 20 guineas. Apply, with deposit of £1, to Mr. Lawrence, Clerk to the Council, Council Offices, Eastleigh.
No Date	The War Memorial Committee of the Burgh of Coatbridge invi designs for the erection of a War Memorial on a site in the We End Park. The estimated cost of the work amounts to £3,0 and premiums of £75, £50, and £25 are offered for designs plac first, second, and third respectively. Assessor is Mr. James Lo head, F.R.I.B.A., Hamilton. Apply Town Clerk. Deposit £1 1

Trade and Craft

"Bimol Blocks."

The use of "Bimol Blocks" for all types of building is pidly increasing throughout the country. One of the more rominent buildings in which they were used was Thornycroft ouse, Westminster, the home of Messrs. John. I. Thornyroft & Co., Ltd. This building (illustrated below) has been rected from the designs of Mr. A. Alban H. Scott. The opularity of the blocks is due to the valuable qualities of olar earth from which they are manufactured and to special nstructional and other advantages. The blocks are exemely light, a point worthy of serious consideration, pecially where it is desired to erect partitions over an isting floor, easy to handle and erect, are fireproof, and are ell able to withstand the sounds ordinarily met with in ublic buildings, large offices, and domestic houses. The me quality of non-conductivity of sound also applies to at, and many architects are using the blocks to protect the eel framework of large buildings from the high temperature case of an outbreak of fire. The fact that the blocks are ade from a natural clay, which is burned in the ordinary way, thout the addition of straw, sawdust, or other such material, nders them vermin-proof. Each side of the block is grooved and each groove distinctly dovetailed, thus giving a positive mechanical hold for plaster. We are informed that in some cases only one coat of plaster is being applied and an excellent finish is obtained.


THORNYCROFT HOUSE, WESTMINSTER.
A. ALBAN H. SCOTT, ARCHITECT.



"Victor" Door Springs in New Buildings.

In connection with the important works now proceeding and recently completed in London, including those for the reconstruction of Regent Street, the "Victor" door springs have been adopted for such buildings as the London County Hall; University College, Gower Street; British Museum extensions; Bush House, Aldwych; No. 324 Regent Street; Galleries Lafayette; Trafalgar House; the new premises of Messrs. Peter Robinson's; Liberty's; Hamley's; Saxone Shoe Co.; Walmar House, Furness Withy Building, Leadenhall Street; Lilley and Skinner's, Oxford Street; Anglo-South American Bank extensions; Finsbury Circus House; Messrs. Lyons's New Restaurant, Coventry Street, W.; Messrs. Selfridge's new premises; Gorringe's; Whiteley's; Guardian Insurance Offices, King William Street; Lloyds Bank, King William Street, etc.

"Victor" door springs and other fittings have a wide vogue for important buildings, a consequence of the solid reputation for work of the highest quality which the firm of Robert Adams has built up during over half a century. The productions of this house are under the personal supervision of the principal.

Among the features that popularize the "Victor" door springs may be mentioned their exceptionally wide angle of opening and closing, their reliable automatic compensating action, the facilities for regulating the closing power and closing speed, their perfect checking action, and their great durability. It is one of their valuable points that they hold the doors firmly at the closed position and yield pleasantly when opening, an agreeable feature in connection with their use in important business houses and stores. The new shallow patterns, which can be fixed in floors not more than 1¼ in. deep over joists and girders, make for their universal application, and the adjustable checking devices in the shallow patterns, contained in a sealed cylinder, prevents floor stains. The "Victor" door springs are made to suit both double and single action doors of any size, and to fix in the floor or overhead. Many other types are manufactured by the firm. Every requirement for such devices is covered by the firm's inventions, which are all claimed to be of demonstrated efficiency and durability.

New Electrical Showrooms.

Owing to the expiration of Messrs. Francis Polden & Co., Ltd.'s, lease at 17 Wells Street, W.1, more extensive premises adjoining the company's head offices, 56 Cannon Street, London, E.C., have been obtained, and a showroom for the display of electrical fittings, domestic appliances, and accessories has been opened. From time to time the company are arranging for special demonstrations to be given to show the advantages of a particular piece of electrical apparatus, but a technical staff is always available to explain to callers any appliance displayed.

Stucco Work.

A film was presented on Tuesday in last week in the private theatre of Jury's Imperial Pictures, Ltd., showing the advantages of "Atlas White" Portland Cement Stucco, a permanently white and stainless preparation. Various stages of the process of application were shown, and also several views of houses texturally finished with it. Although these examples are from America, where white stucco may be said to be in universal use, this particular material is also widely employed in this country, the new Tivoli in the Strand, and Messrs. Liberty's, Tudor House, in Argyll Place, Regent Street, being among recent and important buildings so treated.

Mr. Frederic Coleman, of the Adamite Company, which represents the manufacturers of "Atlas White," has engaged the West End Cinema, Coventry Street, for the mornings of September 20 and September 27, when a comprehensive series of films dealing with this subject will be exhibited on each day. Architects and contractors desiring to be present are invited to apply to Mr. Coleman at Regent House, Regent Street, W., for tickets of admission. In addition to films showing stucco work in progress in all its details, illustrations will be shown by Mr. Coleman showing the progress of cast stonework in America. He will also show pictures of the latest architectural work in the eastern cities of the United States.

Rates of Wages in the Building Trades*

The following table, which is published in the first issue of THE JOURNAL for each month, shows the revised rates of wages for craftsmen (bricklayers, masons, carpenters and joiners, woodcutting machinists, slaters, plumbers, plasterers and painters), and labourers in the building trade. The labour rates for London are given in the Table of Current Prices on pages xvii and xviii.

Grade.	Craftsmen.	Labourers.	Grade.	Craftsmen.	Labourers.	Grade.	Craftsmen.	Labourers.
	s. d.	s. d.		s. d.	s. d.		s. d.	s. d.
A	1 7	1 2¼	B	1 5	1 0¾	C	1 3½	11¾
A1	1 6½	1 2	B1	1 4½	1 0½	C1	1 3	11¼
A2	1 6	1 1½	B2	1 4	1 0	C2	1 2½	11
A3	1 5½	1 1¼	B3	1 3½	11¾			

Grading of Towns.

The towns in which the above grade rates have been reported to apply are shown below, divided into their main area groups. The principal exceptions are indicated in the notes appended to each Group. In towns marked* the rate for painters is 1d. less than that paid to other craftsmen, and in those marked† it is ½d. less than the craftsmen's rate.

NORTH-EAST COAST :—

Grade A.—Alnwick, Annfield Plain, Birtley, Bishop Auckland, Blackhill, Blyth, Chester-le Street, Consett, Darlington, Durham, Ebchester, Gateshead, Hartlepools, Hebburn, Hexham, Jarrow, Lanchester, Leadgate, Medomsley, Middlesbrough, Morpeth, Newcastle, North and South Shields, Seaham Harbour, Stanley, Stockton, Sunderland, Thornaby, Tynemouth, Wallsend, Whitburn, and Whitley Bay.

YORKSHIRE :—

Grade A.—Alltofts, Barnsley, Batley, Bingley, Birstall, Bradford, Brighouse, Calder Valley, Castleford, Cleckheaton, Cleethorpes, Colne Valley, Crosshills, Dewsbury Doncaster, Gomersal, Grimsby, Guiseley, Halifax, Harrogate, Hebden Bridge, Heckmondwike, Holmfirth, Horbury, Hoyland, Huddersfield, Hull, Ilkley, Immingham Keighley, Knottingley, Leeds, Liversedge, Mexborough, Mirfield, Morley, Normanton, Ossett, Penistone, Pontefract, Pudsey, Rawdon, Rotherham, Scunthorpe, Selby Sheffield, Shipley, Sowerby Bridge, Stocksbridge, Wakefield, Wombwell, and Yeadon. **Grade A3.**—Barnoldswick, Beverley, Bridlington, Goole, Hornsea, Scarborough Skipton, Worksop, and York. **Grade B3.**—Kirby Moorside, Malton, Northallerton, Norton, and Wetherby.

NORTH-WESTERN COUNTIES :—

Grade A.—Accrington, Adlington, Alderley Edge, Altrincham, Ashton-under-Lyne, Atherton, Bacup, Barrow, Birkdale, Bispham, Blackburn, Blackpool, Blackrod Bolton, Broughton (Flints), Burnley, Bury, Carlisle, Chester, Chorley, Church, Cleveleys, Clitheroe, Colne, Connahs Quay, Dalton-in-Furness, Darwen, Denton Droylsden, Eccles, Farnworth, Fleetwood, Frodsham, Glossop, Great Harwood, Haslingden, Hawarden, Helsby, Heywood, Higher Kinnerton, Horwich, Hyde Kirkham, Leigh, Leyland, Littleborough, Longridge, Lymm, Lytham, Manchester, Middleton, Mossley, Nelson, Ormskirk, Oswaldtwistle, Oldham, Padiham Pendlebury, Poulton, Preston, Prestwich, Queensferry, Radcliffe, Ramsbottom, Rawtenstall, Rishton, Rochdale, Runcorn, St. Annes-on-the-Sea, St. Helens Saddleworth, Sale, Salford, Shaw, Shotton, Southport, Stalybridge, Stockport, Swinton, Thornton, Todmorden, Tyldesley, Walkden, Warrington, Westhoughton Whalley, Whitefield, Widnes, Wigan, and Wilmslow. **Grade A2.**—Lancaster and Morecambe. **Grade A3.**—Askam, Broughton-in-Furness, Buxton, Cleator Moor Congleton, Coniston, Crewe, Distington, Egremont, Grange-over Sands, Harrington, Knutsford, Macclesfield, Maryport, Market Drayton, Middlewich, Millom, Mold Nantwich, New Mills, Northwich, Sandbach, Tarporley, Ulverston, Winsford and Over, Whitehaven, Workington, and Wrexham. **Grade B1.**—Colwyn Bay, Conway Holywell, Llandudno, Llandudno Junction, Mostyn, Prestatyn, Rhos and Rhyl. **Grade B2.**—Bala, Cockermouth, Kendal, and Penrith. **Grade B3.**—Ambleside Bangor, Bowness-on-Windermere, Carnarvon, Grasmere, Holyhead, Langdale, and Windermere.

[NOTE.—*In the Liverpool and Birkenhead districts the rates remain at 1s. 9d. for plumbers, 1s. 8½d. for other craftsmen, and 1s. 4d. for labourers. The new rate for plumbers at Warrington is reported as 1s. 8d.*]

MIDLAND COUNTIES :—

Grade A.—Alfreton, Belper, Bilston, Birmingham, Blackheath, Burslem, Chesterfield, Coalville, Coventry, Derby, Hanley, Heanor, Hinckley, Ilkeston, Kenilworth Leicester, Lincoln, Long Eaton, Loughborough, Mansfield, Newcastle-under-Lyme, Nottingham, Ripley, Stoke-on-Trent, Sutton Coldfield, Sutton-in-Ashfield, Wes Bromwich, Willenhall, and Wolverhampton. **Grade A3.**—Atherstone, Bewdley, Boston, Brierley Hill, Bromsgrove, Burton-on-Trent, Cannock, Coseley, Darlaston Dudley, Gainsborough, Gornal, Grantham, Halesowen, Hednesford, Kidderminster, Knowle, Leamington, Leek, Lichfield, Louth, Malvern, Market Harborough Matlock, Melton Mowbray, Newark, Northampton, Oakengates, Old Hill, Peterborough, Redditch, Retford, Rugby, Rugeley, Sedgley, Shifnal, Skegness, Sleaford Solihull, Stafford, Stamford, Stourbridge, Stourport, Stratford-on-Avon, Swadlincote, Walsall, Warwick, Wednesbury, Wellington, and Worcester. **Grade B1.**—Kettering and Wellingborough. **Grade B2.**—Ashbourne, Bridgnorth, Horncastle, Oakham, Oundle, Raunds, Rushden, Spalding, Thrapston, Uttoxeter, and Wirksworth **Grade C.**—Buckden, Eaton Socon, Huntingdon, St. Ives, and St. Neots. Market Harborough, craftsmen 1s. 5d., labourers 1s. 0¾d.

[NOTE.—*For plumbers in the Potteries district and at Strafford the rate remains at present 1s. 9d. The rate for plumbers at Leek is reported as 1s. 6½d. and for plumbers at Chesterfield, 1s. 8d.*]

EASTERN COUNTIES :—

Grade B1.—St. Albans, Southend-on Sea, and Westcliff. **Grade B2.**—Norwich. **Grade B3.**—Baldock, Bedford, Berkhamsted, Biggleswade, Braintree, Cambridge Chelmsford,* Colchester, Halstead, Hatfield, Hemel Hempstead, Henlow, Hertford, Hitchin, Hoddesdon, Ingatestone, Ipswich, Letchworth, Luton, Norwich, Ongar Sawbridgeworth, Stevenage, Stotfold, Ware, and Welwyn. **Grade C.**—Aldeburgh, Attleborough, Aylsham, Braughing, Clacton, Cromer, Dovercourt, Dunstable Ely, Fakenham, Felixstowe, Frinton, Gorleston, Halesworth, Harwich, Hunstanton, King's Lynn, Leighton Buzzard, Leiston, Lowestoft, March, Much Hadham Newmarket, Puckeridge, Renthem, Saxmundham, Southwold, Standon, Stowmarket, Walton-on-the-Naze, Wickham Market, Wisbech, Woodbridge, Wymondham, an Yarmouth. **Grade C2.**—Bungay, Coltishall, East Dereham, Hadleigh, Haverhill,* Royston.

SOUTHERN COUNTIES :—

Grade B.—Leatherhead.† **Grade B1.**—Gosport, Portsmouth, and Southampton. **Grade B2.**—Bournemouth, Brighton (see below), Christchurch, Eastbourne Fareham, Hove, Poole, Reading, and Tilehurst. **Grade B3.**—Abingdon, Addlestone, Amersham, Ascot, Ashford (Middlesex), Beaconsfield, Bracknell, Byfleet, Chesham Cremborne, Egham, Eton, Gerrard's Cross, Goring, Gravesend, Guildford, Henley, Laleham, Maidenhead, Marlow, Northfleet, Oxford, Staines, Stanwell, Sunningdale Sunninghill, Tonbridge, Tunbridge Wells, Wallingford, Windsor, Woking, Wokingham, and Wycombe. **Grade C.**—Arundel, Ashford (Kent), Aylesbury, Bagshot Banbury, Basingstoke, Bicester, Bletchley, Bognor, Bosham, Brockenhurst, Camberley, Canterbury, Chatham, Chichester, Chipping Norton, Deal, Dorking, Dove Fareham, Faringdon, Faversham, Fenny Stratford, Folkestone, Gillingham, Godalming, Hailsham, Haslemere, Hastings, Herne Bay, Hythe, Lambourn, Liphook Littlehampton, Lymington, Maidstone, Margate, Milford, Milton Regis, Newbury, New Milton, Newport Pagnell, Pangbourne, Petworth, Ramsgate, Rocheste Sandgate, St. Leonards, Sevenoaks, Sittingbourne, Strood, Stony Stratford, Thame, Walmer, Wantage, Wendover, Westgate, Whitstable, Winchester, Winslow Witney, Wolverton, and Worthing. **Grade C2.**—Alton,* Andover, Bishop's Waltham, Farnham, Godstone, Hawkhurst, Hartley Wintney,* Isle of Wight, Rye Smallfield, Staplehurst, and Uckfield. Andover, craftsmen 1s. 3d., labourers 11¼d. Bournemouth, Poole and Christchurch, craftsmen 1s. 4½d., labourers 1s. 0½d Camberley, Godalming, Grayshott and Haslemere, craftsmen 1s. 4d., labourers 1s. Guildford and Woking, craftsmen 1s. 4½d., labourers 1s. 0½d. Tonbridge an Tunbridge Wells, craftsmen 1s. 4½d., labourers 1s. 0½d.

[NOTE.—*It is understood that no reduction has yet been made at Brighton and Hove and Eastbourne, the rates remaining at 1s. 4½d. for tradesmen and 1s. 0½d. for labourers. The rate for plumbers at Dorking is reported as 1s. 4½d., for labourers at Basingstoke, 11½d., and for labourers at Folkestone, Hythe and Sandgate, 1s.*]

SOUTH-WESTERN COUNTIES :—

Grade A.—Bristol. **Grade A2.**—Keynsham. **Grade B.**—Plymouth* and Devonport.* **Grade B2.**—Bath, Cheltenham, Gloucester,* Hereford,* Swindon,* an Tewkesbury.* **Grade B3.**—Exeter, Newton Abbot, Portishead, Stroud† and Taunton. **Grade C1.**—Barnstaple, Bradford-on-Avon* Bridgwater, Brixham, Bruton Burnham-on-Sea, Calne,* Castle Cary, Cheddar,* Cirencester,* Coleford,* Corsham,* Crewkerne,* Dawlish, Dorchester,* Exmouth, Fairford,* Frome,* Glastonbury Lydney,* Melksham,* Midsomer Norton, Minehead,* Radstock, Shepton Mallet, Street, Tetbury,* Thornbury, Totnes,† Trowbridge,* Wells, Westbury,* Weston-supe Mare, Weymouth,* and Yeovil.* Weston-super-Mare, craftsmen 1s. 4d., labourers 1s. Plymouth, Devonport and Stonehouse, painters 1s. 5d., other tradesme 1s. 6d., labourers 1s. 1½d. Newton Abbot and Paignton, Torquay, craftsmen 1s. 4½d., labourers 1s. 0½d. Barnstaple, Clevedon and Exmouth, craftsmen 1s. 3½d labourers 11¾d. Exeter, painters 1s. 3½d., other craftsmen 1s. 4½d., labourers 1s. 0½d.

SOUTH WALES AND MONMOUTHSHIRE :—

Grade A.—Aberavon, Aberdare, Abertillery, Ammanford, Barry, Bridgend, Briton Ferry, Brynmawr, Cardiff, Chepstow, Duffryn Valley, Ebbw Vale, Eas Glamorganshire and Monmouthshire Valleys, Garw Valley, Gorseinon, Llanelly, Maesteg, Merthyr, Mountain Ash, Neath, Newport, Ogmore Vale, Pontardaw Pontardulais, Pontypool, Pontypridd, Porthcawl, Port Talbot, Rhondda and Rhymney Valleys, Sirhowy Valley, Swansea, and Tredegar. **Grade A2.**—Abergaven **Grade B.**—Brecon, Carmarthen, Llandilo and Llandrindod Wells. **Grade B2** —Fishguard, Hay, Monmouth, and Talgarth.

SCOTLAND :—

Grade A.—Airdrie, Alloa, Alva, Armadale, Ayr, Bathgate, Bellshill, Bridge of Weir, Buckhaven, Burntisland, Clydebank, Coatbridge, Dumbarton, Dunde Dunfermline, Edinburgh, Falkirk, Glasgow, Gourock, Grangemouth, Greenock, Haddington, Hamilton, Harthill, Irvine, Kennoway, Kilmarnock, Kirkcaldy, Larber Largs, Leith, Leslie, Leven, Markinch, Methil, Motherwell, Neilston, Newmains, Paisley, Pencaitland, Perth, Port Glasgow, Renfrew, Stenhousemuir, Uddingston, Upha Wemyss, Whitburn, Windygates, and Wishaw. **Grade A2.**—Arbroath, Montrose, and Peebles. **Grade B.**—Dumfries, Galashiels, Hawick, and Maxwelltown. Aberdee joiners 1s. 6d. Dumfries and Galloway, plumbers 1s. 5d.

[NOTE.—*The rates quoted do not apply to plasterers and painters in Scotland, who are not affiliated to the National Wages and Conditions Council. The rate for labourers at Leslie, Markinch, and Perth is reported as 1s. 2d., and at Arbroath, Bathgate, Irvine, and Montrose 1s. 1d.*]

---

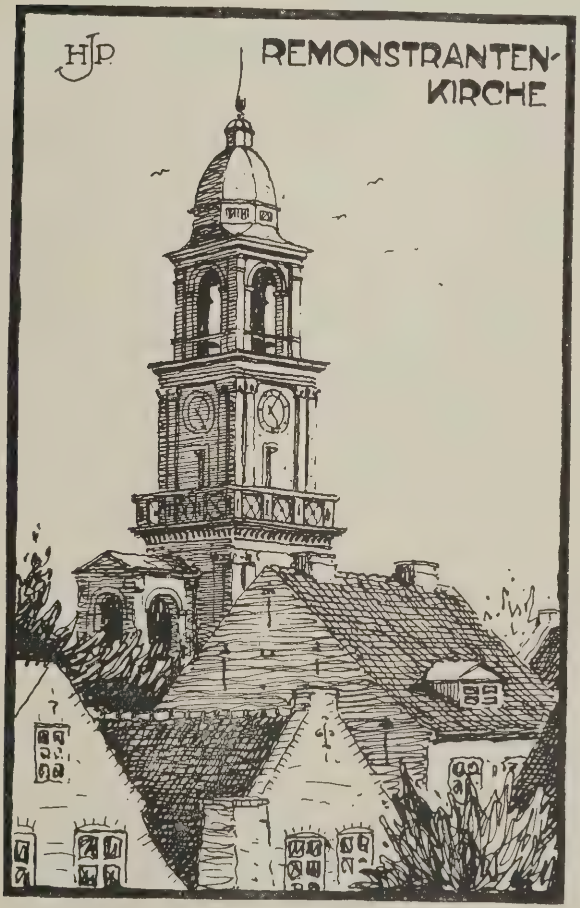
* From "The Labour Gazette."

Wednesday, September 12, 1923. Vol. LVIII. No. 1497.

THE ARCHITECTS' JOURNAL

& Architectural Engineer

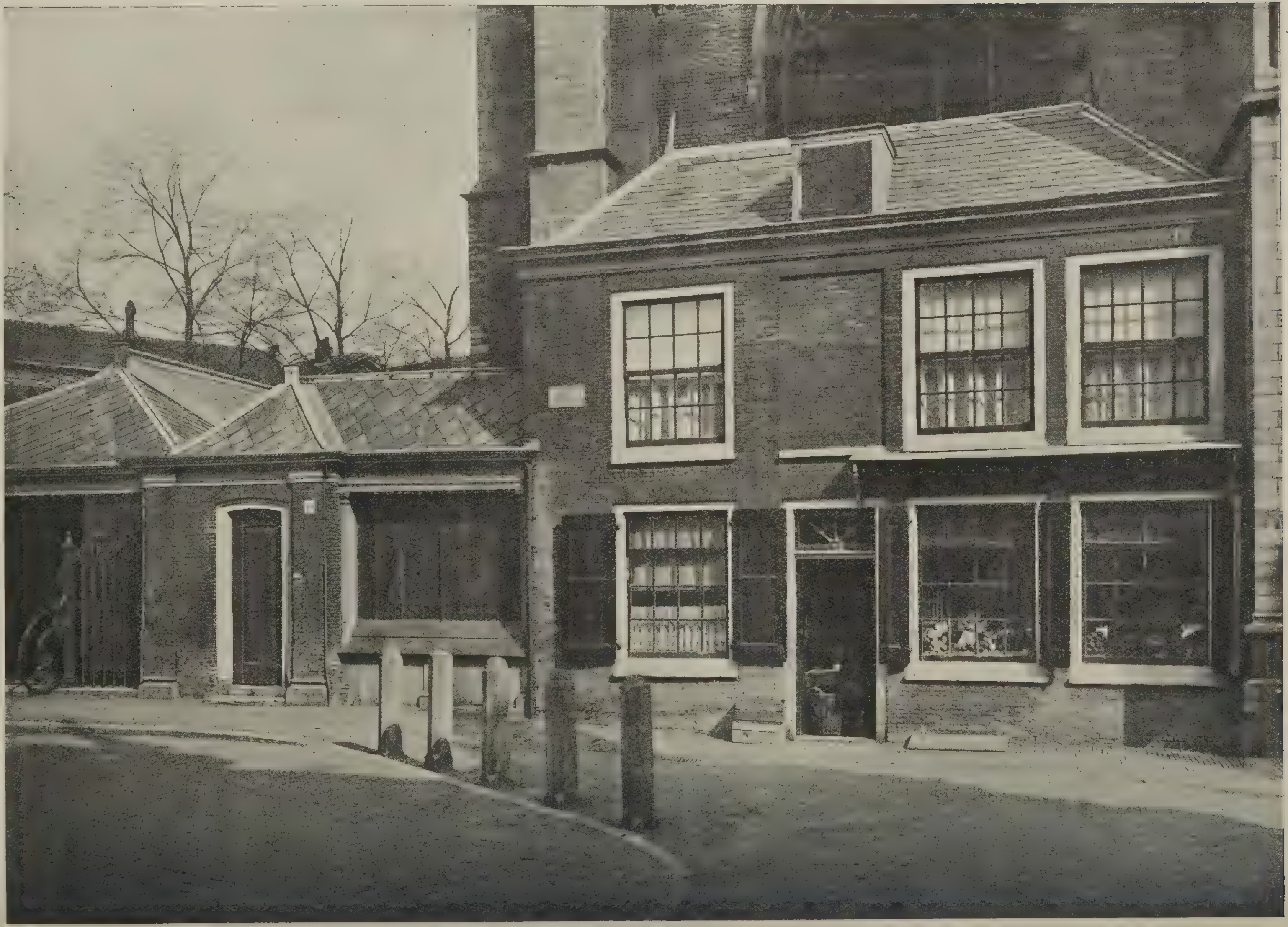
With which is incorporated "The Builders' Journal."



A FREE CHURCH.
HANS J. PHILIPP, M.G.I.A., ARCHITECT

27-29 Tothill Street, Westminster, S.W. 1.

Haarlem. Houses adjoining the Great Church



These houses adjoin the Great Church at Haarlem, being built in between the buttresses. The Church is practically encircled with small houses of this delightful eighteenth-century type.

THE

ARCHITECTS' JOURNAL

27-29 Tothill Street, Westminster, S.W.1.

Vednesday, September 12, 1923

Volume LVIII. No. 1497.

The Earthquake in Japan

THE earthquake which, in a few hours, reduced Tokio, the capital, and Yokohama, the chief port, of Japan, to mere heaps of ruins, has presented its problems, the final one of which vill be the reconstruction of the two cities by methods of ouilding that will be calculated, with good fortune, to vithstand convulsions of even like magnitude in the future. The old Tokio, which was mediæval in character, experinced many earthquakes without much harm being done; he frame houses, if thrown down, could be easily restored, nd no part of the city was far distant from open country, vhere the inhabitants could find safety. But the new 'okio, imposing to look on, and equipped with all the comlex apparatus of our urban civilization, proved something ke a death-trap for countless thousands of its people. Jumerous great stone or concrete buildings in the central uarters, including the Government offices, were flung own by the earthquake, killing and injuring many eople.

The usual Japanese houses are built so that they can tand a good deal of rocking. They are rather like enlarged irdcages, resting on the earth and loosely and elastically onstructed of bamboo and paper, and covered with light les. Until recently they had no foundations. They are asily knocked down and as easily put together again.

For modern business requirements, skilful architects and uilders have erected foreign-style buildings of from six o ten stories, built of steel and concrete, designed and escribed as "earthquake proof." For the most part these uildings do not rest upon solid rock, but upon cement afts floating in the silt and mud of the morass upon which okio is for the most part situated. They can, and pparently have, resisted all the lesser earth tremors to hich Tokio is weekly—almost daily—subjected. Like the w boat in Kipling's "Ship that found itself," their structral members are designed to give here, hold fast there, nd, remain rigid, and, indeed, remain sound through very stress and strain to which an earthwave may subject em. And, indeed, earthquake-proof buildings require to constructed very much like a ship—that is, built to be uffeted, lifted, dropped, rocked, twisted, suspended now the bow and now by the stern—threatened every oment either by backbreak, crushing, or being shaken to eces—and, like a ship, they can withstand all save the rcest of storms. But "The earthquake," to quote from striking passage in Wordsworth :

> "The earthquake is not satisfied at once,"

d in this case, the first convulsion having passed, fire oke out in the ramshackle native houses, and a typhoon, hich rapidly boxed the compass, fanned the flames and rried them to all quarters of the town. It will probably er transpire that many of the modern buildings did at st endure all that could humanly be expected of them, d gave way at last only under conspiracies of tempest m without and tempest from within.

The Japanese Government has encouraged the study of seismology, the new science founded by the late Professor John Milne in Japan, and Japanese architects and engineers have devised methods of building that are calculated to withstand the ordinary earth tremors which are of almost daily occurrence. But human knowledge and skill are almost impotent in face of such tremendous convulsions as that which has made Tokio a place of mourning, and which, it is provisionally estimated, has done damage to cities and towns to the extent of a thousand millions sterling.

(As no great modern capital has ever had to be rebuilt before, we cannot check the calculation, but it does not strike us as extravagant, for you might rebuild and reconstruct for twenty years, and even then you would not have the Tokio and Yokohama of yesterday.)

Towards the close of the last century Professor Milne, addressing the Institute of Civil Engineers, said that the most important principles to be followed in building in volcanic regions were : First, to provide against horizontally applied stresses, secondly, to allow all parts of the buildings with different vibrational periods to have freedom amongst themselves or else to bind them securely together with long steel or iron tie-rods (for the end can be achieved either by extreme flexibility or extreme rigidity, though which were the better it is hard to say), and thirdly, to avoid heavy superstructures. How far these three principles were followed only the architects of the wrecked buildings can say. But looking at an illustration of the Commercial Museum, Yokohama, then the tall square tower with its projecting cornice which rises up from the corner is surely an example of how not to build in a country where height, for height's sake, is to be avoided, and overhanging cornices are about as dangerous as an air-raid.

The evil effects of overloading the upper part of a structure are obvious. For instance, when a chimney with a heavy top is suddenly moved forward, the upper part by its inertia tends to remain quiescent. The result of this as with all heavy superstructures is to cause a fracture between the lower part, which has been quickly moved, and the upper part, which has tended to remain still. Heavy tile roofs have the same effect upon supporting walls as heavy tops to chimneys.

The Lord Mayor of London has followed an honourable tradition of his office in starting at once a fund for the relief of the many thousands of people who are homeless and starving in Japan. Is it not worth considering whether we might not also, if the Japanese Government will accept it, lend her some part of our stock of professional skill in rebuilding the ruins? Of course, it may well be that the Japanese Government will prefer the services of native officials who are more versed in the facing of such problems and have more knowledge of the local conditions of Japan. But at any rate we could offer much skill, which, used in conjunction with Japanese experience, might stand Japan in good stead.

H. J.

Notes and Comments

Vanishing Oxford

OXFORD, it seems, is no more immune from the consequences of "progress" than any other city. It is asserted in "The Oxford Chronicle" that old Oxford is "disappearing piecemeal," and in proof of this alarming statement a number of instances of demolition are cited, the latest being that of an ancient building on the west side of Cornmarket Street, which has received a modern front and is now in process of incorporation into a bank. The historical and architectural societies both protested against the modernizing of this building, but without avail. The story is unfortunately only too familiar. This problem of old buildings is one of the most difficult that we moderns have to face. In the case of public buildings or buildings that are virtually held in trust for the nation, preservation is not usually difficult, though by no means definitely assured, as we have found to our sorrow in the case of the City churches. Always there is going on a conflict between sentiment and "necessity," and necessity, besides knowing no law, nearly always has the advantage of the big battalions. Ethically we have no right to destroy any good building that has been bequeathed to us by the past, though generations now remote frequently had no such scruples with regard to their own inheritance. Past delinquencies are not, however, any excuse for ourselves, though they form an unfortunate precedent that the modern vandals are by no means slow to seize upon to justify their own wrongdoing. "What, then," they say, "is to be done? If it is to be laid down that no old building shall be destroyed, where are we going to build? Are we to go on for ever building upon the outskirts and unreasonably increasing the size of towns and cities, while old buildings, no longer of any use for modern purposes, occupy valuable interior sites that could be turned to advantage? If old buildings are to be preserved for sentimental reasons only, will not our cities in course of time become mere museums, dead, useless antiques to be preserved at immense cost?" To all of which the answer is that enough destruction has already been done; that if venerable buildings continue to disappear at the present rate, it will not be long before we shall have little to show that we are a country with a history behind us. But since we must build if we are to keep pace with modern progress, why not destroy, instead of the things that matter, the things that are of no account whatever—the slum areas, the acreages of ugly modern buildings already out of date—the Charing Cross Roads and the Queen Victoria Streets? What is wanted in every town is some competent authority to deal with all these questions of architectural amenity. Not until bodies of this sort are generally brought into existence will anarchy cease to prevail.

Regent Street

Mr. Henry Tanner, in an article in "The Weekly Dispatch," makes a spirited reply to the critics of the new Regent Street (extracts from his article are quoted in a later part of this issue). By this time we have become sadly reconciled to the loss of Nash's architecture, though there are still a few people who vehemently deny that rebuilding was necessary. As Mr. Tanner rightly points out, it is not a case of building for the sake of building, it is building for the sake of business. Whether the method of rebuilding adopted is the right one is a question upon which no satisfactory opinion can be given until the street is completely rebuilt and we are able to see the various façades not only as individual compositions, but as a "street picture." At the present time old work alternates so restlessly with new that the street is a positive offence to the eye; and we sincerely hope that Mr. Tanner has overestimated when he says that the work will not be finished for at least nine years. From those parts of the street in which there is any sort of continuity in the new work it is even now possible to see that the uniform height of floor levels, cornices, and roof lines does produce in perspective a certain dignity of effect, though the increased height has obviously thrown the whole street out of scale. This is particularly noticeable at Oxford Circus, where the segmental façades are manifestly too high for the extent of their curvature. To "carry" such a height the circus would have to be considerably increased in circumference. This, of course, is not the fault of the architect. Nash's façades were exactly proportioned to the width of the street, so it inevitably follows that higher buildings must reduce the apparent spaciousness of the scheme. The ultimate effect of Regent Street will be very similar to Kingsway, that is, it will look very much like a narrow track between high cañon walls.

"As you were" Architecture

A writer in "The Observer" calls attention to the continuance of the policy of preserving the architectural character of Stratford Place, the Adam enclosure off Oxford Street. It will be remembered that this policy was initiated in the rebuilding of a corner of the Place as a shoe-shop some two or three years ago; it is now being continued in the reconstruction of house No. 20 as a bank. The devotee of "progress" will probably be greatly perturbed at this alarming instance of architectural retrogression. He will have much to say about "insincerity," "being untrue to our own time," "spurious imitation," and so forth. Others, however, will welcome this new departure as a sign of a new spirit among property owners; a gratifying indication of thoughtfulness for architectural amenity and for the collective interest. It is an example that must surely have a beneficial effect upon other schemes of reconstruction, and the Corporation of the City of London, the owners of the property, deserve the best thanks of the community for their courage in setting such an example.

Caen Stone in London

Sir Reginald Blomfield has written to "The Times" to point out that the refacing of the Carlton Club has been rendered necessary by the failure of the Caen stone in the building erected from Smirke's design in 1846–50. Mr. Edward Smirke, the architect's son, has informed Sir Reginald that his father was not responsible for the use of Caen stone and, in fact, advised the use of Portland. As Sir Reginald observes, "it is only fair to a distinguished architect that this should be known." Caen stone is not taken kindly to by the London atmosphere. Blore's old east front to Buckingham Palace was of Caen, and weathered so badly that it had to be painted at regular intervals as though it were stucco. The front, indeed, was actually thought to be stucco until during the refacing some few years ago by Sir Aston Webb it was discovered to be Caen.

Building By-Laws and Housing

The long-standing grievance of architects and builder against obstructive by-laws need be a grievance no longer in the case of house building at any rate, for we note that in order to help the Government's housing policy, th Minister of Health is emphasizing the powers which th Ministry now possesses in this respect. Anyone who experiences a difficulty in this matter should make representation to the authorities concerned, and if these go unheeded th Ministry may then be asked to exercise the powers conferred by the new Act. If a good case can be made out, then th offending by-laws may be revoked and others substituted.

Kingsway and Bush House

By MAJOR HARRY BARNES, V-P.R.I.B.A., F.S.I.

This is the second of Major Barnes's broadcast talks on architecture. The first appeared in our issue for August 15.

IN continuance of my talks on London buildings, I am to say a few words on Kingsway and Bush House. Before speaking to you about the buildings, I think it will be useful if we consider Kingsway for a few minutes in the light of the general development of London.

It is not always easy to remember that London was once a small city, the boundary of which on the west came no farther than Temple Bar. From London City there radiated on the north side of the Thames roads like the ribs of a fan, and that feature is strongly marked to-day. It is not peculiar to London and may be found elsewhere. Side by side with the great highway of the Thames runs the Embankment from the City to Westminster, on the high ground above is the Strand, to the north is Holborn and Oxford Street, farther north still are the Euston and Marylebone Roads.

The great defect in communication, to be found in all old cities, is that between these arterial roads there is no adequate connection; this was so in London. Between the Strand and Holborn the only means of communication was through narrow winding lanes, some of which, such as Fetter Lane and Chancery Lane, still remain. Up to the present time even that defect has not been removed. It s closely related to the presence or absence of bridges across the Thames. In the old days when there were no bridges between London Bridge and Westminster Bridge, he defect was perhaps not so keenly felt; you had to cross he river by one bridge or the other, and the road you were n gave you access to both. Since those days Southwark Bridge, Blackfriars Bridge, and Waterloo Bridge are added o the means of passage over the Thames, and the making f Kingsway is directly connected with the transit of goods nd passengers for which Waterloo Bridge affords convenience. When that bridge, easily the best architecture f any across the Thames, was made, a fairly good approach was devised to it from the Strand, but beyond that there was really no adequate access from the great thoroughfares o the north. It is remarkable that even now, between t. Paul's Cathedral and St. James's Palace, there are eally only two direct connections to Euston and Maryleone Roads, the one by Farringdon Street to Blackfriars nd the great thoroughfare which Kingsway completes. roceeding farther west, Charing Cross and Tottenham ourt Roads give a more or less winding thoroughfare, while he last great means of access is that furnished by Regent treet, of which more will be said in my next talk.

From the point of view of the general development of ondon, therefore, Kingsway may be looked upon as the st great effort to connect London on the south of the hames with London on the north. How slow these great evelopment schemes are in reaching completion will be alized by the statement that the lifetime of a generation as passed since the inception of the Kingsway scheme. was in the very first year of the existence of the London ounty Council, in 1889, the scheme was initiated, and for xty years before that time the matter had been under nsideration, so that a century may be said to have passed nce the need was first felt up to the time when it has been pplied. Ten years passed before the plans were fully atured, and when that had taken place they comprised ree important schemes. First, the widening of the Strand the removal of the Holywell Street block, which lay the north of the churches in the Strand, secondly, the dening of Southampton Row and Theobald's Road, and stly, the scheme dealing with the clearing of the insanitary eas in the neighbourhood of Clare Market.

It may be observed at this point that schemes of this nd yield a double advantage, not only providing better communication from one part of the City to another, but furnishing an opportunity of slum clearance. It was a great scheme for pre-war days. The gross cost was estimated at about £6,000,000, and after the disposal of building land the net cost at nearly £2,000,000. Twenty-eight acres of land were dealt with, twelve and a half of which went into new streets, leaving available for the sites of new buildings above fourteen acres. It would have been better if the proportions had been reversed, and the length of Kingsway broken up by more cross streets, which would have given opportunity for a larger number of detached buildings; the buildings beset by other buildings on three sides are little more than façades, and three-fourths of the possibilities of great architecture are eliminated.

In any old city in which such developments take place many interesting buildings are bound to disappear. It was the case here. In Holywell Street and Wych Street and in the New Inn, London lost a number of interesting examples of its old life. The great new street, 100 ft. in width, however, gave opportunity for a display of what was possible in modern architecture, and we are now in a position to see what advantage has been taken of it.

Leaving for the moment Bush House out of account and the other buildings on the island site in the Strand, let us see what has been done in Kingsway. At the outset a comparison between the treatment of this great new thoroughfare and that of the last important street improvement in London eighty years previously, in Regent Street, leaps to the mind. From the beginning of Regent Street in Waterloo Place to its completion in Park Crescent, the street was marked by a unity of design and conception which is almost entirely absent from Kingsway. There can be no doubt if such a street as Kingsway had been laid out by Haussmann in Paris in the "sixties" it would have presented itself as one design from end to end. The eternal conflict between uniformity and variety is, perhaps, never so evident as in the architecture of great cities. Our system of private ownership of individual plots of land leading, as it naturally does, to the determination of the individual owner to make the most of his plot, regardless of what his neighbours may do to theirs, has produced in every great city in this country, thoroughfares distinctly impressed with that individualism.

A great effort was made at the inception of Kingsway to secure control of the design as well as of the materials to be used in the construction of its buildings, but apart from some general uniformity of the heights of the buildings and the character of the materials used, the design may be said to have failed. A number of very interesting buildings have been erected about which, of course, varying estimates have been formed, but apart from the entrance to Kingsway, where Adastral House and Shell House balance each other and make a really fine entrance to the street, there is no approach to uniformity in its treatment. That may frankly be regretted. In narrower streets not axially planned, variety may not only be permitted, but encouraged, but in a great thoroughfare like Kingsway with the alignment there attempted, something nearer uniformity should have been achieved.

That must, however, remain for another century, and we have to accept it as it is, and being what it is it may be said at once that perhaps the most charming building in it is the Parish Church of Holy Trinity, which adjoins the Holborn Restaurant, and has a recessed forecourt, the walls of which are curved, and in which is centred a fine porch. Some day it is understood that the structure will be completed by a tower and spire in the spirit of the City churches. The architect's architect, Sir Edwin Lutyens, is responsible for the Friends' Insurance building, and those who pass up and down this thoroughfare may well seek it out. The Kodak building is interesting, not only in itself, but as one of the first attempts at that kind of building which is coming to be accepted as the type of a business building. The Grand Opera House just misses being a great building, but perhaps the building in Kingsway itself which will receive, and to some extent deserve, the main attention is Africa House. Here may be realized the advantage possessed by a building which can display itself on four fronts, not that such an advantage has been wholly obtained here. Indeed, in Gate Street may be seen one of the most interesting examples of the effect that ancient lights may have upon the design of a building. This building has the advantage of being one of the last erected, and has been able to gather up in itself all the experience of the past.

Passing from Kingsway to the island site in the Strand, the building that undoubtedly dominates, and will continue to dominate it, is Bush House. Up to the time of its erection, Australia House, a remarkably fine piece of design, was certainly the best building on the site. The chief matter for regret is that there was not in the early days of this great development scheme someone strong enough to secure the use of this site by the London County Council for their new building. This is where they should have been. Here was the chance for a great public building which has not occurred since Wren rebuilt St. Paul's, and which was miserably lost when the Law Courts were erected. The mind almost failed to conceive what might have been achieved here if the whole site had been devoted to the great purpose of housing the supreme authority in London. That chance has been missed, but we are fortunate that its place has been taken by a building which shows the quality of mind and feeling displayed in Bush House. Here we have, perhaps, the most important site that has been developed in modern London, passing into the hands and under the control of an American business man, employing an American architect, and no greater tribute can be paid to both than to say that they have placed upon this site a building which in some respects more than any building I know has been erected with a genuine regard for the amenity of the surroundings in which it has been placed. What is to be seen at present is but the central part, and when the whole is completed there can be no doubt, as has already been said by those competent to say it, that the building will command more attention than any other modern building in London.

In these troublesome times, when so much depends upon the friendship and the co-operation of the English-speaking people of the world, it is a great thing that, in the heart of our great city, buildings should have been erected by men from across the sea, who speak the same language as ourselves, dedicated to the friendship of the English-speaking people throughout the world. It was a fine conception, it has been finely carried out; the simplicity and dignity of the building are extraordinarily great. The great portico in Kingsway will never cease to be an object of admiration, and all lovers of architecture will hope that the day is not far distant when linked up to the great central block will be the two wings, and that the whole structure will be completed, including the fine tower which is contemplated. Perfection being too much to expect in an imperfect world, we may congratulate the architects of London at the completion of this century-old scheme on having risen to a very considerable height, and hope that this great development will be but the forerunner of others which may come to fruition more quickly.

Architecture in Japan

By W. G. BLAIKIE MURDOCH

In view of the recent disaster which has befallen Japan excerpts from an article which originally appeared in "The Architectural Review" *will, we believe, be of interest.*

THERE is no country, not even Greece, not even Italy, that has associated herself so widely and closely with her artistic achievement as Japan. The mention of Athens, or of Florence, evokes memories of a great many exploits, irrespective of architecture, sculpture, or painting. But to hear the name of Japan is to think almost instantly, if not exclusively, of her great artists; and since these, like all great artists, cast a glamour over whatsoever things they depicted, the traveller to the Celestial Empire is inclined to believe that, on reaching there, he will step straight out of the world of prose into an enchanted realm. Instead, on emerging from the main railway-station at Tokio, there is found a wilderness of shapeless atrocities, the hasty output of speculative builders who have learnt their trade in the United States. And, walking among these buildings, if such they may be called, there will often rise to the lips the angry question, whether the Japanese have passed from disregard of the beautiful into positive contempt for it. But this very fact that Old Japan is dying creates the deeper love for all that is fine in the country's bygone architecture, and renders passionate the desire to make a record of her work in the art, nothing even approximate to the adequate having as yet been written about it.

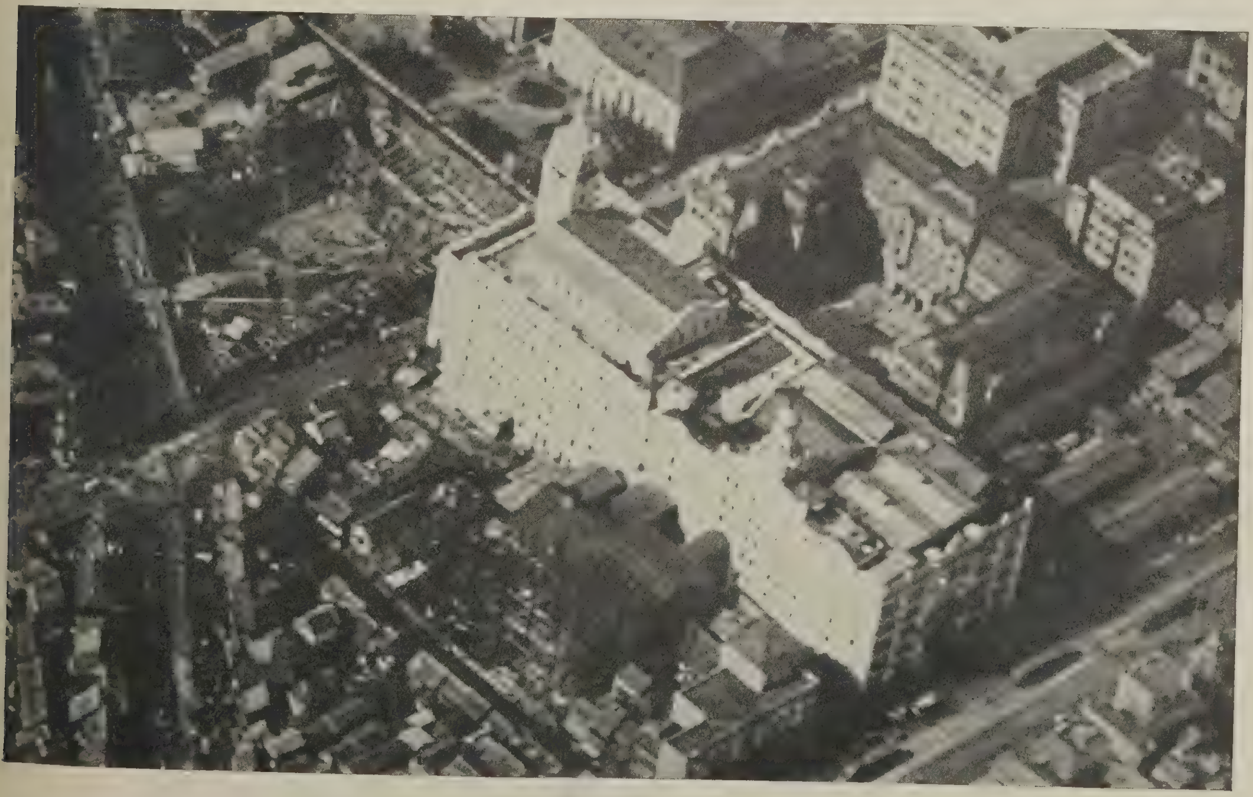
The great age of everything in the Far East is proverbial in the West. Yet, living in the oldest parts of a Japanese town, there is not felt more than the slightest suggestion of antiquity. For it must be remembered that, although Japan made her castles with stone till recently, for all other buildings she mainly employed wood. And if she built more beautifully with that unpretentious medium than any other land built, if, too, her supremacy herein is a notably interesting laurel, the inevitable outcome of her protracted bias for timber is that in the annals of her temples and cities there is endless word of destruction by fire. Old houses, then, are rare in Japan; and it is improbable tha the group of Shinto shrines at Ise, not far from the huge seaport of Kobe, do really date from the eve of the Christian era, at which time they were founded. But there is littl reason to suppose that these structures, commonly pointed to by Japanese antiquarians as the oldest relics of thei country's architecture, are other in guise than they wer originally, the reconstruction of a place of worship havin been, as a rule, until the seventeenth century, an endeavou towards exact duplication of the predecessor.

Each of these shrines is a mere oblong cottage of on story, the entrance in the middle of the longer wall, th roof V-shaped, while the four rafters joining the eaves edges project considerably beyond the apexes of the roo thus decorating each apex with a sort of St. Andrew cross; and along the ridge of the roof are laid horizontall seven short thick logs, their points looking from a distanc rather like a row of cannon-mouths. It is likely that thes devices had a purely utilitarian origin, the horizontal log being conceived with a view to giving the roof stability b weight, the edge-rafters allowed to project so that the might be bound together in the manner of tentpole Nevertheless, it would seem that the early Japanese cam to regard both these things as having some esoteric si nificance, for they became elements of Shinto architectu exclusively—its sole exclusive elements; while its sole pr rogative among independent decorative adjuncts a sculptured foxes, and that commonly very simple arc called torii. Not that by any means all Shinto buildin have these idiosyncrasies, which, however, are never fou at Buddhist nor at secular edifices.

In remote times there was no fixed capital in Japan, the seat of government being changed whenever a new monarch ascended the throne. But, the idea dawning that a permanent home for the royal house would be an institution adding much to the prestige of the realm, Nara was selected in 709. Whilst builders were making a palace there, no vestige of their labours being left to-day, there was heard much murmuring against Buddhism; for at this time a famine was followed by a pestilence, and people widely believed these visitations to be inflicted by avenging Shinto deities affronted by the growth of the Indian creed. However, the renowned prelate Gujogi came forward with the doctrine that Buddha was a reincarnation of Amaterasu. The Shintoists were conciliated by this second concession, and as the then Emperor, Shomu, was a devout Buddhist, he celebrated the triumph by building Todaiji, at Nara, containing that colossal bronze Buddha which has been described often by travellers as the finest sculpture in the Orient.

Some Japanese historians declare that, during the sway of the earlier Tokugawa, Tokio became for a space the largest city in the world; and, be that as it may, the town certainly grew at wonderful speed at this time. Ever since being made the capital, Kyoto had been the acknowledged centre of intellectual activities; but now Tokio began to usurp that position, a law being passed, too, that all feudal lords must spend a part of the year in the town, whither they were followed by swarms of *samurai*. A fine architectural relic of Tokio's growth as an intellectual centre is the Seido or Hall of the Sages. A fine survival of the old feudal régime is the mansion of the Mayeda family. Owing partly, no doubt, to the persecution of the Christians, the seventeenth and eighteenth centuries were an era of much philosophic speculation and writing in Japan; and the Seido, which was founded in 1690, was intended for the expounding to young men of the great Chinese teachers, Confucius in particular. Placed high on the steep bank of a river, this nstitution consists of two identical oblong houses, each having at either of its ridge-pole extremities a colossal dragon in bronze, the two houses formed into a square by ambulatories, the sides everywhere black, the roofs all green. On account of the slope of the site, when looking from the opposite side of the river the front building alone is seen in entirety, a long stone balustrade before it, a stone stairway winding downwards thence; while the crest of the back building forms an ideal background, the shapeliness of its dragons the more emphatic since those are shown against the sky. The whole picture thus made has something of an air of gravity, finely in accord with the purport of the Seido; while the Mayeda mansion in turn owes much of its charm to its garden, with twisted pine-trees, miniature rocky mountains, and goldfish pond. There is an oblong single-storied house, scarcely more than half as big again as the Horiuji kondo, this house having two much smaller ones attached, while its door is in a porch with round top; and the walls are everywhere of dark brown wood. Grey tiles cover the sloping roofs, that of the largest house having the inward curve, and its eaves meet in a carving. This must sound a somewhat humble place for a powerful baron to live in; but supposing that the extant edifice was formerly part of a group—and that assumption is supported by the great size of the gateway, rather less than half a mile from the house—it must on the other hand be borne in mind that the Tokugawa rulers passed law after law against luxuriousness, despite their own taste for splendid buildings.

A salient beauty of the Japanese house, a beauty moreover of an exceptionally refined sort, lies in the insistence on the straight line and the angle. For, apart from the square shafts already mentioned, the big windows of translucent paper are invariably divided into equal-sized sections, oblong or square, by a trellis work of laths, each hardly thicker than a pencil. As yet glass is used only sparingly; as yet doors are nearly always of the sliding kind, never having handles, merely indentations big enough to give finger-grip, which indentations are lined with metal, a relief of birds or flowers on it usually. But there is little favour to-day for painting the doors with *genre* scenes or landscapes, as in Hideyoshi's time; and many are duplicates of the windows. Some of opaque paper have a quiet floral pattern, while a specially favoured door is one of rough grey paper, flecked as though by accident with tiny patches of gold. In consonance with their affection for these apparent inadvertencies, Japanese architects are fond of introducing



This air view of Tokio illustrates the huge Mitsukoshi store (destroyed by the recent earthquake) contrasted with the native type of business premises, which it completely dwarfs.

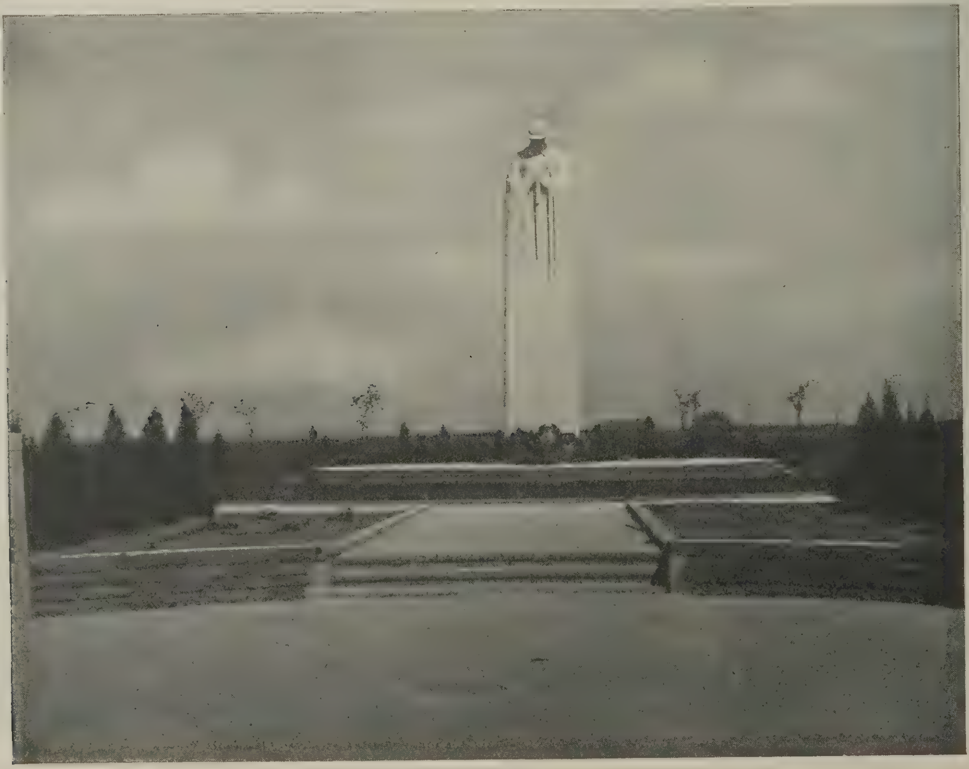
rafters, or upright beams, from which the bark has not been taken; they like ventilators made to look as if a knot had been removed from wood, or the shape of a pear or fan, these ventilators being commonly crossed by a network of untrimmed birch twigs; and sometimes builders will give the end of a room a tank, to be enlivened by goldfish and a miniature rockery. Floors are always covered with yellow matting, ceilings generally with brown planks, walls with a cold tint; and there is little waning of the old idea that a room should contain only one picture, hung in the recess. As a rule, the furniture is merely some oblong boxes of brown wood, with black metal fixings, these boxes piled one on top of another so as to make a chest-of-drawers, and having a look of grand severity.

The typical house of Old Japan is doomed: it may be built to-morrow, it will not be built the day after. Giving poor shade in the fierce heat of summer, it is bitterly cold in winter; and the now quickly growing wealth of the Japanese, together with their increasing acquaintance with foreign comforts, will result before long in the Celestial Empire having none save Westernized dwellings. It must not be thought that the new edifices are without exception bad; wherein Japan is so culpable being in her apparent contempt for her old buildings, her carelessness in relation to their surroundings. With her ardour to be Occidental, she seems intent on mutilating all that savours of her long period of exclusive policy: she seems determined that people in future should know of the full excellence of her bygone architecture only from photographs of yesterday, or prints of the day before.

The Canadian Monument at St. Julien

CHAPMAN CLEMESHA, Architect

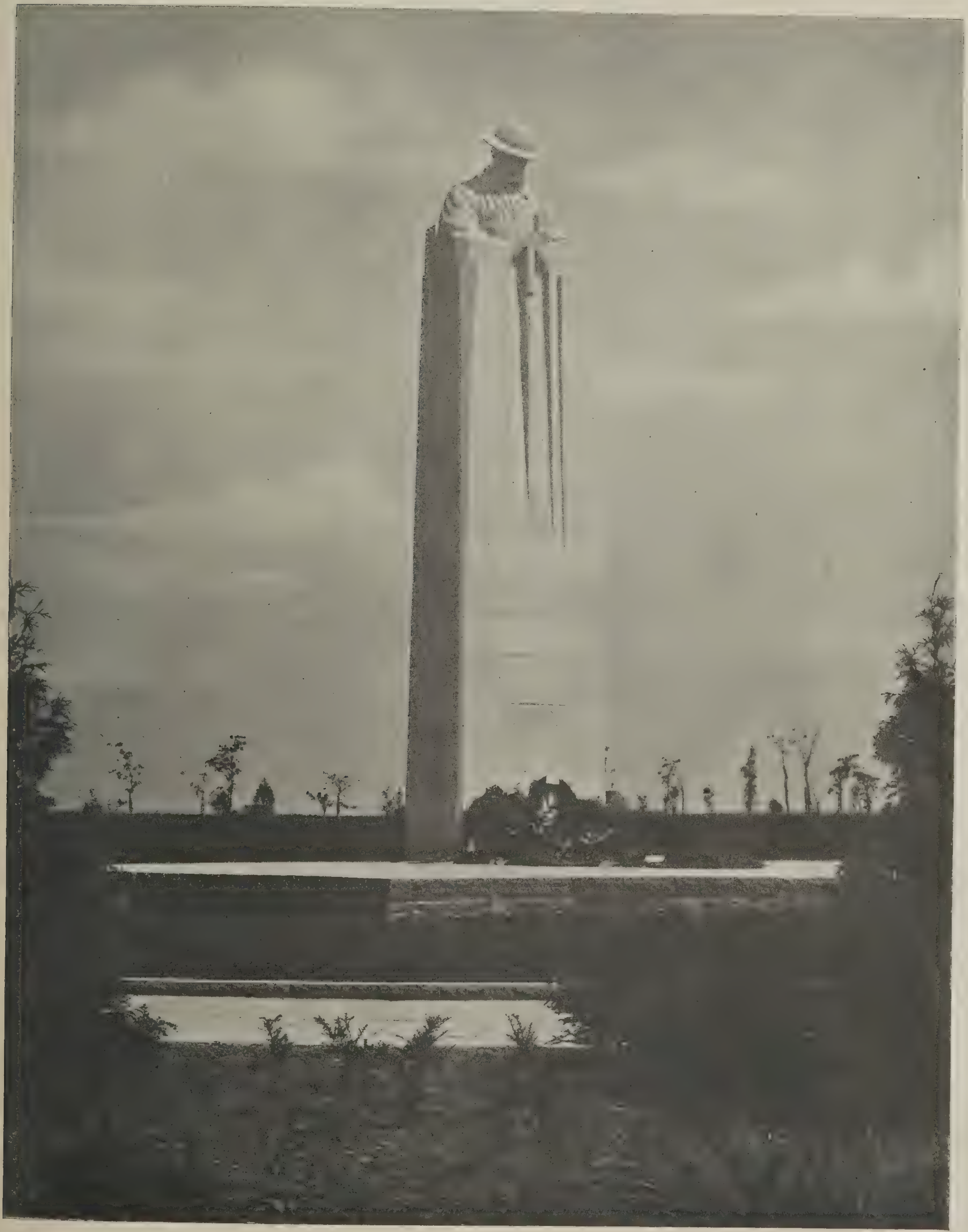
THE Canadian monument at St. Julien, here illustrated, is to be the first of six similar monuments to be erected by the Canadian Government to commemorate the chief battlefields on which the Canadian army distinguished itself. The Canadian Government, in deciding on these memorials, felt that it might seem ostentatious to erect on foreign soil six different monuments. They therefore determined, on the advice of the judges in the competition they held, to erect this particular monument, designed by Mr. Chapman Clemesha, architect of Regina, because it was of a simple and severe nature which would bear repetition. It would stand on the various sites in Belgium and France, surrounded by its circle of trees, as a sort of milestone marking the progress of the Canadian army, easily recognizable, when once seen, as the Canadian monument. Three are to be erected in the Ypres salient, one at Drury cross roads, one at Bourlon Wood, one at Courcellette, and one at Hospital Wood (near Amiens). The only monument to be different from the rest is the one to be erected on Vimy Ridge, whic the same judges gave to Mr. Allward, sculptor, o Toronto. These great milestones, if such they may b called, some 40 ft. high, are being erected in grey Belgia granite. The sites, many of several acres in exten have been given by the French and Belgian Government These Canada is laying out as solemn groves of map trees and in many cases has had to build approach roa to them, sometimes a couple of miles in length. This wor which, in the case of the Belgian sites, is practically finishe is being executed by the Canadian Royal Engineers und the command of General Hughes, while the horticultur work is under the direction of Colonel Ross. The judges i the competition were the architects, Paul Cret, representi France; the late Frank Darling, representing Canada; ar Professor C. H. Reilly, representing England. No oth great country has, at any rate, so far taken such pai to secure worthy memorials for itself on the battlefield This first monument was unveiled by H.R.H. the Dul of Connaught a few weeks ago.



A GENERAL VIEW.

War Memorials. 37.—The Canadian Monument at St. Julien

Chapman Clemesha, Architect



This monument, lately completed at St. Julien, is to be duplicated on five other battlefields in Belgium and France on which the Canadian forces were represented. The design was selected in competition, the judges, all architects, being Paul Cret, representing France, the late Frank Darling, representing Canada, and Professor C. H. Reilly, representing England.

THE LIBRARY
OF THE
UNIVERSITY OF ILLINOIS

The Architectural Societies

4.—Liverpool

THE LIVERPOOL ARCHITECTURAL SOCIETY FOUNDED 1848 INCORPORATED 1892

THE PRESIDENTIAL BADGE.
Designed by H. Tyson. Smith.

TO the Liverpool Society, which was founded in
the year 1848, belongs the credit of being the
first professional society to represent architec-
tural interests in the provinces. At the time
its formation the Institute of British Architects had not
en above the level of a local society and had only two
ndred professional members. Facilities for travel and
the transport of material were then very limited, for
railway system was still in its infancy, and photography
photographic methods of printing were unknown.
od illustrations and facilities for travel perform an
portant part in the education of an architect, and the
ficulties to be overcome in obtaining an efficient training
st have been very great.

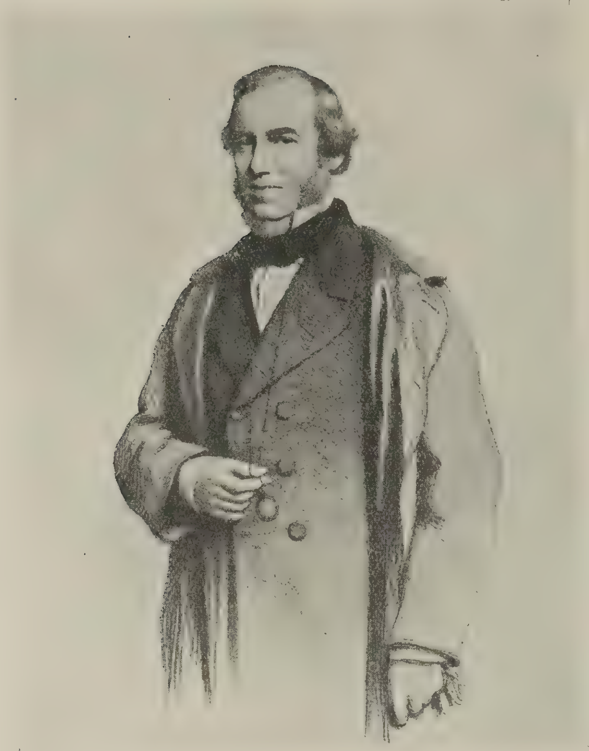
he proposal to form an architectural society in Liver-
l appears to have originated with the late William
kson, M.P., and the suggestion having met with approval
Society was formed at a meeting held at the Lyceum,
d Street, on March 1, 1848, and was called the Liver-
l Architectural and Archæological Society. Mr. T. B.
rsfall, Mayor of Liverpool, having intimated his willing-
s to accept the office, was elected the first president.
rospectus, several copies of which still exist, setting
h the objects of the new Society was prepared and cir-
ited. There is no essential difference between the aims
the founders as described in the prospectus, and the
iety as now constituted, though the character of the
nbership has varied. In its early days the Society
tained a large number of leading citizens and public
, whom it was desired to interest in the subject of
itecture, and who in many instances maintained a life-
connection. By reason of the numerical weakness of
professional members it would, at that time, have been
ossible to have maintained the Society without their
ort. Except such as may belong to an Honorary Class
members have disappeared, and it is now a require-
t in the Articles of Association that all candidates shall
fy the Council of the sufficiency of their architectural
wledge and training.

For the pioneer work of the founders the Society and the profession has every cause to be grateful, for it gave the initiative to a movement which has since become a great and growing organization. Mr. James Allanson Picton, elected the first professional president in 1850, and subsequently knighted in recognition of his public services, and Mr. Joseph Boult, were indefatigable workers on behalf of the Society.

At a meeting on June 6, 1851, a letter was read from the R.I.B.A. acknowledging the receipt of a copy of the Society's first annual report. This is the first note of relations between the Institute and a provincial Society. On the same date there is a record of a communication from the Bristol Society of Architects enclosing suggestions for the management of architectural competitions and rules of the Society. The Bristol Society, the next oldest provincial society, had then just been formed, and this was the first communication to pass between one provincial society and another.

The records of the Liverpool Society are sometimes very voluminous, but for the greater part relate to the ordinary routine associated with an architectural society and are therefore only of local interest. On the other hand, there are from time to time many interesting references recording the history of the gradual growth of the profession as it at present exists from a period when there was but little or no organization, when professional education was generally very deficient, and when the same person not infrequently alternated the practice of the profession as an architect with that of the business of a builder.

One of the earliest matters of general interest to be brought before the Society was a proposal to institute architectural examinations. In October, 1855, a communication was received from the Architectural Association of London in reference to a memorial to the Council of the R.I.B.A. in favour of the establishment of an examination, which would eventually serve as the basis for the issue of such a diploma as would certify that the holder thereof



T. B. HORSFALL.
(The Society's First President.)

was fully qualified to practice as an architect. The Architectural Association desired that the members of the Society would give expression of their feelings in a memorial if they thought it desirable. The subject was discussed at a meeting held in January following, when a resolution in favour of the scheme was passed and forwarded to the Royal Institute. Mr. Thomas Rickman, a member of the Council of the London Architectural Association, was present at the meeting. The Hon. Secretary of the Institute, Mr. J. J. Scholes, in acknowledging the communication, which, he said, had received the attention due to so important a matter, enclosed the following resolution :—

"Resolved that the Council feel that it is as yet premature to pronounce an opinion on a subject of so great importance as the establishment of an examination with reference to granting diplomas to architects, that before they can recommend the Institute to undertake such a change it would be necessary carefully to ascertain the opinion of the members of the profession generally . . . ."

The subject of examinations was again before the Liverpool Society in October, 1860, when an important discussion took place on the draft proposals of the Institute to establish an elementary examination for students and Associates of the Institute and a higher examination in the theory and practice of the profession for Associates and for future Fellows. Resolutions were passed cordially supporting the scheme. Further exchange of views passed between the Society and the Royal Institute of British Architects and the Architectural Association. The results of the first examinations were published in February, 1863.

In March, 1861, a Member said he had received a communication from a London architect asking why architects in Liverpool did not join the Institute in London. It was considered that there would not be much advantage in doing so unless some closer relations could be formed. The constitution of the Institute was said to be very narrow. All architects who had acted as surveyors were ineligible, and there were other restrictions which debarred almost every provincial architect from becoming connected with the Institute.

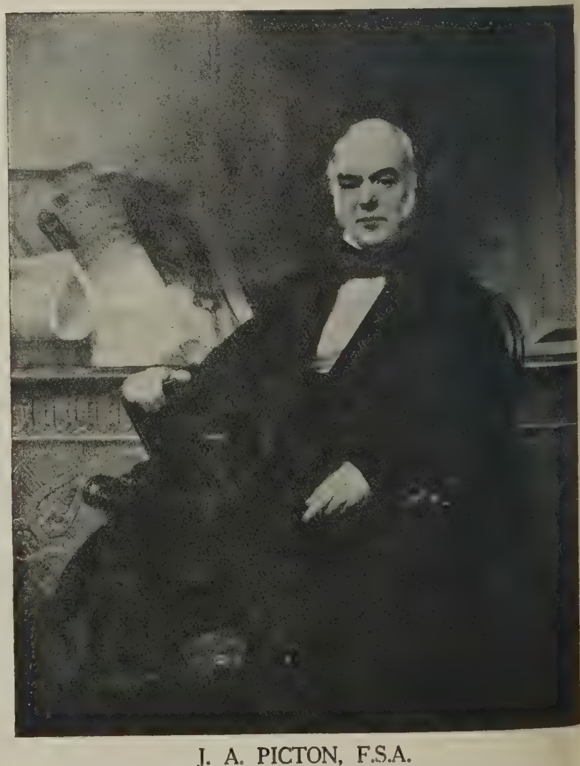
In May, 1861, the Northern Architectural Association submitted details of a scheme for forming an architectural alliance or union of the various societies throughout the country. The outline of the scheme contained, *inter alia*, the following proposals : "That its object shall be to promote united action among the otherwise isolated architectural societies. That it shall take cognizance of all matter affecting the interests of the profession and that fo this object it shall direct its attention to the presen unsatisfactory mode of conducting competitions an shall endeavour by the publication of a scale o charges to regulate the rates of professional remuneration."

The Society cordially concurred in the objects of th alliance, and the rules of the proposed alliance having bee considered and agreed upon, delegates were appointed t its first meeting held in London on July 2, 1862, at th house of the Architectural Union Company in Condui Street. Delegates attended from the London Architectura Association and from Edinburgh, Glasgow, Ireland, Birmingham, Liverpool, Manchester, Bristol, and Newcastl In the following February the Hon. Secretary of the Allianc called the attention of the Society to a letter in the "Building News" in reference to the terms of a competition for building at Plymouth, and requesting members not t compete until satisfactory conditions were issued. Th was probably the first occasion on which action of th character was taken.

In 1865 the Architectural Alliance proposed that "Quantities should form part of a building contract, and th an independent arbitrator should be appointed." Th opinions of the members of the Society were keenly divid on these novel suggestions. In March, 1869, a form building contract was agreed upon between the Liverpo Society and the Liverpool Master Builders' Association a recommended for adoption. The same subject was th occupying the attention of the Institute, and copies of t form were forwarded to Mr. T. Haytar Lewis, who w engaged in drawing up a report for the Institute.

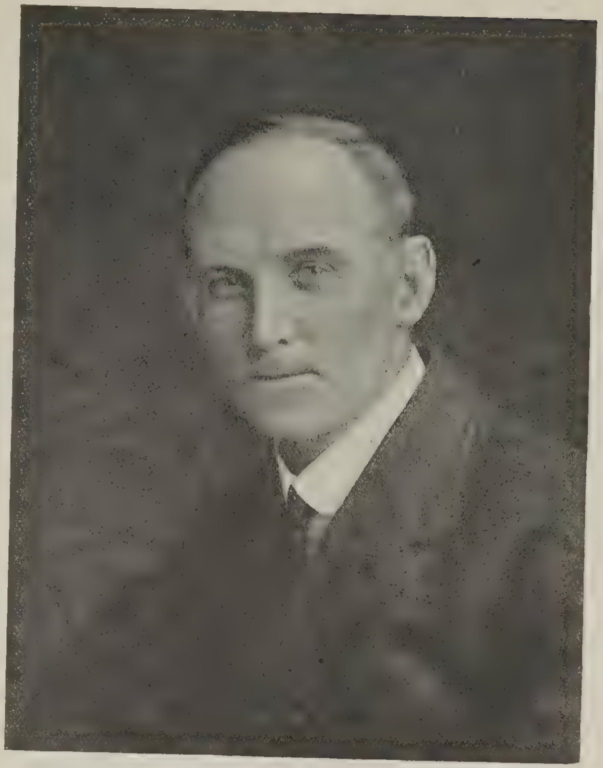
In 1870 the Manchester Society of Architects, havi sought the co-operation of the Society in expressing definite opinion as to the claims made by the First Commissioner of Works as to the possession of Mr. E. M. Barr drawings, the Society passed a long resolution in favour the retention of the drawings and other documents. M Barry wrote thanking the Society for the action they h taken.

At the opening meeting of the session in 1870 Mr. T.



J. A. PICTON, F.S.A.
(President, 1850–52 and 1876–77—The Society's first Professional President.)

R. ARNOLD THORNELY, F.R.I.B.A.
(President, 1910–12.)



MR. G. HASTWELL GRAYSON, M.A., F.R.I.B.A.
(President, 1912–14.)

Wyatt, president of the R.I.B.A., was present, and expressed the hope that the relations between the Central Architectural Society in London and the provincial societies would become closer than at present; he would deal with the importance of such intimate connection with the provincial societies in his address. In his opening address Mr. Wyatt said: "But I cannot think there should be any serious obstacle to the union of three societies like the Institute, the Architectural Association, and the Architectural Alliance, whose objects are so similar, if the union were approached in a spirit of conciliation and mutual trust." At the annual meeting in 1871 the delegates appointed to Architectural Alliance were instructed to urge a pre- ence of this Society for a bond of union for architectural ieties with the Institute, and thus do away with the essity for the Alliance, provided the arrangement could made without detriment to the present societies. In rch, 1875, communications were received from Mr. D. tthews, of the Architectural Alliance, and Mr. C. East- e, of the R.I.B.A., enclosing a proposal from the Royal titute of Architects of Ireland for the affiliation of vincial societies with the Royal Institute. A long series resolutions were passed in support of the proposal. m this date the Alliance appears to have ceased to ction.

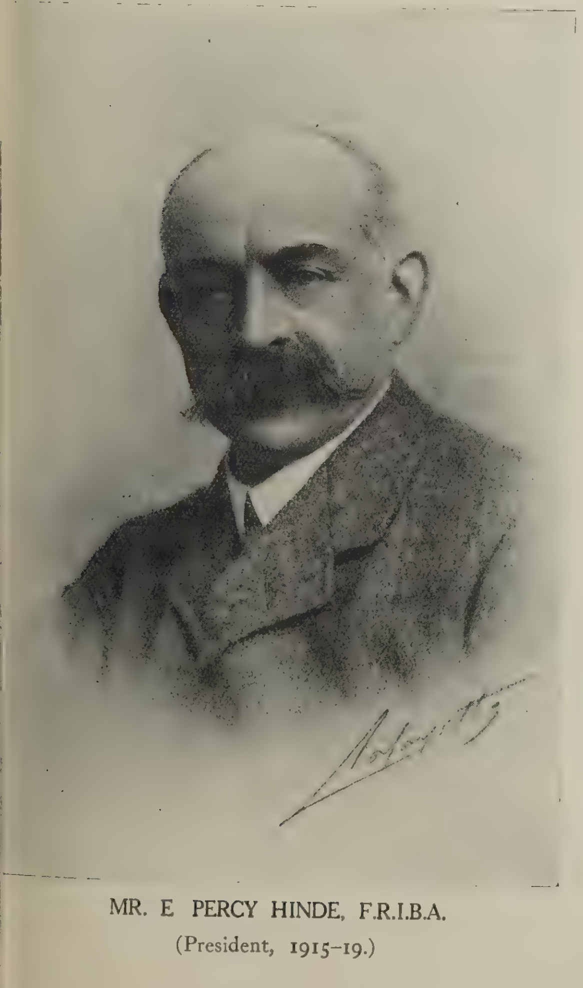
n 1865 the Architectural Alliance consisted of the London Architectural Association, the Northern Architectural Association, the Liverpool Architectural and Archæological Society, the Bristol Architectural Society, the Nottingham Architectural Association, the Architectural Institute of Scotland, the Birmingham Architectural Society, the Glasgow Architectural Society, and the Manchester Architectural Association, the last four of which no longer survive. The very existence of the Alliance is now almost forgotten, but the value of its initial work in the organization of the profession and in bringing forward the subjects of building contracts, a scale of charges, and the control of the conditions of architectural competitions has been very great.

In 1875 the words "and Archæological" were omitted, and the name of the Society became the "Liverpool Architectural Society."

In 1886 the secretary of the newly formed Society of Architects waited upon the Council of the Liverpool Society with a view to obtaining their favourable consideration to the Society of Architects' Federation Scheme, and in reference to the application of the R.I.B.A. for a new Charter. The Council declined to support the Society of Architects. In the November following, the Society presented a petition to the Privy Council in support of the R.I.B.A., whose application for a new Charter was being opposed by the Society of Architects.

In September, 1891, the Council of the Liverpool Society had before them a statement by the R.I.B.A. against the proposed Memorandum of Association of the Society of Architects then applying for a certificate of incorporation. The Council passed the following resolution: "That the Council having duly considered the Memorandum of Association of the Society of Architects and draft statement against it by the Council of the Royal Institute of British Architects unanimously resolve to support their action. They consider the establishment of a rival society to the Royal Institute of British Architects which already adequately fulfils the functions of such a society would promote disunion and prove disastrous to the architectural profession."

On January 16, 1893, a paper was read before the Society by Professor MacKay of the Liverpool University College, entitled "The Teaching of Architecture in the New Univer-



MR. E PERCY HINDE, F.R.I.B.A.
(President, 1915–19.)

sity," and in the course of the address the suggestion was made that a scheme might be set on foot for endowing a chair at University College for the combination of instruction in architecture, sculpture, and painting. The proposal received the energetic support of the Society, and a scheme formulated by the Liverpool Technical Instruction Committee, having been approved by the Council of the University College, Mr. F. M. Simpson was appointed Roscoe Professor of Fine Arts, and the School of Architecture and Fine Arts was opened in the autumn of 1894. From this beginning has developed the present Liverpool School of Architecture.

In April, 1893, at the invitation of the Liverpool Society, delegates from the R.I.B.A. and from various provincial societies attended in Liverpool for the purpose of discussing a proposal of the Birmingham Architectural Association for the division of the country into architectural provinces. Resolutions were passed expressing general approval of the scheme and also in favour of the presidents for the time being of the several provincial societies being members of the Institute Council. This was the first provincial conference of architects.

In 1898 a commemoration dinner was held to celebrate the fiftieth anniversary of the formation of the Society. A unique feature of the occasion was the presence of Mr. T. D. Barry, who had attended the meeting at which the Society was formed, and who had been president at the time of its twenty-fifth anniversary.

On August 22, 1901, the Society became Incorporated under the name of the Liverpool Architectural Society (Incorporated).

During 1908, in consequence of the troubles still arising from unsatisfactory competitions, the Liverpool Society, in co-operation with the Manchester Society of Architects, drafted a revised form of conditions of competition, copies of which were submitted to the R.I.B.A. As a result the matter was taken up by the Institute, and led to the publication of the regulations for Architectural Competitions issued in 1911.*

On April 18, 1917, at the invitation of the presidents of the societies of Manchester, Liverpool, and Birmingham, a conference of representatives of provincial societies was held in Manchester to consider various questions then affecting the profession and a series of resolutions were passed and forwarded to the Council of the Royal Institute. Subsequently further conferences, presided over by the late Mr. H. T. Hare, P.R.I.B.A., were held at Manchester and Birmingham. The conferences were numerously attended, and many matters of professional interest were discussed.

The principal students' prize offered by the Society is the Honan Travelling Scholarship, of the value of £50, tenable for one year, awarded annually, and open to members of the Society under the age of thirty years. The scholarship is the bequest of a member, the late Matthew Honan.

In 1921 the first of the recently organized provincial conferences of the R.I.B.A. was held in Liverpool, and proved a very successful meeting.

Appended is a list of the thirty-nine presidents who have occupied the chair during the past seventy-five years :—

The Liverpool Architectural and Archæological Society.

1848–49.	T. B. Horsfall (Mayor of Liverpool).
1849–50.	The Rev. David James, F.S.A.
1850–52.	J. A. Picton, F.S.A.
1852–54.	Charles Verelst.
1854–56.	John Hay.
1856–58.	Samuel Huggins.
1858–60.	H. P. Horner.
1860–62.	James M. Hay.
1862–64.	W. H. Weightman.
1864–66.	Joseph Boult.
1866.	William Stubbs.
1866–68.	T. J. Kilpin.
1868–70.	Francis Horner.
1870–72.	Henry Hill Vale, F.R.I.B.A.
1872–74.	T. D. Barry.
1874–76.	Joseph Boult, F.R.I.B.A.

The Liverpool Architectural Society.

1876–77.	J. A. Picton, F.S.A.
1877–78.	James M. Hay.
1878–80.	Henry Sumners, F.R.I.B.A.
1880–82.	Charles Aldridge, F.R.I.B.A.
1882–84.	William Parslow, F.R.I.B.A.
1884–85.	Thomas Cook.
1885–86.	Thomas Mercer.
1886–87.	George E. Grayson, F.R.I.B.A.
1887–89.	Edmund Kirby, F.R.I.B.A.
1889–91.	T. Mellard Reade, F.R.I.B.A., F.G.S., A.M.I.C.E
1891–93.	T. Harnett Harrisson, F.R.I.B.A., A.M.I.C.E.
1893–95.	Henry Hartley, F.R.I.B.A.
1895–96.	Alfred Culshaw, F.R.I.B.A.
1896–97.	George Bradbury.
1897–99.	W. E. Willink, M.A., F.R.I.B.A.
1899–1900.	E. A. Ould, F.R.I.B.A.
1900–01.	Professor F. M. Simpson.

The Liverpool Architectural Society
(Incorporated.)

1901–02.	Professor F. M. Simpson, F.R.I.B.A.
1902–04.	John Woolfall, F.R.I.B.A.
1904–06.	P. C. Thicknesse, F.R.I.B.A.
1906–08.	Edmund Kirby, F.R.I.B.A., F.S.I.
1908–10.	T. E. Eccles, F.R.I.B.A.
1910–12.	Arnold Thornely, F.R.I.B.A.
1912–14.	G. Hastwell Grayson, M.A., F.R.I.B.A.
1914–15.	Gilbert Fraser, F.R.I.B.A.
1915–19.	E. Percy Hinde, F.R.I.B.A.
1919–21.	T. Taliesin Rees, F.R.I.B.A., F.S.I.
1921–23.	Gilbert Fraser, F.R.I.B.A.

[*The previous articles of this series appeared in our iss for May 2 and 30, and August* 1.]

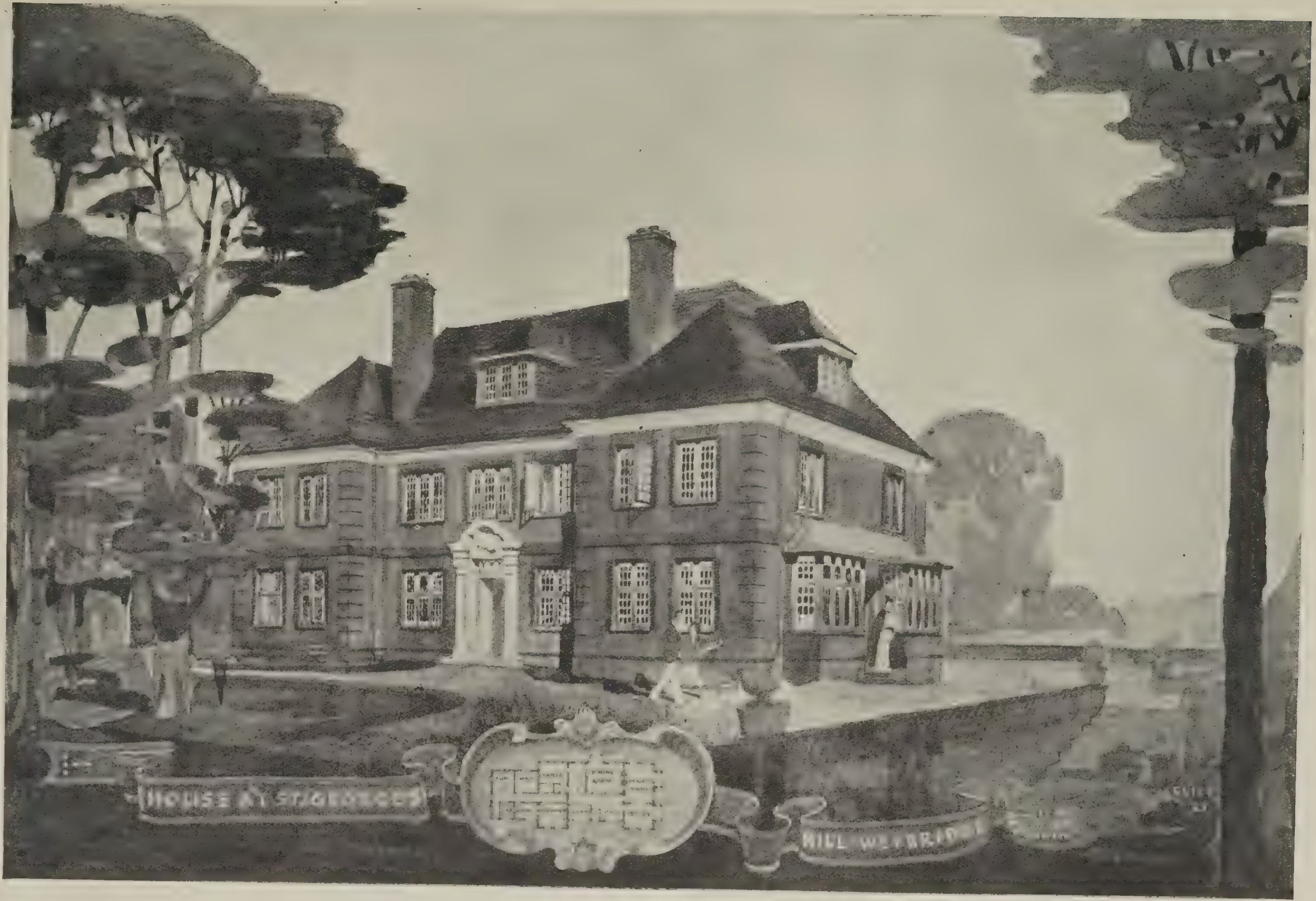
A House on St. George's Hill, Weybridge

E. STANLEY HALL, M.A., F.R.I.B.A., Architect

THE house at St. George's Hill, Weybridge, of which we publish a view from the north-west, was designed by Mr. E. Stanley Hall for Mr. W. G. Tarrant, of Byfleet, the freeholder of the whole of this estate. It is built of mottled stock bricks, with red quoins to the windows, and the roof is of tiles. A wide cove under the eaves runs round the main building. The windows are steel casements with leaded lights, hung in oak frames. The ground floor contains sitting-hall, dining and drawing-rooms, and study. There are large folding doors between the two last rooms so that they can be thrown into one for parties. All the sitting-rooms and hall have mahogany doors and oak floors. On the first floor there are five bedrooms and two bathrooms, with a butl bedroom off the back stairs. On the second floor are th bedrooms, one bathroom, and a box-room. The garage situated on the north-east side of the house. The site extremely fine, with a large cluster of pines in the fr (north side) of the house. On the south the ground slo fairly steeply, and there is a very extensive view over tr tops to the distant hills. There is a terrace at the back a west side of the house; and below the south terrace i long bowling lawn. The tennis court is on a sunk la on the west of the house. The whole of the work been carried out by Messrs. W. G. Tarrant, Ltd., Byfleet.

Modern Domestic Architecture. 58.—House at St. George's Hill, Weybridge, Surrey

E. Stanley Hall, M.A., F.R.I.B.A., Architect



(See description on opposite page.)

THE LIBRARY
OF THE
UNIVERSITY OF ILLINOIS

Some Minor Aspects of Town Planning. 4.—Public Services

By H. J. BIRNSTINGL, A.R.I.B.A.

THE regional survey of South Wales produced an abundance of valuable material, but some of the matter which was excluded from the report is of almost equal value to much that was included, ch, for example, as the information compiled and the idence heard relating to the existing and contemplated iblic services in the area. These services include the llowing: sewerage, water supply, electricity, and gas. a large area there will probably exist every kind of stem of sewage disposal, from the individual cesspool to e complexity of a trunk system, but co-ordination is sential, and the probable future growth must be considered it will influence the present arrangements. Conversely, e sewerage system, too, may influence the selection of es for development. For example, in the South Wales ea, the committee selected large housing sites near the end the valleys in order to avoid the cost of connecting sites aced high up the valleys with the proposed trunk system. he same remarks apply to water supply, and a region may ntain both individual wells and borings and a well-stributed water supply brought from a distant source. he need for water is not limited to the urban and more althy districts, and therefore it may sometimes be sirable that the water resources of a large area should be oled and jointly administered, and the cost apportioned cording to the capacity for payment and consumption the different authorities.

It is, however, in the provision of the electric and gas pplies that consideration is more particularly needed. e central burning and subsequent distribution of fuel as s and current would seem to be as desirable as the central rage of water or disposal of sewage, rather than house-to-use methods of either. Yet house-to-house fuel connption still holds the field despite the efforts of manufacers, on the one hand, and propagandists on the other, popularize new methods. It is largely a matter of cost. ange as it seems, central fuel consumption and the disbution of heat as a service does not seem to be cheaper used continuously than the individual consumption of l, which means that, time for time, the old method is eaper. It only fails economically where an intermittent at is required, because the open grate is unable to provide s with speed or ease. The saving is in cleanliness, labour, l health. The first effort, therefore, must be in the direcn of cheapening these services. There is scarcely any ed at this stage to go over the old arguments to show how ch we waste in time, fuel, and health by the open hearth. is calculated that London loses 72 per cent. of its winter nshine through smoke; that during a period of bad fog in tober, 1912, the death rate in London increased nearly per cent. Startling facts and figures such as these can produced *ad infinitum*. But the lesson has been learnt, l people are desirous of co-operating. The town planner st therefore do all in his power to provide cheap services. here possible, provision should be made for large-scale eration of electrical energy for power, transport, heating, l lighting purposes. Gas, no less than electricity, requires be undertaken on a large scale, in an area where there some dozens of small undertakings. A town plan should empt to combine them into a single, or a few, well- and dernly-equipped stations, suitably placed for present l future needs. All new houses should be carcassed for even if supplies are not immediately available.

Looking ahead somewhat, it is possible that public seres will go still further and will include the provision of onstant supply of hot water. In new residential areas am might be generated in high pressure water-tube boilers to serve turbo-driven generators. These could provide the electrical energy for cooking and lighting. The exhaust steam might then, after passing through calorifiers, be used to heat a hot water supply. The difficulty with all such schemes is that maximum load peaks occur at certain definite times, whereas for economical running a constant load is required. It would therefore probably be desirable to work the system in connection with the public baths or laundry, which could make up the load during the slack periods. A slight increase in the rent would have to be made for these services, the payment of which would probably be resisted at first, but after the advantages (providing that a constant and efficient service were maintained) were once appreciated there would be a demand for their extension. The suggestion has been made that before long we may see a house-to-house piped service of oil. Oil is rapidly gaining favour as a cooking and heating fuel, and its advantages over coal for these purposes are numerous. It is doubtful, however, if it has any advantages over gas, and its distribution in this way would seem a matter of greater difficulty, but it is one about which it is necessary, for lack of more conclusive evidence, to maintain an open mind.

In new residential areas and housing sites a great deal of expenditure occurs in tapping the various mains for each individual house and leading in from the roadway or footpath to the dwellings. In some instances the possibility of dispensing with this arrangement might be worth considering, and a method adopted by which light service mains were laid immediately in front of or behind the houses, thus substituting short for long branch services, saving a considerable amount of digging, and avoiding the frequent opening up of a good and perhaps newly-laid road to its inevitable detriment. The arrangement is similar in theory to that which was adopted in many of the late Government's housing schemes for drainage. A common drain served up to fourteen houses, thus effecting a saving in labour and material, and although it was often subject to severe criticism there would seem, on the face of it, no very reasonable objection to such a procedure, provided always that adequate means for rodding were maintained. Such an arrangement for water, gas, and electric services, however, is subject to more limitations. To begin with, where there services are not municipally owned the statutory powers of their owners are limited to mains to the public streets for the most part. Then there is the question of accessibility. More frequent access is required to these services than to the drainage system, and there is the danger of sheds, garages, and the like, in addition to party walls and fences, being erected over them. Finally, it must be remembered that these services have public as well as private uses. They are used for fire hydrants, stand-pipes, street lighting, etc., so that the mains would still, in many cases, have to be laid in the roads. However, the matter is worth consideration, for under certain conditions it would tend to lessen the first cost, which is such a serious item of expenditure, and if the services were laid in easily accessible trenches the dangers of the method would be minimized.

Another branch of the public services which comes within the scope of town planning is that of scavenging and refuse. Here there is need for far greater efficiency than obtains in most districts. It is now realized that household and street refuse is by no means waste, but that it can be turned into a source of revenue by enterprising municipalities, of which, unfortunately, there are all too few. It is calculated that there are produced annually 10,000,000 tons of household refuse, of which 8,000,000 is absolutely wasted. In London the cost of collection is something like 8s. per ton.

Many boroughs, including some in London, still persist in the wasteful and objectionable habit of dumping their refuse. A well-planned town, however, must make proper provision for its refuse and turn it into a source of revenue. There are many ways of doing this. The chief sources are as manure and as fuel. The more valuable material is at once extracted, such as bones, rags, metal, coal, and coke. The remainder, comprising food, waste paper, ashes, cinders, breeze, straw, is then available as fuel, and it is estimated that it has a heating value equal to about a sixth of its weight in coal. The destructor works should therefore be combined with the electric-power station, for the destructor plant should be used for the production of steam to serve the generators. The residual fuel can then be used as an aggregate for concrete for making pavement slabs, or, as has been done with success in one large borough, building municipal houses.

Finally, the idea that because the plant and apparatus connected with these services is of a strictly utilitarian nature it can be ugly must be vigorously counteracted. Well-designed and pleasantly painted lamp-posts, sandbins and the like have a real effect upon the general amenity of a town. This must be extended even to the painting of the dust-carts and refuse lorries, and certainly to the design of the generating stations and destructor works. Each town should have a committee of good taste that should help and recommend in the design of all public appurtenances of this nature, and every town should strive after beauty and efficiency in the equipment of its public services.

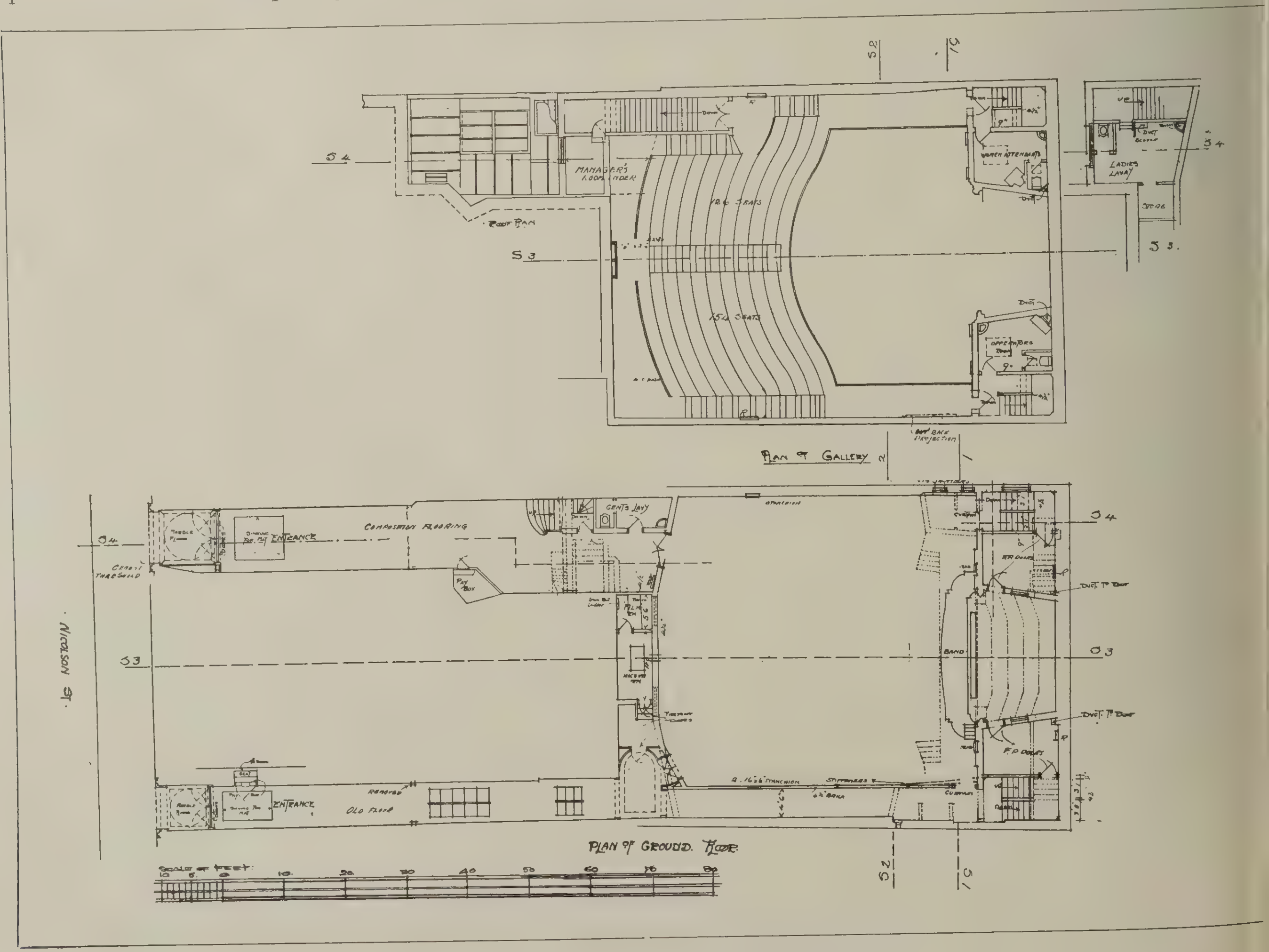
(To be concluded.)

An Old Theatre Remodelled

ORPHOOT and WHITING, Architects

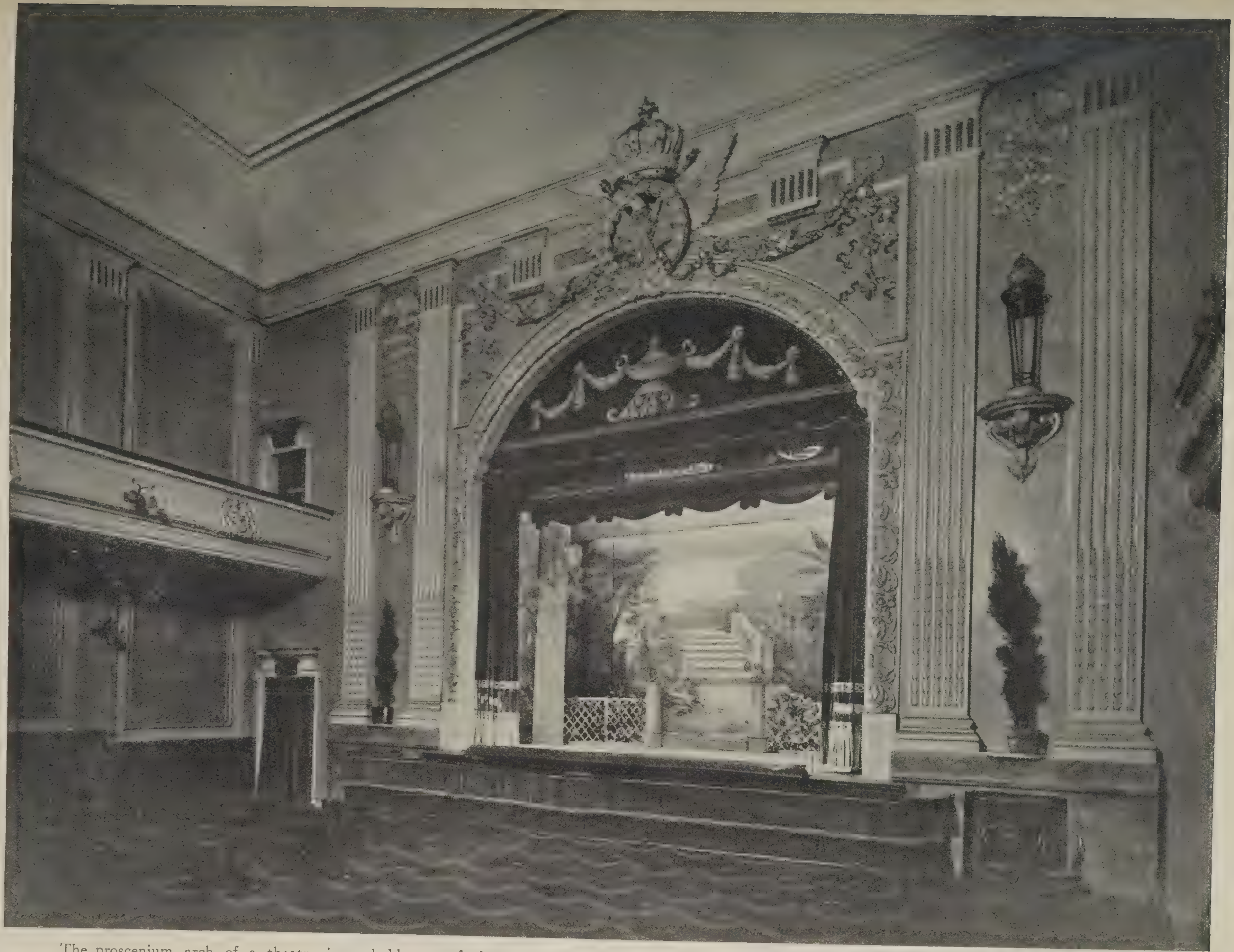
THE illustration reproduced on the opposite page shows an interior view of the new Scala Theatre, Edinburgh (lately the Princess Theatre), which has been reconstructed from the designs of Messrs. Orphoot and Whiting, architects, of Edinburgh and Bideford. The interior of the theatre is kept generally plain, and architectural interest is concentrated upon the proscenium opening, which has an attractive decorative treatment. An arched form of opening is adopted, having a central eagle motif above, linked with which are swags whose pendants occupy the spandrels of the arch. The space on either side is occupied by pairs of pilasters, between each of which, standing upon a bracket, is a tripod flambeau. Access to the theatre is gained by two corridors from Nicholson Street, the theatre proper being to the rear of an intervening block of buildings.

The general contractors were Messrs. James Millar and Sons, of Edinburgh. Steelwork was supplied by Messrs. Redpath, Brown & Co., Ltd. Messrs. Mackenzie & Moncur, Ltd., of Edinburgh, were responsible for the heating and ventilating. The plasterwork was executed by Mr. Thomas Beattie, of Edinburgh. Special electric light fittings in wrought-iron, also door furnishings, were supplied by Mr Chas. Henshawe, of Edinburgh.



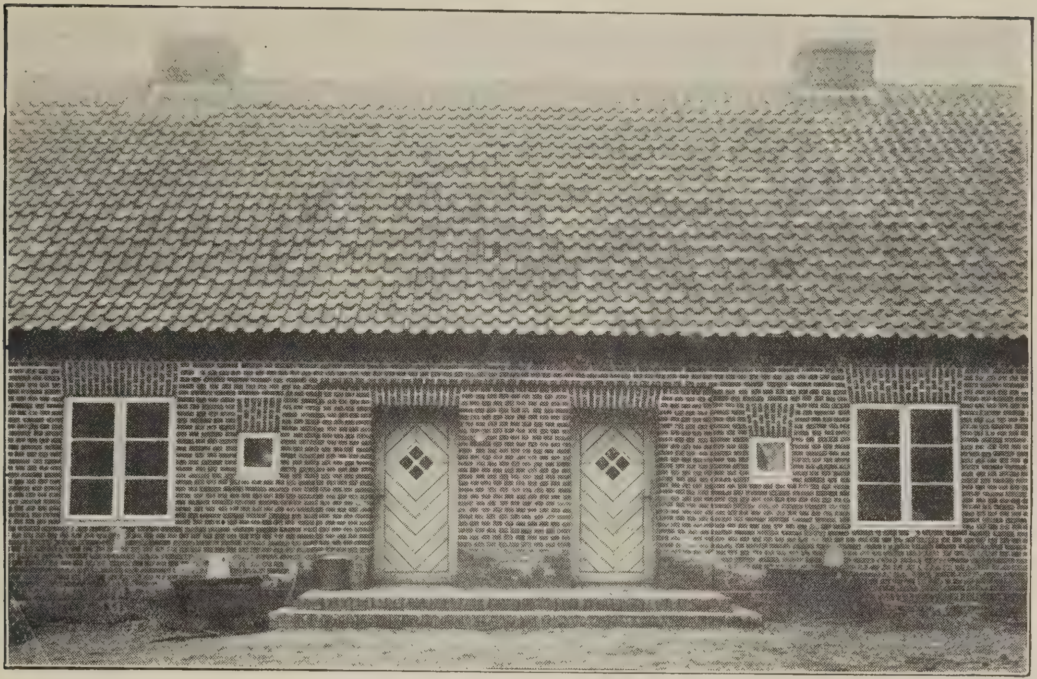
PLAN OF THE SCALA THEATRE, EDINBURGH.

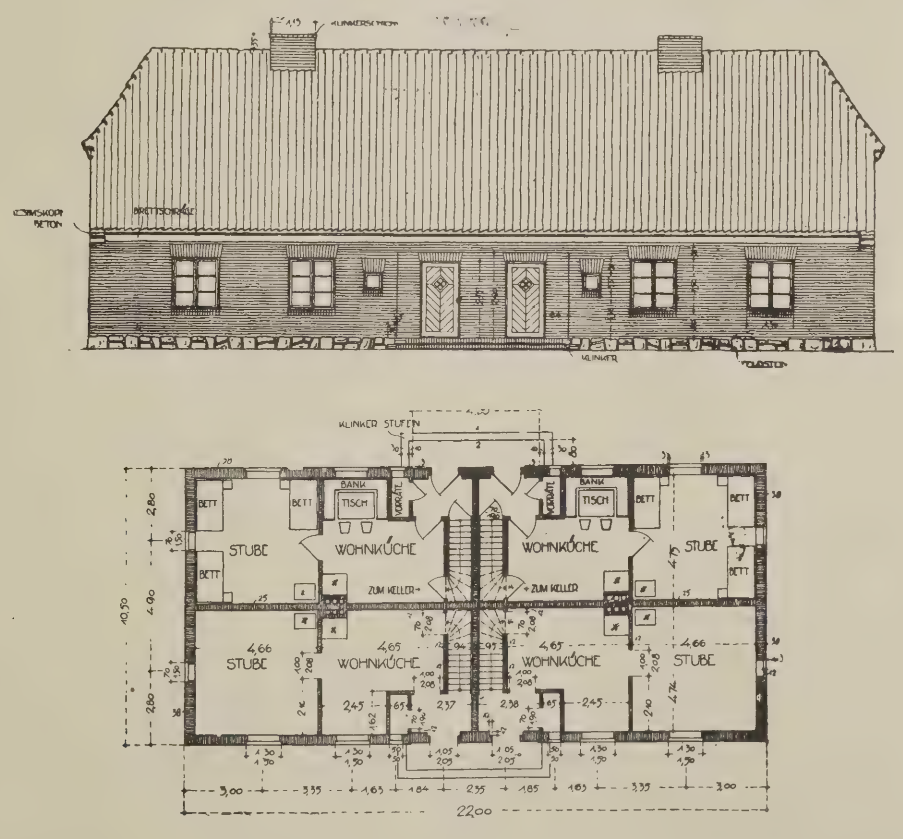
Orphoot and Whiting, Architects



The proscenium arch of a theatre is probably one of the most suggestive details an architect can be given to design. Before the curtain rises, the audience have the opportunity to note the details of decoration as on few other occasions; and when the curtain has gone up, it is the frame in which will appear Shakespeare, Ibsen, or Molière.

THE LIBRARY
OF THE
UNIVERSITY OF ILLINOIS

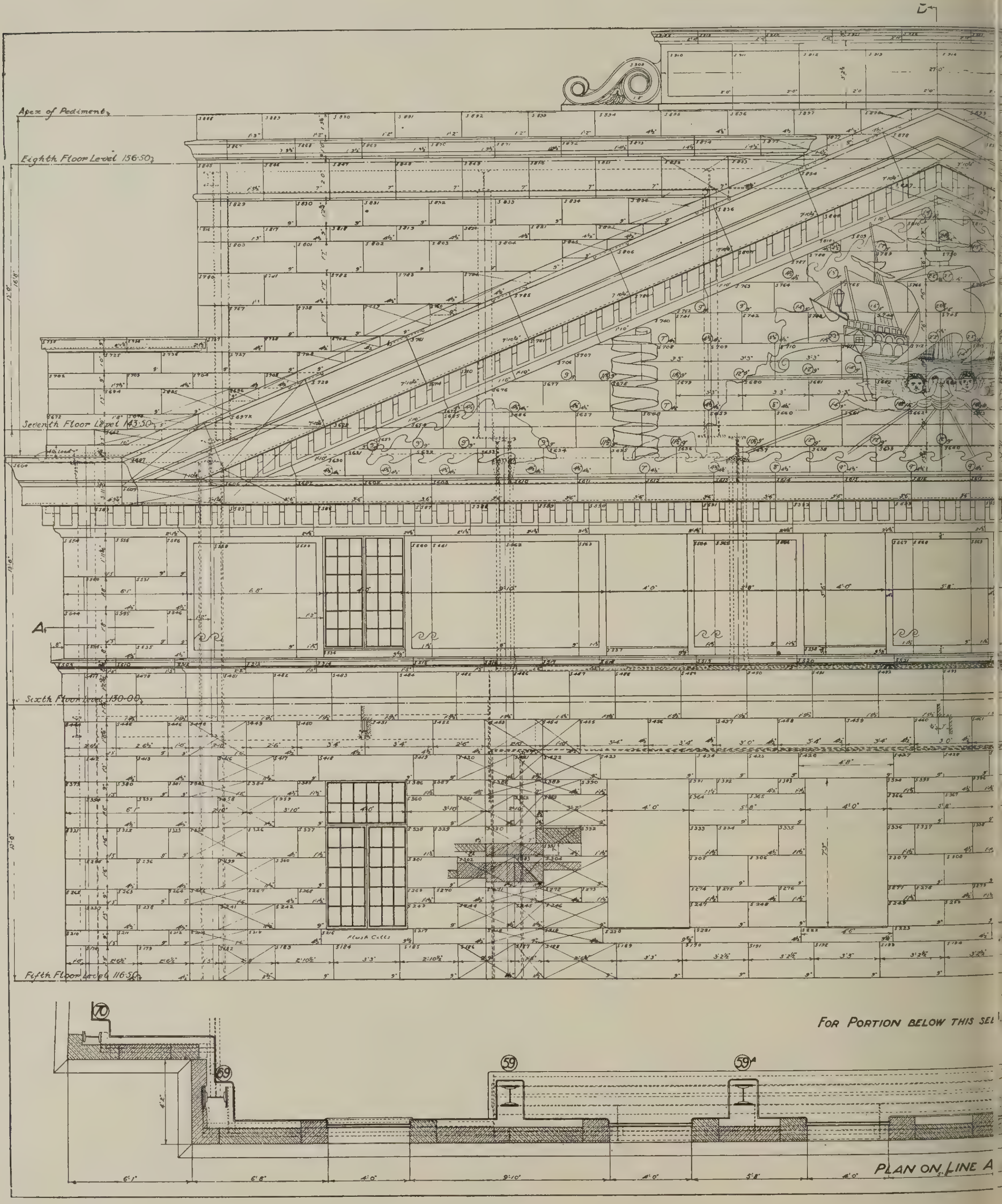




SMALL HOUSES IN A REBUILT TOWN OF EAST PRUSSIA.
HANS J. PHILIPP, M.G.I.A., ARCHITECT.

Architects' Working Drawings. 70.—Bush House, Lor

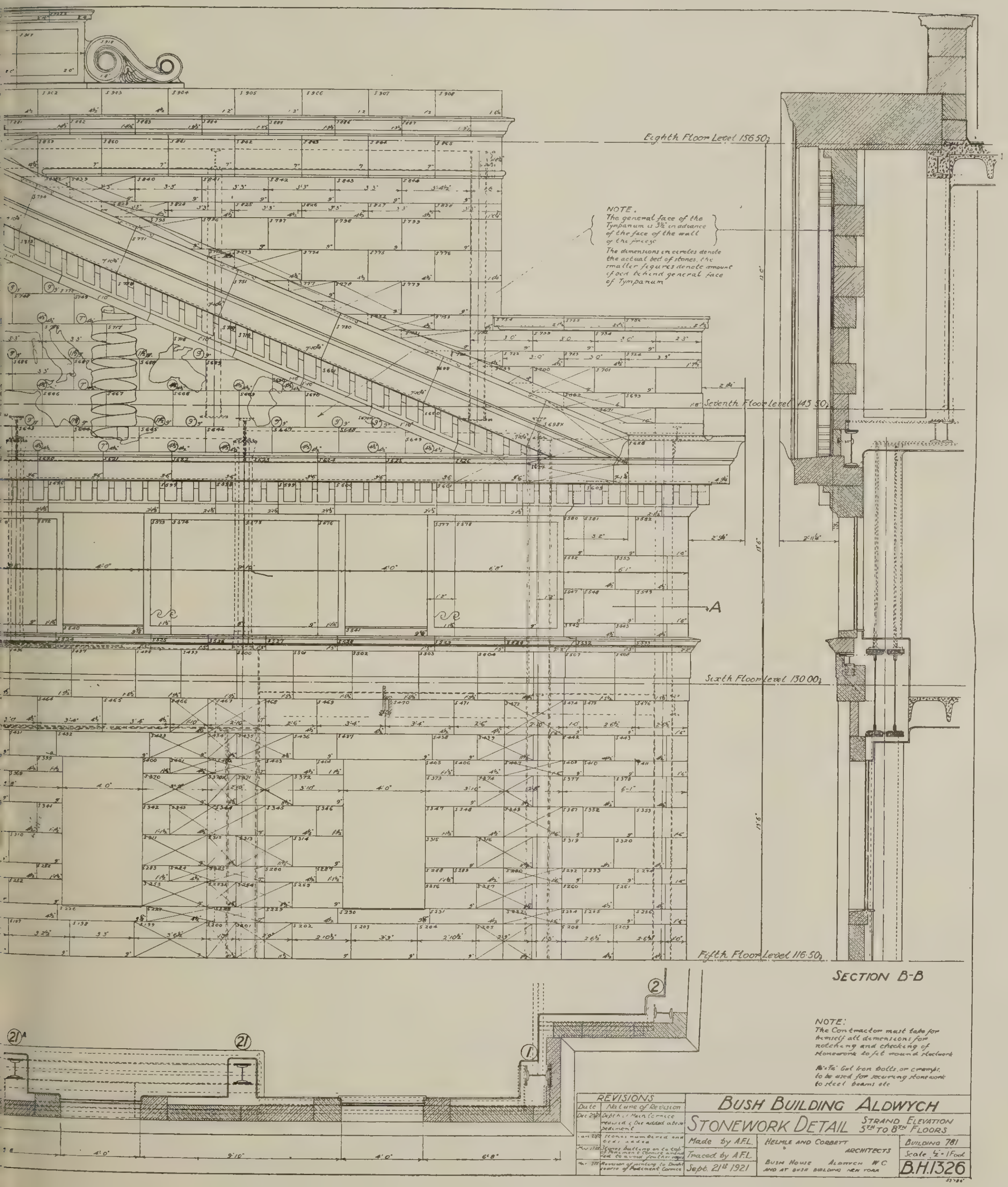
Helmle and



Bush House was fully described and illustrated in our issue for August 15, and a working drawing of the arch and p already appeared. It is an instructive example c

onework Detail of 5th to 8th Floors, Strand Elevation

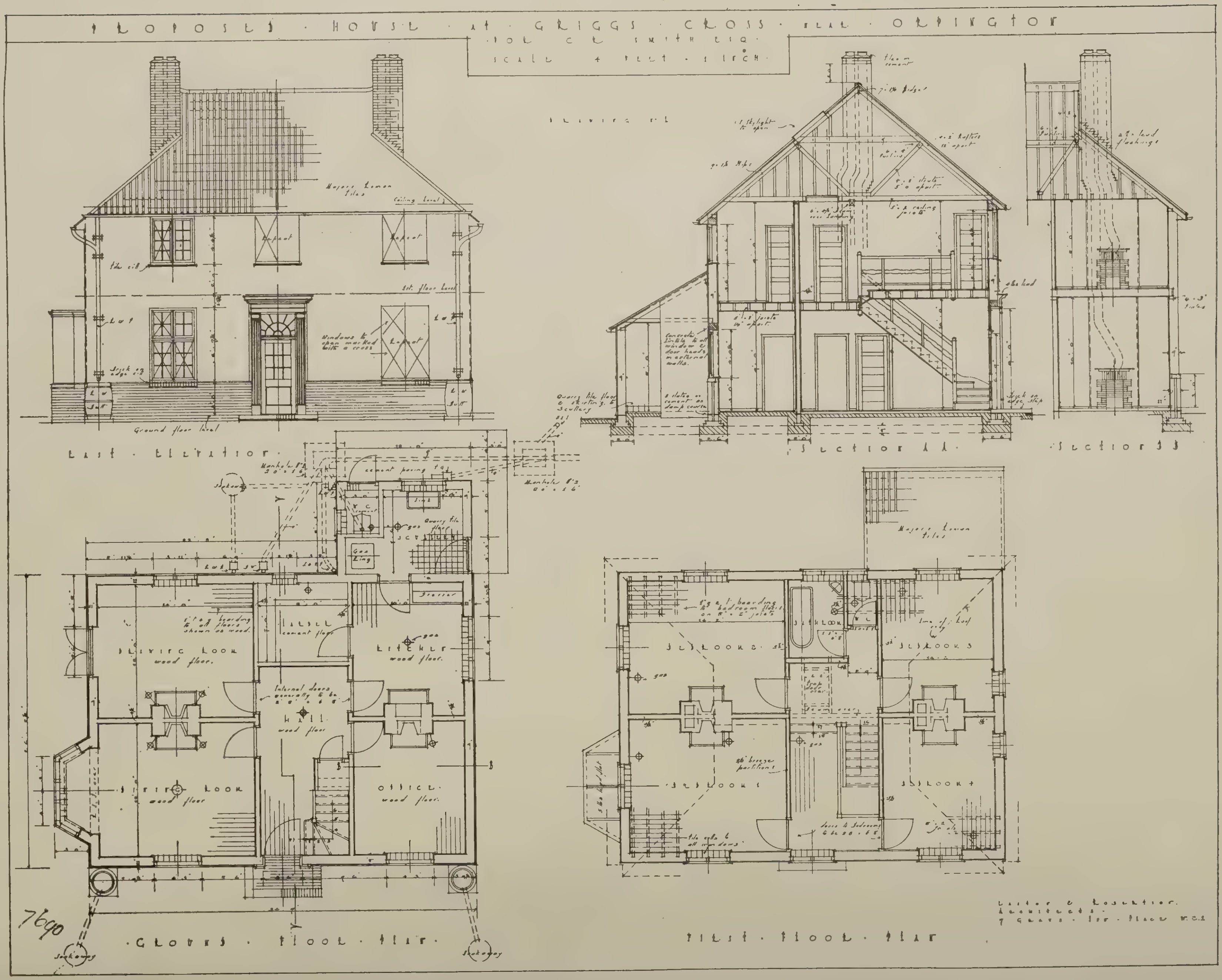
.A., Architects


Eighth Floor Level 156.50
NOTE.
The general face of the Tympanum is 3½" in advance of the face of the wall of the frieze
The dimensions in circles denote the actual bed of stones, the smaller figures denote amount of bed behind general face of Tympanum
Seventh Floor Level 143.50
A
Sixth Floor Level 130.00
Fifth Floor Level 116.50
SECTION B-B
NOTE:
The Contractor must take for himself all dimensions for notching and checking of stonework to fit round steelwork
Galv. Iron bolts, or cramps, to be used for securing stonework to steel beams etc
REVISIONS
Date
Nature of Revision
Depth of Main Cornice reduced & Dec added above pediment
Stones numbered and beds added
Stones butting on to top of Pediment Cornice altered to avoid feather edges
Revision of jointing to Dentil course of Pediment Cornice
BUSH BUILDING ALDWYCH
STONEWORK DETAIL
STRAND ELEVATION 5TH TO 8TH FLOORS
Made by A.F.L.
Traced by A.F.L.
Sept. 21st 1921
HELMLE AND CORBETT ARCHITECTS
BUSH HOUSE ALDWYCH W.C. AND AT BUSH BUILDING NEW YORK
BUILDING 781
Scale ½" = 1 Foot
B.H.1326
2
21
21A
1

ych was given last week. The further detail reproduced above should be studied in conjunction with those that have n practice in the preparation of working drawings.

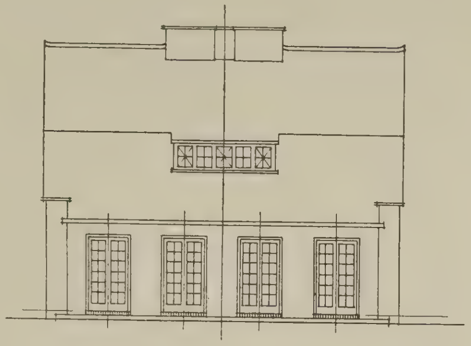
House at Grigg's Cross, near Orpington, Kent

Easton and Robertson, Architects

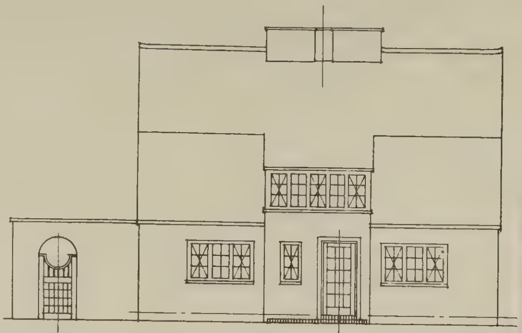


This house, on a chicken farm, was designed to meet the special requirements of the owner as regards accommodation and low cost. The walls are 11 in. hollow to ground floor sill level, and 9 in. stuccoed and limewashed above, and the roof is covered with Bridgwater tiles. The total cost was £1,277. The Merritt Construction Company, of London, were the builders.

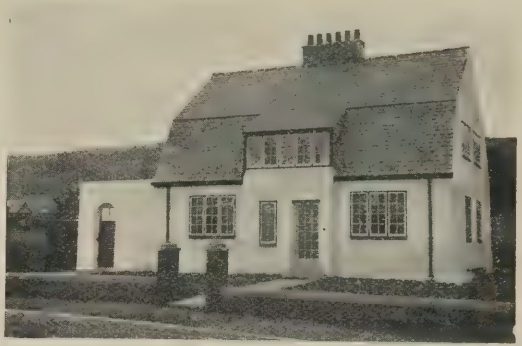
Easton and Robertson, Architects

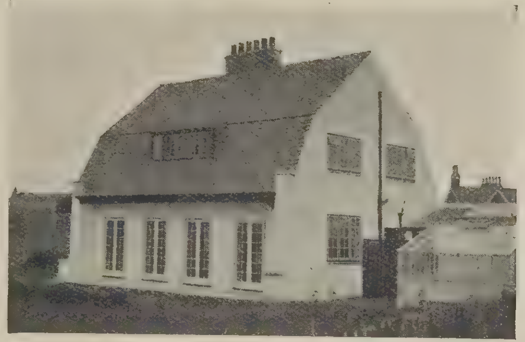


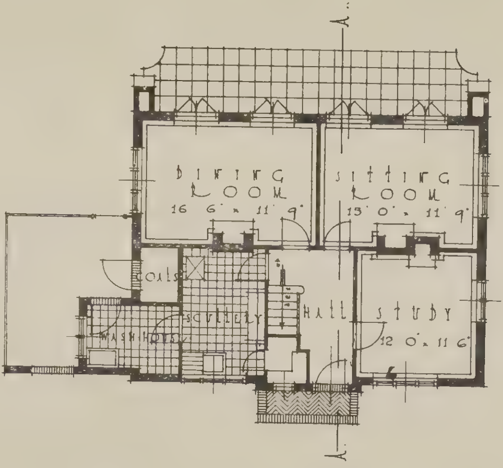
·SOUTH · ELEVATION·



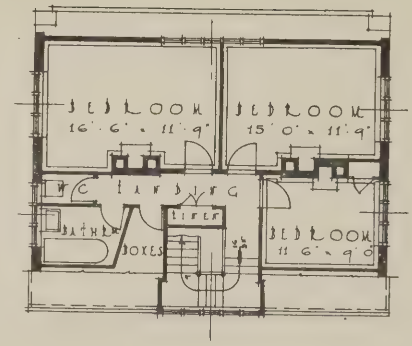
·NORTH · ELEVATION·



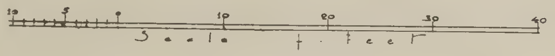




·GROUND · FLOOR · PLAN·



·FIRST · FLOOR · PLAN·



The garden front of this cottage is the most important as it faces south and is seen from a main road, and it has been treated as a verandah with a paved terrace having French windows opening on to it. A wash-house has been provided in accordance with northern methods, and a bungalow range in the living-room provides the hot-water circulation. The walls are 9 in. rough-cast with very fine pea-gravel limewashed, the slates are Welsh grey-green peggies, and the ground-floor finish wood block and red quarries. Messrs. Roberts and Sloss, of Liverpool and Prestatyn, were the builders.

Architecture in the Lay Press

Oxford's Ancient Buildings

The reconstruction and adaptation of two of Oxford's ancient buildings to modern requirements have once again drawn attention to the city's disappearing relics of antiquity. In the one case commerce claims the building, and in the other learning. Cornmarket Street will, when its new bank façade is finished, come into line with the remainder of the street, and frankly declare itself more and more as the commercial centre of Oxford; but at the sacrifice of an interesting fourteenth-century house, which the efforts of historical and architectural societies alike have failed to save. This house, in spite of protests from both societies, has shed all its antiquarian value. Parts of it, including the old timber, had fourteenth-century features, and the façade was probably of the seventeenth century, containing a good deal of Georgian work, with latticed windows and charming over-hanging gables.

The secretary of the Architectural Association (Mr. T. Rayson) related to a "Morning Post" correspondent the steps which his society and the historical society had taken to save this house. They approached the bank authorities with a suggestion that the premises might be adapted to their new use without the sacrifice of their ancient features, but they were frankly informed that this was impossible.

The other instance is of a more hopeful character. The octagon bookshop in Clarendon Street is about to take its place in Sir Thomas Jackson's extension of the front of Hertford College. It is an historical little building, and one of the show places of Oxford. Originally the Chapel of Our Lady, it still retains a finely carved fifteenth-century doorway. It is gratifying to know that in the plans for the incorporation of this old house into the new part of the college it will now be allowed to retain its present form.—"Morning Post."

Plagiarism in Architecture

In an observatory paragraph on the work of the Bradford architects, Lockwood and Mawson, it was indicated that they borrowed freely from the Gothic and Renaissance architecture of Italy. It must be admitted that Lockwood and Mawson, and their contemporaries as well, were often downright plagiarists. The Bradford Town Hall tower is faithfully copied from that of the Palazzo Vecchio at Florence, the elevations to the Bradford Exchange are more than reminiscent of the Ducal Palace at Venice, and the design for the smaller chimney at Saltaire Mills was derived from that of the Palazza del Signore at Verona. It is probable, too, that the larger chimney contains features borrowed from one of the leaning towers at Bologna. One of Bradford's most prominent landmarks, the great chimney of Manningham Mills, was evidently inspired by the famous campanile of St. Mark's at Venice.

Several of the banks and warehouses of the city have a dignity which is borrowed from Rome and Florence, but the purpose for which these buildings have been intended has necessitated modifications which make indentification difficult.—"Yorkshire Observer."

Shooter's Hill and its Wells

Housing schemes are not altogether a modern innovation, for as far back as 1769 a plan was propounded to construct a small town on Shooter's Hill. The spot had at that time gained a great reputation owing to its medicinal springs, and in 1673 an account was published by a London printer of "The Mineral Well at the top of Shooter's Hill." The district was noted for such wells, and one existed near the Royal Military Academy as late as 1870.

The idea of the promoters of the scheme referred to was the establishment of a rival to Bath and Tunbridge Wells. The "prospectus" inviting the public to make investments contained the following:—

"In the circle of the new town to be built on Shooter's Hill is to be a basin of water, and in the centre of the basin a circular island on which a coffee-house is to be erected, and over it an assembly room, the entrance to which is to be by four bridges, and from which there are to be four grand streets leading to four different high roads to be made for Greenwich, Woolwich, Gravesend, and the High Road over Shooter's Hill." The public, however, were not sufficiently gullible, and the scheme failed for want of financial support.—"Kentish Mercury."

What Grows on Stained Glass

It has long been known that stained glass decays, as well as the leadwork that holds it in place. Like the Alps, like the heat of the sun, like the speed of the earth's rotation, the glories of York Minster are passing away. But not till lately have we learnt that one of the agents engaged in this bad work is vegetable. Certain flying spores of lichens contrive to find at some spots on the outside of a church window the little dampness that they need for a start in life. Once started, they can retain a tiny supply of water between their tissues and the glass. Worse, their polluted breath increases the proportion of carbon dioxide normally contained in the water of these small reservoirs and enables the water to set up a more rapid chemical action on the glass. One of the few cheering details is that, like other trees, these squatters do not like town air. Stained glass might live almost for ever in Hulme. Another point, but one about which we feel less happy, is that glass of certain colours resists the enemy better than others. Purple, green, blue, red, amber, and particularly amethyst, are all bad resisters; but grey and yellow, confident in the vitrification of their silver salts, hold out gamely. Whistler certainly played some pretty tunes in grey and yellow; so did Turner too, and yet it seems a somewhat meagre palette for a stained-glass artist who is enamoured of immortality for his works. Better perhaps to risk it and concentrate on churches in the slums, where the air is a weed-killer. Or induce the architects to put their receptacles for stained glass in places where a mop and duster can reach them without the mercenary assistance of a contractor for scaffolding. For all this wild life can be kept down by the old, old nursery method of regular washing and brushing A large rose window on the ground-floor level in a new cathedral might certainly look "interesting and suggestive," as the reviewers say of the books for which they can say nothing more.—"Manchester Guardian."

Our Best Statues

It is the fashion to find fault with London's statues, and there are plenty of faults to find. But there is more good sculpture in London than meets the eye, for commonly the eye does not gaze in the right direction.

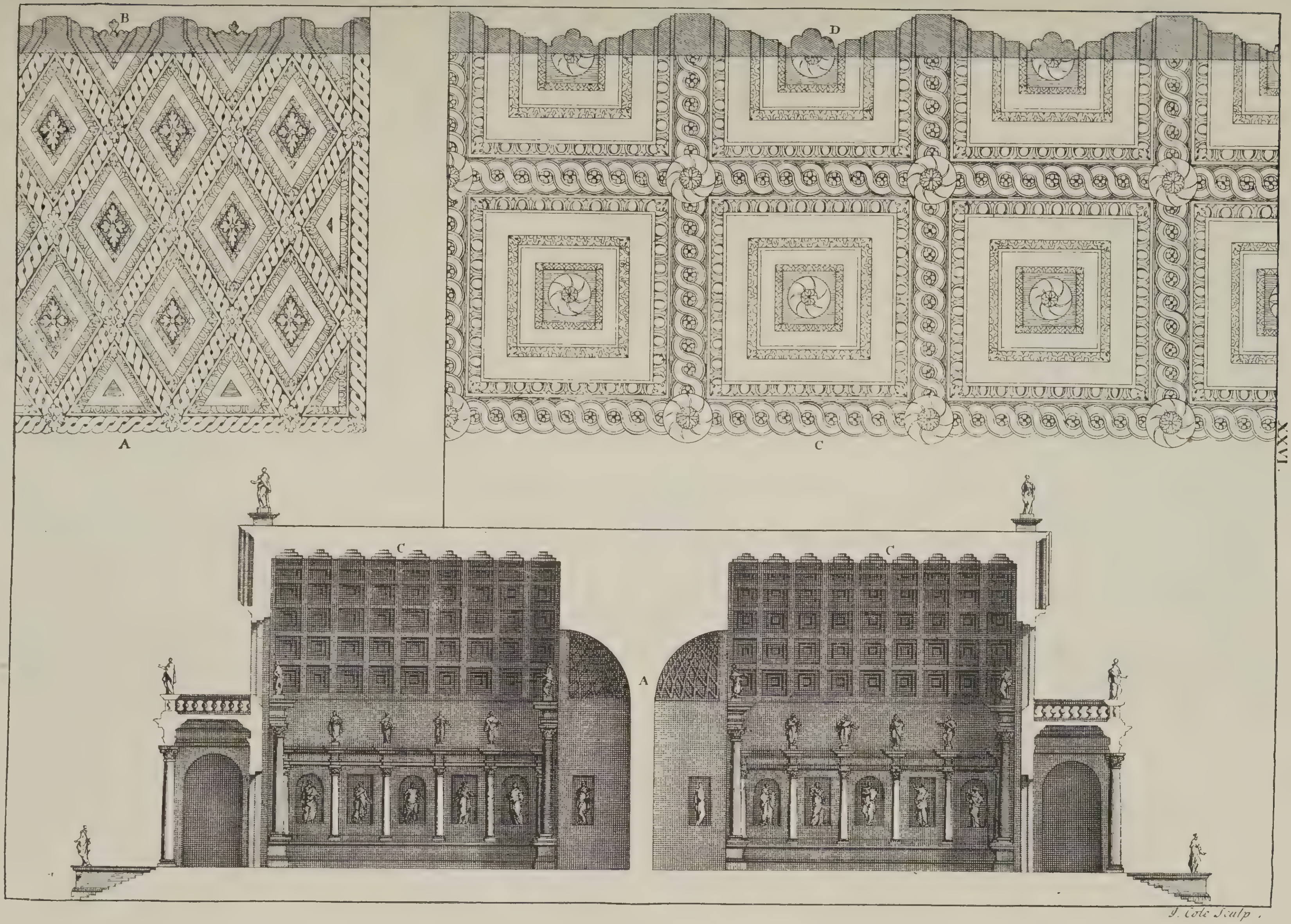
The Quadriga high up on the gateway at the top o Constitution Hill cannot be missed by anyone coming acros Hyde Park Corner. Famous sculptors think a great dea of it.

But there is Rodin's "Burghers of Calais." This is a Millbank, that quiet bit of green riverside garden adjoinin the House of Commons.

Kensington Gardens has little statuary, but Watts' group, "Physical Energy," makes up for a good deal. Th nude giant on a rearing steed is a copy of the original group which stands guard over the grave of Cecil Rhodes in Sout Africa.

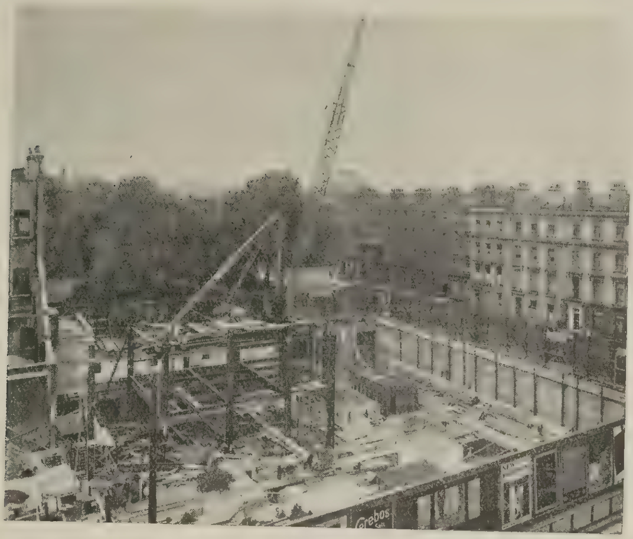
London's best statue is supposed to be that of Charles at the top of Whitehall, but if you stopped to look at you would get run over by a bus.—"Lloyds Sunday News."

Architectural Details. 46.—The Temples of the Sun and Moon.



Drawings of the Temples of the Sun and Moon appear in the Fourth Book of Palladio. Describing them, he says: "In the Gardens of Sancta Maria Nova, near the Arch of Titus, are two temples of the same form, and having the very same ornaments. One of them, for being placed to the East, is thought to have been the Temple of the Sun, as the other of the Moon, because towards the West. They were built and dedicated by Titus Tatius, King of the Romans."

THE LIBRARY
OF THE
UNIVERSITY OF ILLINOIS



A GENERAL VIEW OF THE SITE.

onstruction 29.–The Liverpool Victoria Friendly Society Building: Underpinning, etc.

THE conditions under which the new offices of the Liverpool Victoria Friendly Society in Southampton Row are being erected are such as to make it particularly difficult to have a "clear run" th the construction, and it is the purpose of this article point out some of the difficulties which have in some easure delayed the progress of the work.

As mentioned in a previous article, it is impossible at esent to build over a section of the site, and it has there- e been necessary to carry out extensive underpinning erations at the back of the existing block of buildings.

In determining the section and design of the under- ning wall, many considerations had to be borne in mind, ch as the positions of future foundations when the present uses are pulled down and the new building is extended, necessity for thin walls and vertical faces where the derpinning wall forms the basement wall of the new ilding, the isolation of the site from water, the position future drainage channels, etc.

A glance at the drawing on page 404 will enable the reader realize some of the problems referred to above. The avy black line indicates the exterior walls of the existing ock, and the underpinning follows this line approximately. e work entailed has been very considerable, as may be lged from the accompanying drawings and photographs.

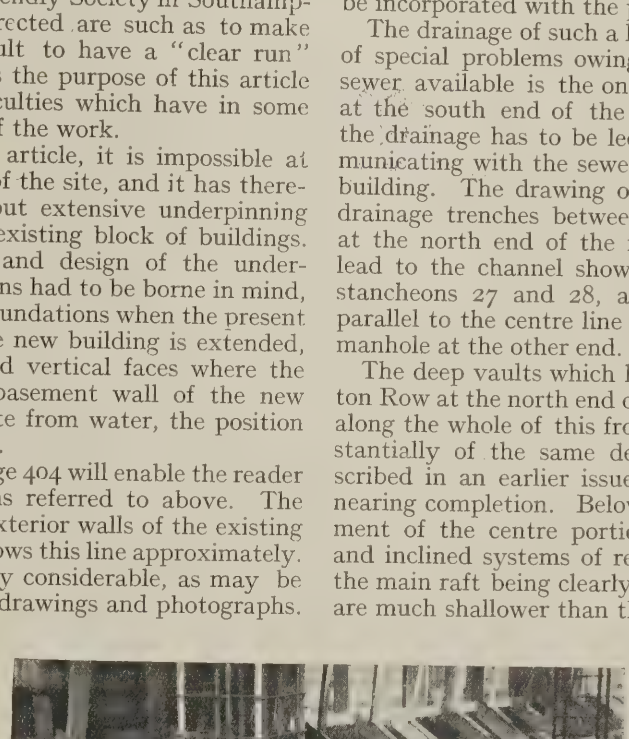
Two main types of under- ning wall have been used: plain gravity wall built brick with a supercement king, or in plain superce- nt, and the reinforced con- te wall in cases where the ckness of the wall had to be pt down. For example, at tions EE and DD plain walls used as no main future llages are in the way; at CC upper portion of the wall l be removed later and the llage placed directly on the se, whilst at AA and BB as been necessary to carry vn the base of the wall ow the level of the future ndations, which will take the form of a reinforced concrete raft, and as such cannot be incorporated with the present wall base.

The drainage of such a large site presented also a number of special problems owing to the fact that the only deep sewer available is the one which runs under Vernon Place at the south end of the site; consequently the whole of the drainage has to be led to a single deep manhole communicating with the sewer at the Vernon Place end of the building. The drawing on page 405 shows a plan of the drainage trenches between the main grillage foundations at the north end of the new building; these trenches all lead to the channel shown along the side of the raft for stancheons 27 and 28, and this will run approximately parallel to the centre line of the building to meet the deep manhole at the other end.

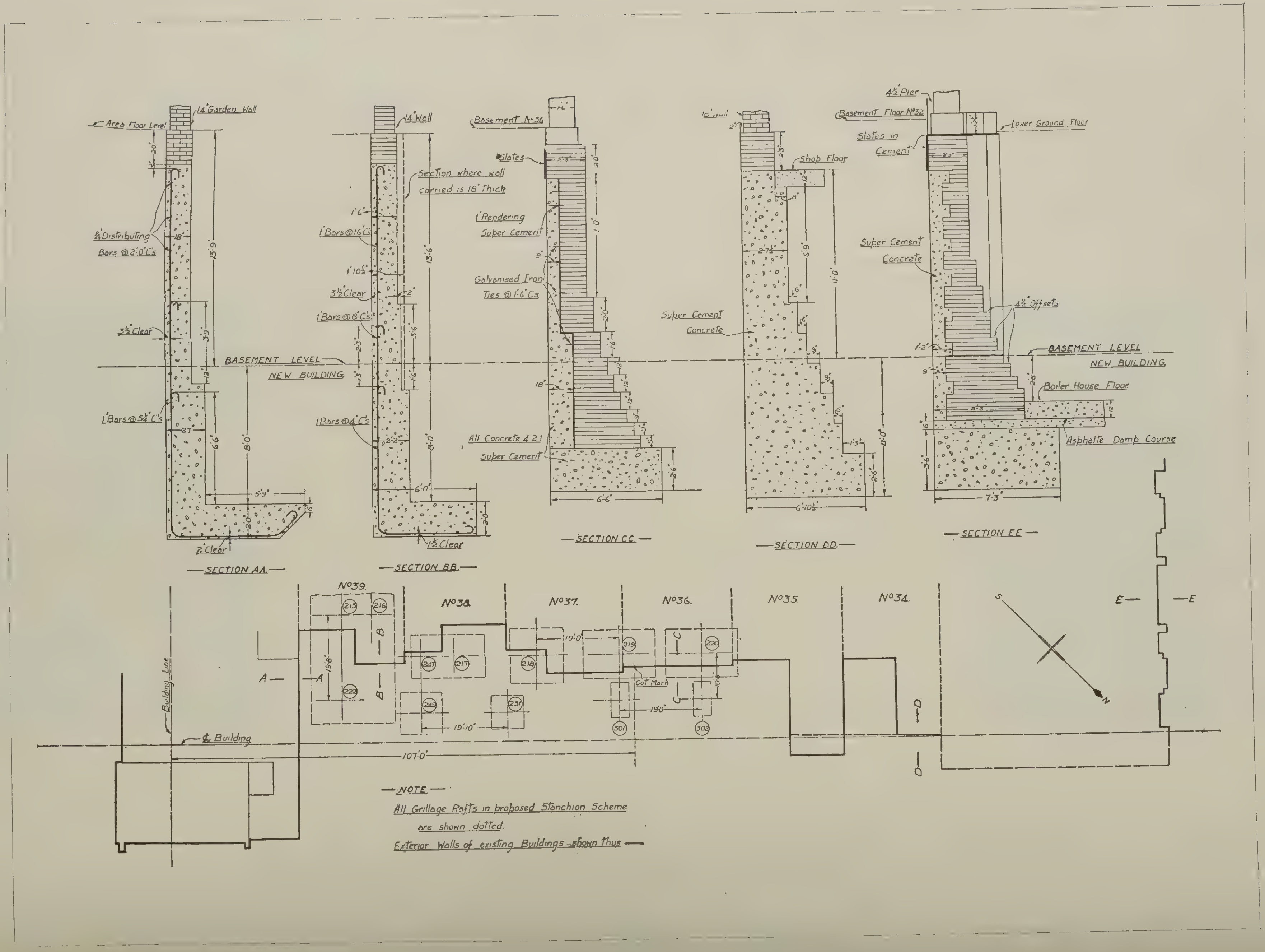
The deep vaults which have been built along Southampton Row at the north end of the site are now being extended along the whole of this frontage. The extensions are substantially of the same design, which has been fully described in an earlier issue of this JOURNAL and are now nearing completion. Below is shown some of the reinforcement of the centre portion of these vaults, the vertical and inclined systems of reinforcement tying the vaults to the main raft being clearly indicated. These centre vaults are much shallower than the end ones, and in consequence, compression steel had to be provided at the inner faces of the panels; this is shown in position in the illustration.

The first section of the steelwork, extending from basement to first floor level, is now being erected; and the photo at top of page shows the amount of progress made with this work at the time of writing this article. The next article will give particulars of the grillages and the steel structure.

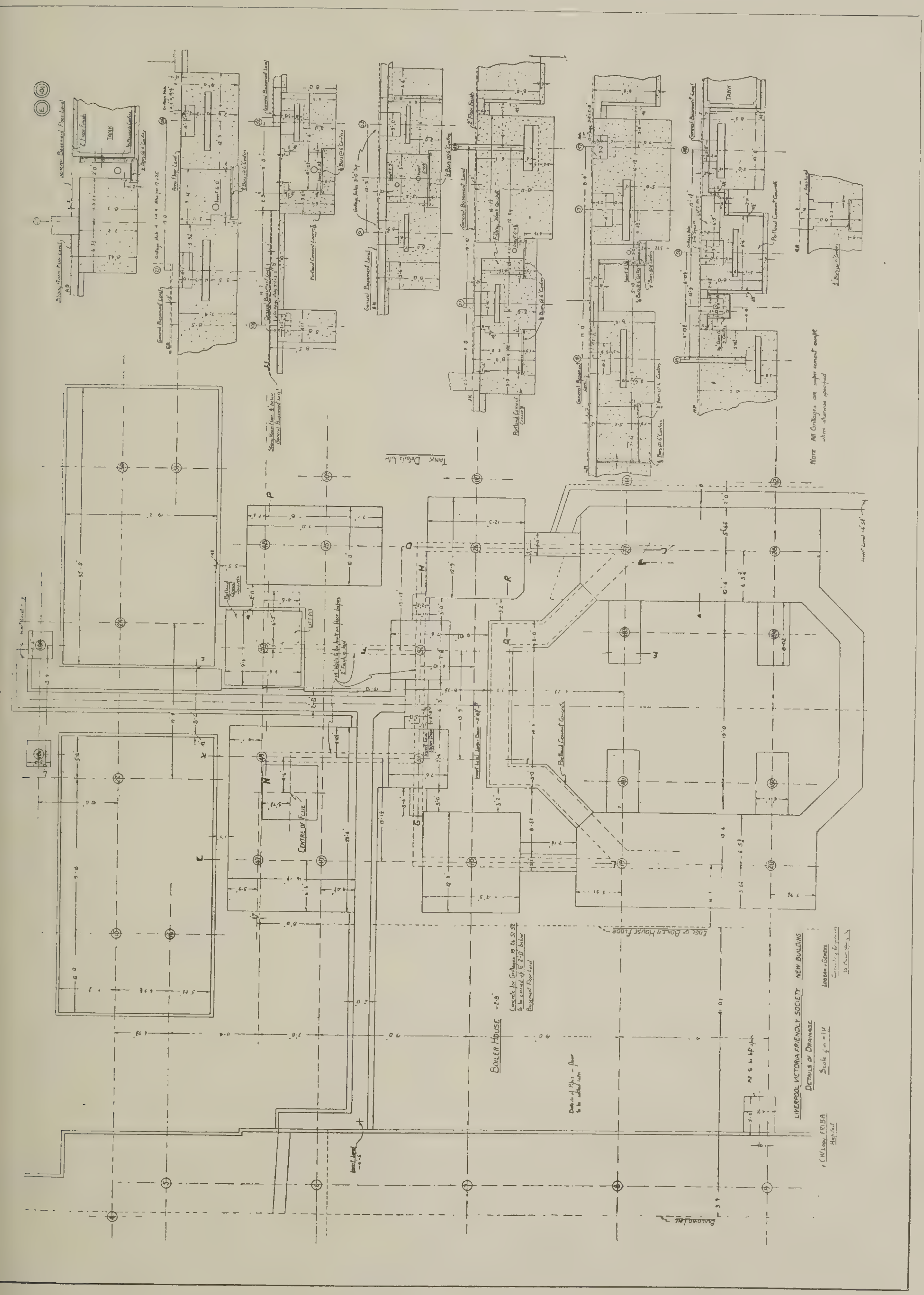
[*The last article in this series appeared in our issue for December* 13, 1922.]



REINFORCEMENT OF CENTRE PORTION OF VAULTS.



THE LIVERPOOL VICTORIA FRIENDLY SOCIETY BUILDING, LONDON: UNDERPINNING DETAILS.



THE LIVERPOOL VICTORIA FRIENDLY SOCIETY BUILDING, LONDON: DETAILS OF DRAINAGE.
C. W. LONG, F.R.I.B.A., ARCHITECT. LOBBAN AND GENEVE, CONSULTING ENGINEERS.

Enquiries Answered

Enquiries from readers on points of architectural, constructional and legal interest, etc., are cordially invited. They will be dealt with by a staff of experts, whose services are specially retained for this purpose. If desired, answers will be sent direct through the post. In no case is any charge made for this service.

Ventilating a Public Shelter.

Subscriber writes: "What is the best and most economical method of ventilating and cooling a public shelter the size of which is 70 ft. by 160 ft., 16 ft. at the eaves, and 21 ft. at the ridges? The roof is constructed of steel principals and rolled plate-glass. Sliding doors are arranged on three sides to open during the hot weather."

—It is difficult to advise in a case like this without more particulars. Apparently the roof is 70 ft. span and only 5 ft. rise, and if so any weight added to it will produce a very great additional stress on the principals. The natural way to ventilate the shelter would be by lantern louvres on the ridge at intervals of 25 ft. or 30 ft., or by a continuous louvre formed by raising the roof from the ridge to the first purlin on each side 6 in. or 9 in., giving sufficient overlap of glass at the lower edge to prevent rain driving in. Or Boyle's exhaust ventilators might be used and the fresh-air inlets made by leaving the sliding doors partly open. An alternative for the latter will be to range some large Tobin inlet tubes along the sides. The cooling is another matter—fans will not cool the air unless they can be supplied with air from the shady side. Sun heat may be reduced by whitewashing the inside of the roof, or coating it with pale green Hall's distemper, the same as the inside of greenhouses.

HENRY ADAMS.

How to Fell a Tall Chimney.

"A" asks: "Will you please give me information upon the best way of felling a tall brick chimney. The chimney is 150 ft. high."

—The usual plan of felling tall chimneys is to underpin a portion of the base of the chimney with a number of stout props of timber, about 5 ft. long, and then, with a ton of coal, a quantity of solid pitch, two barrels of paraffin, and some shavings, a bonfire in made, and lit and fed in such a manner that the props are consumed simultaneously, and with their removal the chimney-stack falls by its own weight in a comparatively circumscribed area. Altogether this is a matter requiring no little skill and experience on the part of the operator in the management of the fire, in order that the whole of the props may collapse at the same moment and allow the chimney to settle on the spot where the base has rested. This is the end to be attained; but it is now claimed that better results can be obtained without lighting a huge bonfire.

The newer method received ample justification when the Bleachfield chimney-stack, on the outskirts of Aberdeen, was felled. Built in the year 1846, and rising to a height of 242 ft., it was a well-known landmark. It was erected, we are informed, by a bricklayer named Walker, and about 300,000 bricks were employed, representing a total weight of 1,200 tons. It was struck by lightning and repaired, but its demolition became necessary owing to rapid decay having set in consequently on the closing of the works and the stopping of the fires.

Exactly half the base of the chimney was cut away. The brickwork rested on a strong stone foundation, and therefore there was no fear that the weight of the chimney would cause the props to sink and the chimney to fall by its own weight before its time. The fuses were arranged so that the centre one exploded first, and the others in pairs, and last of all the wing-holes.

The demolition took place on July 17, 1908, in the presence of, it is said, 30,000 spectators, who were kept at a safe distance by the police.

The workmen armed themselves with torches, and one of these was handed to Mr. Adam Maitland, chairman of the Aberdeen Land Association, who lit the first fuse and hurried from the scene. The torches were then applied to the other fuses, from which heavy smoke rose and issued from the mouth of the chimney. Two and three-quarter minutes after the fuse had been fired the first shot rang out, followed almost immediately by the other three. The props flew from beneath the brickwork, some shattered, others not. The summit was seen to sway slightly, the result of the back kick of the explosions. Gradually, however, it leaned towards the west, and, slowly gaining momentum, appeared as if to fall full length on the ground. The strain, however, was evidently too much for the storm-battered structure, and it was seen to fracture almost in the centre. At the same time an explosion burst the base, and the top portion telescoped. The other portions cracked and split, and amid the explosion of the remaining charges the shaft crumbled away. Huge clouds of dust rose from the debris and for a time obscured the wrecked chimney from view but it rapidly cleared away, and it was seen that the immense quantity of masonry had fallen within a very limited area. The operations had been in every way successful. From the time the top was seen to move until the whole erection was on the ground nine and four-fifth second elapsed. The workmen cautiously approached the grea mass of brick and mortar fearing the presence of som unfired explosive. All the charges had done their work however.

Decayed Outside Cement Facing.

"North East Coast" writes: "A series of houses buil about sixty years ago are faced with what appears to b Roman cement. This is in a very defective condition, an when re-cemented with Portland cement, scales off. Thi applies to the plain surface and the cornices. Is there an remedy short of hacking it back to the brickwork an finishing in Portland cement?"

—It would be advisable to try the effect of repair wit Roman cement before resorting to hacking and refinishin in Portland. This material can still be obtained throug merchants, being used chiefly for the purpose of such repair and for work "between tides" owing to its quick-settir properties.

E.

Ash from Factory Chimney.

With regard to Enquiry published in our issue f August 22, page 301, a correspondent writes: "I think yc will find that Messrs. Davidsons, the Sirocco fan people Belfast, manufacture an ash-arresting device. It is beir fitted to a large number of power plants, and is, I believ perfectly satisfactory."

The Preservation of Bricks.

In answer to the enquiry with regard to the "Preserv tion of Bricks," published in our issue for August 2 page 301, the "Impregnol" solution of Messrs. Rain and Porter, Ltd., was referred to as a silicate of so solution. This is incorrect. The firm state: "O 'Impregnol' 'C' is not a solution of silicate of soda n a preparation of silica. It is a colourless solution, whi will not render brickwork treated with it unsightly appearance, nor will it produce a glossy surface. It h been specially prepared so that its waterproofing a preservative properties are not destroyed by the mort of the joints. 'Impregnol' 'C' waterproofs and preserv both bricks and mortar."

Labour and the Building Boom

he following letter by Mr. F. J. Gayer, President of the
titute of Builders, appeared in last Monday's "Times" :

IR,—In the midst of an unparalleled state of unemploy-
it in industry generally, it is interesting to note that
re is quite an appreciable volume of building work avail-
, but unfortunately the amount of skilled labour is
lly inadequate. In fact, it has been foreseen for some
e that the number of skilled building trade workers is
that will only cope with a slump, and there are not
icient to cope with a normal demand, much less a boom,
as could be rightly looked for following the depression
the only partly diminished demand for houses.

he shortage to a small extent can be attributed to the
, it being easy to understand that the building trade is
xception to the consequent chaos. The other reason is
iously the lack of new blood, since the only entry is, at
ent, by means of apprenticeship.

ll are agreed that the best method of augmentation of
ur is by the apprenticeship scheme, and at first blush
is naturally inclined to ask, if this is agreed, why not
y on and so solve the problem? It must be recognized
the building trade is exceptional to the extent that the
and flow of the volume of work is probably more marked
his than in any other industry, with its consequential
s not only to the operative but to the employer. The
ting apprenticeship schemes provide for guaranteed
inuity of labour for the apprentice until he is twenty-
years of age, and while many of the employers can face
risk of guaranteeing employment by means of appren-
hip to a limited number, yet quite a large number of
entices are not taken because the employer, owing to
casual nature of the industry, is not in a position to
antee continuity of employment to the full quota. It
so undoubtedly a fact that the trade unions view the
tage of labour as an asset to their bargaining powers.

the unions could be persuaded to vary the apprentice-
scheme, to recognize the following suggestions, much
e shortage would disappear. The unions would really
a healthier position, the community in general would
, and much of the demoralizing influence of the dole
ld disappear. The apprenticeship scheme should by
ual consent be modified, to provide that, in the event
ny employer being unable to find sufficient employ-
t for his apprentices, they should stand off until such
as they can be restarted, in a like manner to that in
h the craftsmen are stood off. Where, by the misfor-
of slackness of trade the craftsmen are stood off, it
s illogical, and even unfair, to the craftsmen to be
l off while the proportion of apprentices to craftsmen
equently increases. Further, there are many trade
n labourers, used to building work, who would quite
nably be trained with the help of the craft unions, to
rm many of the simpler craft operations.

e more highly skilled craftsmen would have nothing
ar from this augmentation of labour, since, in the event
falling-off in employment, the builder obviously and
rally retains his best men. Much more consideration
t reasonably be given by the employers and unions
endeavour to regulate the volume of building work
a view to levelling up the valleys of depression and
ling down the hills of booms, etc., and so to some extent
l against unemployment on the one hand and high
on the other. It can be reasonably anticipated that
e next few years there will be sufficient building work
ore than absorb the available skilled labour, hence
n is required promptly to devise a scheme that will
fer many of the unemployed to the ranks of useful
ucers.

doubt it is very tempting to the operatives to main-
a shortage in their ranks in order to draw rates higher
the standard rate from the unscrupulous unfederated
er, but it must not be lost sight of that these un-
ated builders pay less than standard rates when trade
is adverse. Even under current conditions inquiry will show that certain unfederated builders are paying higher rates to bricklayers and carpenters and plasterers because of the shortage, and paying on the same jobs lower than standard rates to painters and labourers, owing to a sufficiency of this type of labour. F. J. GAYER, F.I.O.B.

President, the Institute of Builders, past-president, the London Master Builders' Association, chairman, National Conciliation (Building Trade) Board.

The New Regent Street

Mr. Henry Tanner, F.R.I.B.A., in an article in "The Weekly Dispatch," replies to critics of the new Regent Street. Following are extracts :—

The rebuilding of Regent Street will probably not be finished for at least nine years. And since every day brings not less than one new criticism of those who are responsible for rebuilding it, there will be, at a conservative estimate, some three thousand charges to answer before the last brick is laid. Perhaps I may be allowed to answer some of these in advance.

First of all, one is often asked, why rebuild Regent Street at all? Why not leave the delightful façade as it was in Nash's days, when crinolined ladies swayed down a street which had never known the roar of 'buses or taxis? Principally because the force of economic circumstance will not allow it. Regent Street is all Crown property. The leases are falling in thick and fast. The value of property has so tremendously increased that it is essential that higher buildings should be erected in place of the old low ones in order that more room should be available in the same space for letting offices.

A common criticism is that there is no sort of uniformity in the street as a whole. This is quite inaccurate. The Department of Woods and Forests, through the Crown Surveyors, has ensured that one at least of the main effects of unity should be maintained by keeping the skyline approximately to one level. Nash himself, whose beautiful designs are so often held up as example by those who have never seen them, did not preserve strict unity. His general plan was the same, but it was subject to infinite variation.

In addition, it must be remembered that we are not building for the sake of building. We are building largely for the sake of business. And the big business man, who pays for the building, does not wish to be merely one of a crowd. He wants his building to be distinctive. As it is, he is allowed just enough individuality to give his building character while conforming to the main scheme. . . .

Another criticism is made of the new Oxford Circus. Here the main design consists of pillars reaching down to the first floor. It has been suggested that had these pillars been carried down to the street level the effect of height would have been much increased and the general line would have been far more pleasing. With regard to the height, it was our special purpose, when designing this Circus, to conceal the real height of the building. As for the general scheme, it is one of the main principles of architecture to emphasize the *horizontal* line—first the base, then the main colonnade, then the cornice, frieze, etc.—finally the roof or attic. This is a standard principle; it has been worked out by generations of artists and architects; and we should think seriously before throwing it over.

Were the architect to try to follow every suggestion that is made to him, nothing but confusion would result. His first object is to give his clients what they require and then to clothe it architecturally.

Remembering, therefore, what Regent Street stands for, take a look down it, and ask yourself, Is it really so very bad? I know that it is easy to be an architect of one's dreams, to fashion the world according to one's heart's desire, but we architects have had to deal with other stuff than dreams. And I am confident that the verdict of posterity will not be unduly harsh.

The New Housing Subsidy

An Obscure Point Made Clear.

That blessed phrase "An economic rent" enters into the speculations as to whether the recommendations of the Manchester Housing Committee will (if they are approved by the City Council and the Ministry of Health) lead to something in the nature of a building boom in Manchester. Inquiries bear out the opinion that for some time to come the private builder will be reluctant to build houses, even with the subsidy offered by the new Act, unless he can find purchasers, and that if the houses wanted by the general mass of the people, at a rent, are to be provided, it will have to be by the local authorities.

It is declared that the fall in wages forbids any further increase of rent at the present time, but that unless the builder is assured of an appreciable increase new houses for tenants could not be let at an economic rent. The private builder says that a house costing £500 would, to ensure a return of 5 per cent. after making an allowance of 25 per cent. of the net rent to meet the cost of maintenance, etc., have to be let at a rental of not less than 12s 10d. a week, exclusive of rates. The economic rent of a £600 house would, the builder says, be about 15s. 3d. a week. These houses, too, he points out, would not have more than three bedrooms, and it is not certain that they would have a parlour. It is realized that in existing conditions rents of these amounts cannot be obtained from the working class. Apart from this, it is asserted that there are few builders to-day who would be satisfied with a 5 per cent. return on their capital. "I think," said a housing expert to a representative of "The Manchester Guardian," "that it needs little prevision to realize that the duty of the State in the matter of housing is likely to be much greater in the future than in the past. It looks as if it is the local authorities, helped by the State, who will have to provide the houses needed by the workers."

Law Report

Alleged Nuisance to Quiet Enjoyment

Wiginton v. Sevenoaks U.D.C.

August 29. Chancery Division. Before Mr. Justice Russell.

This was a motion in the action of Wiginton v. Sevenoaks Urban District Council, which had reference to an alleged nuisance at the defendants' quarry near the plaintiff's house, "Dunblane," Seal Hollow Road, Sevenoaks.

Plaintiff sought an injunction to restrain the defendants from continuing blasting operations. On this branch of the case the defendants gave an undertaking, until the trial of the action, not to do any more blasting, and the matter accordingly stood over until the trial of the action.

The plaintiff also sought an injunction against the defendants to restrain them from continuing an alleged nuisance to the plaintiff's quiet enjoyment of his residence by creating a noise and dust, due, it is alleged, to machinery used by the defendants in their operations.

This matter had stood over for engineers acting on behalf of the parties to inspect and report to the court.

Mr. Ward Coldridge, K.C., appeared for the plaintiff, and Mr. Hurst, K.C., for the defendant Council.

Mr. Ward Coldridge said in this case the parties had agreed to dispose of the motion. The experts had visited the defendants' works. The parties had agreed that the defendants should, until the trial of the action, give seven days' notice of their intention of bringing rock from elsewhere for crushing, the matter then standing over till the trial of the action. There was only on the quarry enough rock for ten days, and the defendants were trying to get rock by hand-working to continue the works. As long as they continued to use the quarry and works as agreed, the plaintiff would put up with the nuisance of noise. The plaintiff recognized that it would be unreasonable to ask the defendants to discontinue the crushing, and he would put up with the noise till the trial. Of course, the defendants would continue the undertaking as to blasting? There was a heap of dust, some seven or ten tons, a few yards from the plaintiff's house, and his client asked for an undertaking from the defendants to remove it forthwith. Counsel was not asking for a formal order for this, but the plaintiff would rely on the courtesy of the defendants to act reasonably and remove this dust from plaintiff's door. Under these cir cumstances there would be no order on the motion, bu there would be liberty to apply. The pleadings and defenc would be dealt with without delay, and there would b liberty to apply to advance the hearing of the action.

Mr. Hurst concurred in his learned friend's remarks.

His Lordship: See that you agree on the endorsements o your briefs.

Mr. Hurst: We will, my lord.

Department of Architecture and Civi Design

The Technical College, Cardiff

Entrance Scholarships.

At the Technical College, Cardiff, ten scholarship covering tuition fees and maintenance grants of £40 p year for three years are offered for competition annuall As candidates for entry to the Department of Architectu and Civic Design are eligible to compete, these scholarshi are of considerable interest to those contemplating enteri the architectural profession.

The scholarship examination is, of course, a competiti one, and is of about the same standard as matriculation.

In the case of candidates for the School of Architectu the subjects of this examination are:—

1 English.
2. Mathematics (two papers): (*a*) Algebra and arit metic; (*b*) geometry and mensuration.
3. A modern language (French, German, or Welsh).
4. Physics with mechanics, or higher mathematics.
5. History, geography, or chemistry.

Candidates must further satisfy the head of the Depa ment of Architecture as to their ability in elementary drawi

The Department of Architecture at the Technical Colle Cardiff, has now been at work for rather more than th years under the charge of Mr. W. S. Purchon, M. A.R.I.B.A., the assistant lecturer in architecture be Mr. R. H. Winder, M.A., A.R.I.B.A. Students in department also attend courses in the engineering depa ment, the technical chemistry department, the departm of mathematics, and the school of art, all of which depa ments are housed in the same building.

This school of architecture is "recognized" by Royal Institute of British Architects, which grants exer tion from its intermediate examination to students pass successfully through the three years' full-time course leading to the certificate. In addition to this cou the department provides a diploma course consisting two sessions of six months each of full-time study, intervening six months being spent in architects' office

There is also an evening atelier for architects' assista who cannot attend the day courses.

The department is in close touch with the South W Institute of Architects, representatives of this body be on the Advisory Committee for the department, and stude of the school are eligible for the prizes awarded by Institute. In addition to these awards there are als number of departmental prizes presented in the main local architects.

The external examiner for the past session was Mr. P Waterhouse, past-president of the R.I.B.A.

The school year commences on Tuesday, October 2, 19 but intending students are advised to apply at an e date for particulars of the courses of instruction and of entrance and scholarship examination. Candidates the latter should obtain application forms, which mus completed and submitted before September 17.

The Manchester War Memorial

Sir E. Lutyens's Design

e Manchester War Memorial Committee last week pted the designs prepared by Sir Edwin Lutyens of a taph to be erected in St. Peter's Square.

e designs are at present in sketch form only, but in Edwin's drawings the nature of his conception is rent. The cenotaph will be placed over the foundations e old church tower, and on the axial line of Mosley t, Oxford Street, Peter Street, and Lower Mosley t, so that it will be visible from each of these thorough-. It will stand on a low podium or base wall, which be flanked by two obelisks, and built so as to embrace reat War Stone to be placed at its base. The War Stone form of memorial which has become common to most e cemeteries abroad where men who fell in the war are d. It is a plain stone symbol of the altar of sacrifice ing the inscription "Their name liveth for evermore."

he cenotaph will be 36 ft. high. It will carry no orna- ation save the arms of the city encircled in wreaths. apex will bear the effigy of a dead warrior. Sir Edwin ests that the features of the effigy shall not be defined, at it may be to all bereaved the symbol of the one who The flanking obelisks will be approximately 24 ft. The podium wall will serve as a place where wreaths lowers may be laid.

is suggested that for the present the stone cross which memorates St. Peter's Church shall remain. Sir Edwin ens's idea is that it will mark the consecration of the and may harmonize with the intention of the memorial. question of retaining the cross, however, will be con- ed finally when the memorial is in its place. Any ism of Sir Edwin Lutyens's design must, of course, served till its execution is complete.

e work is to be carried out in Portland stone, and it is d that a beginning will be made not later than October.

The Armstrong College Library Competition

a result of the recent decision of the council of Arm- g College to build a college library, all practising mem- of the Northern Architectural Association, and a few tects in other parts of the country, were invited to it competitive designs for the building. Thirty-two ns were received from twenty-six competitors, and Mr. artineau Fletcher, M.A., F.R.I.B.A., who was appoint- sessor upon the nomination of the president of the .A., has now issued his award as follows: First pre- , Mr. A. Dunbar Smith, 6 Queen's Square, Blooms- W.C.; second premium, Mr. W. G. Newton, M.A., ymond Buildings, Gray's Inn, W.C.1; third premium, s. Mauchlen and Weightman, 2 Collingwood Street, astle-upon-Tyne. All the designs submitted will be to inspection by the public in the gallery of the King rd VII School of Art, Armstrong College, between n. and 5 p.m., from September 27 to 29. Many of the ns are of great merit, and the whole exhibition is of interest as a series of solutions of the problem of ling precisely the type of accommodation required in ersity library.

ccordance with the terms of competition and award, . Dunbar Smith has been appointed architect of the y, and work will proceed forthwith. The building will t of a reading-room seating 122 readers, storage space 75,000 volumes, with accommodation for fifty-five ch students, administrative rooms, and photographic tory, and is so designed that additional storage space ,000 volumes may be added when required. A begin- has thus been made to a scheme whose realization t only fill a long and sorely-felt gap in the equipment nstrong College, but should prove an inspiration both ching and to learning within the college, and, by the opportunities it will afford to all researchers and students in letters and science, a notable factor in the commercial, industrial, and intellectual life of the community.

Competition News

Manchester Masonic Temple.

Professor C. H. Reilly, F.R.I.B.A., is the assessor in the above limited competition, and his awards are expected within the course of the next few days. The building is estimated to cost £120,000.

Manchester Art Gallery.

The Manchester Corporation have appointed Messrs. Paul Waterhouse, Percy Worthington, and C. H. Reilly as joint assessors in a big new competition for an Art Gallery in Manchester. Further particulars will be announced later.

New Building, Manchester.

Messrs. The D.I.C. House (Cross Street), Ltd., have appointed Professor C. H. Reilly, F.R.I.B.A., to assess a limited competition for a new building in Cross Street.

Southsea Common Lay-out Competition.

The following notice has been issued by the R.I.B.A.: "The Competitions Committee desire to call the attention of Members and Licentiates to the fact that the Conditions of the above Competition are not in accordance with the Regulations of the R.I.B.A. The Competitions Committee are in negotiation with the promoters in the hope of securing an amendment. In the meantime Members and Licentiates are advised to take no part in the Competition."

List of Competitions Open

Date of Delivery.	COMPETITION.
Sept. 30	Designs for a series of plaquettes in bronze illustrative of London as the capital city of the Empire, or of one or more of her main architectural features. Designs should be submitted in the form of models in plaster. The following prizes are offered: One prize of 100 guineas, two prizes of 50 guineas, three prizes of 25 guineas. Apply Deputy Master of the Royal Mint, London, E.C.1.
Sept. 30	The best colouring of a design for the vestibule connecting 315–317 Oxford Street with 17–19–21 Dering Street, Messrs. Thomas Parsons and Sons' new offices and showrooms. Prizes: 100 guineas, 50 guineas, 25 guineas, and five consolation prizes of 10 guineas each. Assessors—Sir Edwin Lutyens, R.A., F.R.I.B.A., Sir David Murray, R.A.,P.R.I., H.R.S.A., Sir John Lavery, R.A., Mr. Frank Brangwyn, R.A., and Mr. E. Guy Dawber, F.R.I.B.A. Apply Competition Department, Messrs. Thomas Parsons and Sons, 315–317 Oxford Street, London, W.1.
Oct. 1	The Student Welfare Committee, University of Glasgow, invite Competitive Designs (limited to architects having an office in and practising within the Municipal Boundaries of the City of Glasgow) for a pavilion to be erected on the University Athletic Ground at Westerlands, Anniesland, at a cost of £10,000. Assessor, Mr. Alexander N. Paterson, A.R.S.A. Apply Honorary Secretary, Student Welfare Committee, The University, Glasgow.
Oct. 1	Lay-out of the Bull Green Site and part of the centre of the Town of Halifax. Premium £50. Apply, with deposit of £1 1s., to Mr. Percy Saunders, Town Clerk, Town Hall, Halifax.
Oct 15.	Lay-out of a river embankment promenade, adjoining the River Thames below Barnes Bridge, for the Chiswick Urban District Council. Premiums: £105, £52 10s., and £26 5s. Apply Mr. E. F. Collins, Clerk, Town Hall, Chiswick, W.4. Deposit £1 1s.
Nov. 5	Art Gallery for Hull. Assessor, Mr. John W Simpson, PP.R.I.B.A. Apply, with cheque for £2 2s., to Mr. H. A. Learoyd, Town Clerk, Guildhall, Hull.
Jan. 1	The Imperial War Graves Commission invite architects who served during the war as members of the Military, Naval, or Air Forces raised in any part of the British Empire to send in their names for admission to a competition for the designing of memorials to the missing to be erected by the Imperial War Graves Commission at Bethune, Armentières, Cambrai, and Soissons. Applications for particulars of premiums and other regulations from those desiring to compete are to be addressed to the Secretary (Works Branch), Imperial War Graves Commission, 82 Baker Street, London, W.1, and must be received there not later than January 1, 1924, and must be accompanied by a statement giving particulars of the war service and professional career of the applicant and clearly stating which of the memorials it is desired to compete for. Deposit, two guineas for each set of plans. The Assessor is Sir Aston Webb, K.C.V.O., P.R.A.
No date	Extensions to the Poor Law Institution, Premium £50. Apply Clerk to the Wirral Board of Guardians.
No date	The Eastleigh and Bishopstoke Urban District Council invite designs for the extension of their existing Council buildings, and the erection of an assembly hall, on the site adjacent. Premiums: 50, 30, and 20 guineas. Apply, with deposit of £1, to Mr. J. Lawrence, Clerk to the Council, Council Offices, Eastleigh.
No Date	The War Memorial Committee of the Burgh of Coatbridge invite designs for the erection of a War Memorial on a site in the West End Park. The estimated cost of the work amounts to £3,000, and premiums of £75, £50, and £25 are offered for designs placed first, second, and third respectively. Assessor is Mr. James Lochhead, F.R.I.B.A., Hamilton. Apply Town Clerk. Deposit £1 1s.

Small Dwellings Acquisition Acts, 1899–1923

Rate of Interest on Advances

The following announcement is issued by the Secretary of the Ministry of Health :—

I am directed by the Minister of Health to state that he has had under review the Rate of Interest on money advanced by local authorities under the provisions of the Small Dwellings Acquisition Acts, 1899–1923, for the building or purchase of houses in which the prospective owner resides or intends to reside.

(1) The rate of interest to be charged by a local authority on moneys advanced for this purpose is the rate which the Minister with the approval of the Treasury may by order fix (Section 5, Housing Act, 1921). On December 5, 1922, the Minister, with the approval of the Treasury, fixed 5½ per cent. for this purpose in respect of advances made after that date. In certain cases in which the local authority satisfied the Minister that a lower rate could safely be adopted, special orders fixing lower rates for those authorities were made.

(2) By the Ministry of Health (Rate of Interest) Amendment Order, 1923, dated August 14, 1923 (S.R. & O. 940) the Minister has now fixed 5 per cent. as the rate of interest at which local authorities after the date of the order may make advances under the Small Dwellings Acquisition Acts. This order supersedes the order of December 5, 1922 (in so far as that order related to the Small Dwellings Acquisition Act), and the special order referred to in paragraph 2 above.

(3) The Minister will be prepared to give consideration to an application for fixing a higher rate than 5 per cent. in respect of any authority who are of opinion that having regard to terms at which they can raise loans or for other reasons the above rate is not sufficient to cover the expenses likely to be incurred in respect of advances made by them under the Acts.

(4) The Small Dwellings (Acquisition) Act, 1899, has been amended and extended by Section 22 of the Housing, &c., Act, 1923. These amendments are explained in paragraph 16 of Circular 388A, dated August 14, 1923.

Northampton Polytechnic Institute, Clerkenwell

A copy of the recently issued "Educational Announcements" of the above Institute deals with the evening work only. The well-known work dealt with in the day section of the "Announcements" will be practically the same as last session, there being only small changes in details of syllabuses which can be made as the work develops.

The whole of the work includes day and evening courses in engineering (civil, mechanical, and electrical), in optical engineering and applied optics, and in horology. The engineering courses include sub-sections in automobile work, aeronautics, and radio-telegraphy. In addition there are evening courses in electro-chemistry, metallurgy, and domestic economy and women's trades. The classes for the day courses commence on Monday, October 1, and those for the evening courses on Monday, September 24. Enrolments for the latter commence on Monday, 17th inst.

Full details of the syllabuses and the equipment are given in the "Announcements."

An Acknowledgment

We published in our issue for August 29 a photographic illustration of the Loughborough War Memorial Tower. We now learn (what we did not know at the time) that the original from which our reproduction was made is the copyright of Mr. Kendrick G. Smith, of 21 Howard Street, Loughborough.

A Warning to Architects

The following appears in the Press: A man of sufficien appearance and plausible address is calling on variou architects inviting their co-operation in respect of a alluring building scheme, and giving our name as a reference. The interview (which, in these distressfu times, is sufficiently appealing to any professional man apparently culminates by the prospective client discoverin that he is short of a taxi-cab fare to his next appointment We gather that a trifling loan is always forthcoming. W have not heard of his raising more than 10s., but he is quit content with half-a-crown. As we know nothing about thi person, who seems to change his name (though, unfortunately, not his reference), we should like to say that, if any one favoured with a visit from such a client mentioning ou name can delay the interviewer until we can call and mee him, we shall be grateful.—Messrs. Macdonald and Stacey Westinghouse Building, 2 and 3 Norfolk Street, Strand W.C.2.

Prices of Building Materials

The Inter-departmental Committee (Ministry of Healt appointed to survey the prices of building materials, repo as follows: Since July, there have been only a very fe changes. In the case of timber there has been an advanc of £2 per standard at Birmingham, while the special pu chases of the London County Council for their housin schemes have been made at an increase of £4 per standar over those made in the previous month.

Apart from these, there are no appreciable change either in any particular area or class of material, to whic attention need be drawn, and for all practical purposes t general level of prices recorded for July applies equal to the present month.

Corrigenda

A Design for a Public Institute.

In our last issue a design for a public institute by student of the Royal Academy School of Architecture w wrongly stated to be the work of Mr. Alan G. Macfarlar The student responsible for the design was Mr. J. F. Masc

R.I.B.A. Problems in Design.

(*b*) Working drawings of Design Subject No. LXI (a School Library).

Attention is drawn to the fact that owing to a printe error the requirements for the drawings as set forth a incorrect. The requirements should read as follow "The design for a School Library may, after it has be approved, be re-submitted with the addition of one ½ scale elevation and two ½ in. scale sections finished working drawings. The section to show the book-ca fittings."

Publications Received

"Heat Transmission through Walls, Concretes, and Pl ters." Experiments carried out at the National Physi Laboratory by Ezer Griffiths, D.Sc., Department of Scie tific and Industrial Research. Building Research Boa Special Report No. 7. Price 1s. 7d. post free. H. Stationery Office.

"Housing Betterment, 1923." A journal of Hous Advance issued quarterly by the National Housing Assoc tion, 105 East 22nd Street, New York City.

Change of Address

Mr. Beresford Pite, F.R.I.B.A., announces that his offi are now changed from the Royal College of Art, So Kensington, to 101 Great Russell Street, W.C.1. (Teleph number, Museum 2481.)

dnesday, September 19, 1923.

Vol. LVIII. No. 1498.

THE ARCHITECTS' JOURNAL & Architectural Engineer

With which is incorporated "The Builders' Journal."

HEAD OF "THE SPIRIT OF THE REVOLUTION," FROM THE GROUP ON THE ARC DE TRIOMPHE. RUDE, SCULPTOR.

27-29 Tothill Street, Westminster, S.W.1.

A Room at Delft

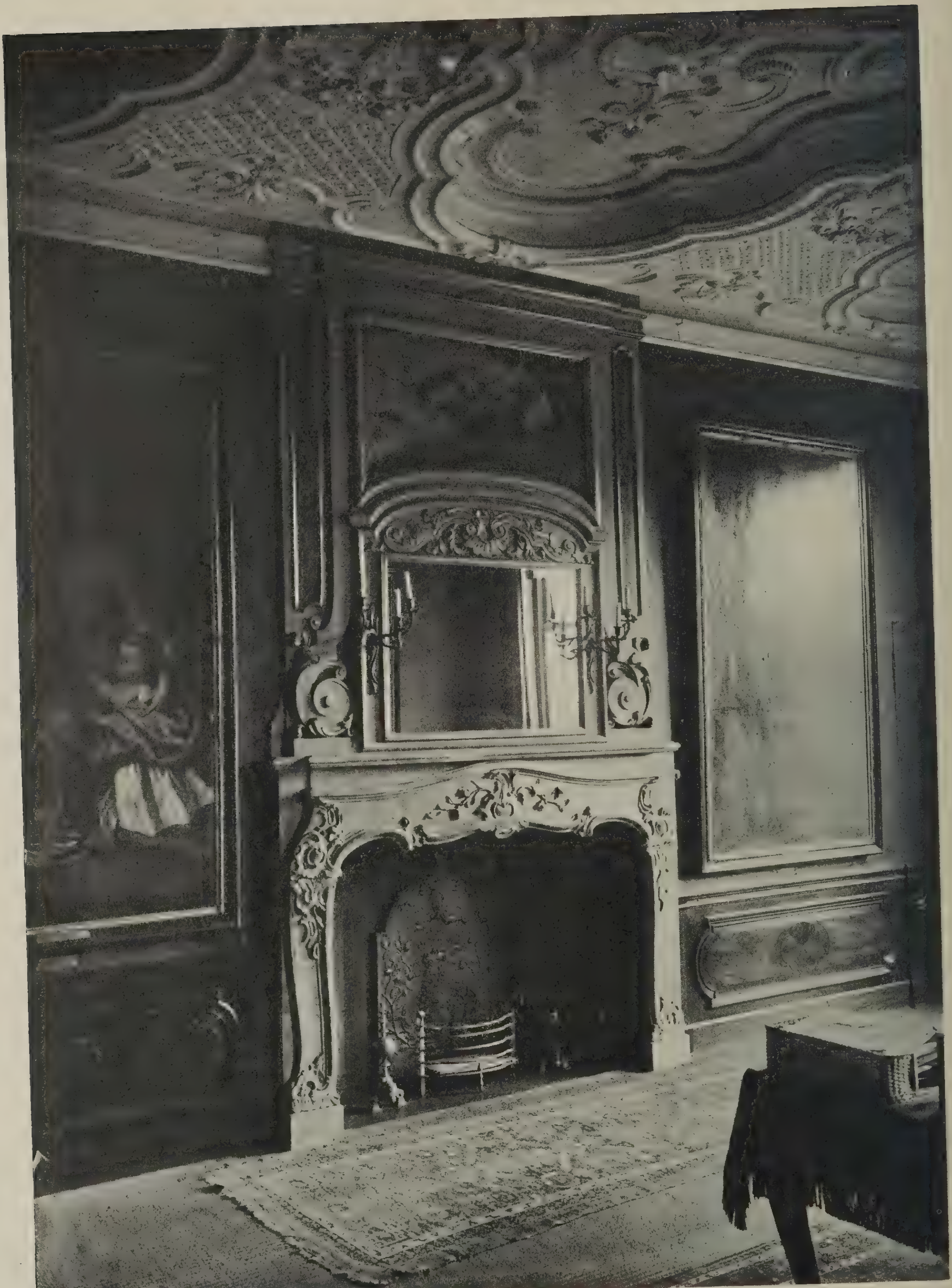


Photo: F. R. Yerbury.

This room is in the building used by the School of Decoration attached to the Technical School. The ceiling is very elaborate, with painted panels. The woodwork is mahogany.

THE
ARCHITECTS' JOURNAL
27-29 Tothill Street, Westminster, S.W.1.
ednesday, September 19, 1923
Volume LVIII. No. 1498.

The Settlement of Housing Accounts

THE promotion of Mr. Neville Chamberlain from the Ministry of Health to be Chancellor of the Exchequer is well deserved, and everyone knowing Mr. Chamberlain's fine record of service, both iunicipal and national, will wish him every success in his ork of controlling the national finances. From many points f view, however, it is somewhat of a national calamity hat such an experienced man of business, standing so high the opinion of the nation, should be removed from the linistry of Health just as he was beginning to make his eight felt; and his successor is likely to find the task of king up the reins an exceedingly difficult one. Such an nportant department as the Ministry of Health, which as under its control not only housing, but the general ealth of the nation, deserves both consistent leadership nd a consistent policy with the public and the local ithorities throughout the land.

In the general approval of the new Housing Act it cannot forgotten that the Ministry has not yet emerged from ie chaos created by the sudden shutting down of its nbitious housing programme, and above all things the eeds at the present time are a capable directing head com- ned with a sound administrative policy. Very consider- ble sums have already been expended in liquidating the bilities incurred under the Addison régime, and the de- rtment still has before it many problems calling for ttlement. The principal of these is the settlement of ousing accounts.

The policy so far adopted by the Ministry, if it can be called policy, is one of cutting its losses at almost any cost except here the payment of professional fees is concerned, in hich case the policy appears to be one of cutting down the s at any cost, so that architects and surveyors through- t the country have in many cases, and with reason, a eling somewhat akin to exasperation with the Ministry d its ways.

So far as the local authorities are concerned they have der the late scheme been more or less guaranteed in spect of any expenditure above the produce of a penny te, so that in the districts with a comparatively low rate- le value there has been little tendency towards economy, d practically no restriction of expenditure. Many llions have been expended in the purchase of sites which ; at the moment, a drug on the market; but it would be wise in the extreme for the local authorities, having quired these sites, to dispose of them for other than blic purposes, and it may yet be found that the land so quired will be of inestimable value to the community in ner directions. And for once the Ministry have done the ht thing in not pressing upon the local authorities the olesale disposal of these apparently surplus properties, ich run into thousands of acres all over the country.

In the settlement of builders' accounts the Ministry have the whole made generous allowance for "anticipated ofits" in respect of contracts which have been annulled, d not a few builders have reason to congratulate them- ves that this course was adopted by the Ministry.

The final settlement with the contractors on the completed schemes is not so simple a matter, and the sharpest wits are being exercised at the present time both in compiling and combating the details of final accounts. The task of adjusting these accounts and arriving at a settlement which shall be fair to both parties is under present circumstances an exceedingly difficult one, and at the present moment, when building costs are considerably less than half of what they were a couple of years ago, it is no enviable task for the surveyors on both sides to arrive at a figure which shall fairly represent the payment due under the conditions which then ruled in the building industry. Even when lump sum contracts were obtained, the amount was, it will be remembered, to be periodically readjusted according to the rise and fall of building materials and labour. Under the Ministry's No. 3 Form of Contract, which was so largely used, particularly in extensive contracts, the difficulties of adjustment of basic sums and overhead charges are even more acute. It will require infinite patience and tact combined with a judicial frame of mind to arrive at a fair settlement of these manifold intricacies. So far very few of these disputed accounts have been referred to arbitration, and it is satisfactory that few, if any, have had to be referred to a court of law. In many cases though, the real "tussle" has yet to come.

When one comes to the consideration of the question of professional fees, however, the matter is still in a somewhat unsatisfactory state. The Royal Institute of British Architects, through its chosen representatives, has done its best to represent to the Ministry the position of the professional man, but it is evident that there are still many cases in which the official memoranda will award but scant remuneration for services rendered; and in such cases, which must from their nature vary very considerably in detail, there is still room for powerful action to be taken, either by the profession as a whole or by a combination of the architects affected. Unity is strength. The quantity surveyors through the medium of their professional society, the Surveyors' Institution, have secured what may be regarded as excellent terms. It remains for both branches of the profession to see that in the individual cases with which they are concerned they are properly remunerated for services rendered.

In any case, however, a spirit of fair dealing is more to be desired than great riches, and given this spirit on both sides there should be no difficulty in arriving at an equitable settlement of any dispute which may arise. A matter of even greater importance than professional fees is that the prestige of the profession should not be lowered, and that the standard of construction and lay-out of housing estates, not only for the working classes, but for all sections of the community, should be permanently raised. In the welter of dispute as to remuneration for past services it is all important to keep in mind that there are many times more houses to be built than have already been erected, and that it is in the interests of the nation that no house should be erected without an architect. In pre-war days it is unfortunately true that not more than 5 per cent. of the houses built in this country were built to the design or under the superintendence of a qualified architect. The strongest pressure possible should be brought to bear not only on Government departments, but on the public as a whole, that no house of any description, whether large or small, should be erected unless its designer is in every sense of the word *an architect*. In how many of our towns, streets, and villages are we affronted at every turn by a glaring eyesore or a long monotony of repetition which is wearisome alike both to eye and spirit? W. R. DAVIDGE.

Charing Cross Bridge Again

It is being urged in several quarters that to spend a million and a half sterling on a new road between Newgate Street and Liverpool Street is undesirable while more serious traffic congestion exists elsewhere. At the risk of becoming tedious, town-planners and others interested must continue to urge the claims of cross-river communication at Charing Cross. The volume of traffic across Westminster and Waterloo Bridges grows appreciably heavier, and the resulting congestion at the cross roads on both sides of the river becomes worse every day. The unfair demand upon these bridges means that they have to be repaved at more frequent intervals, with the consequent diminution from time to time of their traffic-carrying capacity; and at such times if one is in a hurry it is quicker to cross the river on foot. Such a scandalous state of affairs would not be tolerated in any other capital city. Happy Paris, with her multitude of bridges, across which traffic flows as freely as the water beneath! The matter has really got beyond the stage of inconsequent discussion and dispute. The fact that the existing bridges are carrying loads dangerously in excess of what they should be called upon to bear should be sufficient to stir the responsible authorities to action. The improvement should be no longer delayed, for several years must necessarily elapse before the work could be completed. How much worse are conditions likely to be in, say, five years' time! Even from the point of view only of the unemployed problem the scheme would be worth while, for it would provide work for many hundreds of men over a period of years. All the arguments are in favour of going ahead at once, and we sincerely trust that the L.C.C., the City Corporation, and other authorities concerned may realize the seriousness of their responsibility in a matter which is of vital concern not only to the travelling public, but to the physical health and prosperity of London itself.

Mr. Thomas Adams and New York

Mr. Thomas Adams, who has just been appointed chief consultant to the committee on the plan of New York and its environs, has always been associated with architects in his work, and has insisted on architectural collaboration in all schemes with which he has been identified. He collaborated with Messrs. Detmar Blow and Billerey in connection with plans for Sir Richard Paget, Bart., and Viscount Ridley; with Sir Edwin Lutyens in the Knebworth plan for Earl of Lytton. In Canada his chief assistant was a well-known Ontario architect, Mr. W. D. Cromarty, who now succeeds him as town-planning adviser. Mr. Adams was external examiner in civic design to the University of Liverpool, and is now lecturer in town planning in the Architectural Department of the Massachusetts Institute of Technology. He is a regular contributor on town-planning subjects to the "Journal of the American Institute of Architects." He was secretary and manager of the Letchworth Garden City in 1903–06; in private practice as a consultant to large landowners from 1906–10; town-planning inspector to the Local Government Board, 1910–14, housing and town-planning adviser to the Canadian Government, 1914–23. He is a Fellow of the Surveyors' Institution, was first president of the Town-planning Institutes of England and Canada; is a member of the Board of Directors of the City Planning Institute of the United States; and is an honorary member of the Institution of Municipal and County Engineers. In the New York work he will be associated with groups of the leading architects, including men like Mr. Cass Gilbert, Mr. Thomas Hastings, and Mr. Corbett.

For the past three years he has combined, with his work in Canada, a private practice in England, the United States and Canada, with offices in London and New York. Latterly he has been in partnership with Mr. Longstreth Thompson at 121 Victoria Street, Westminster. It was his work in the United States that brought him in touch with the New York committee.

In this country his firm are engaged in preparing regional plans for West Middlesex and Thames Valley, in addition to other places. He has been chairman of the advisory planning group of the New York plan since February last, and now becomes general director of the whole organization. His firm is cancelling most of its United States and Canadian work, but no change will be made in regard to English work, to which Mr. Adams will devote all necessary time, in conjunction with his partner.

Mr. Longstreth Thompson is now in Newfoundland, in connection with the completion of a plan for a new town being built by Sir W. G. Armstrong Whitworth & Company, Ltd. The town is for the housing of employees of a large pulp mill, and another village is being planned by the firm for a large English company engaged in paper making.

With regard to the New York plan, it is proposed to plan for about three times the present population of 9,000,000 in the New York region of 5,222 square miles, which includes all Long Island and fifty miles radius in other directions. It includes parts of two States, and is forty-five times the size of the County of London. It is perhaps the most complex region—in topography and industry, and in social and economic conditions—in the world. The Russell Sage Foundation has provided $500,000 as a preliminary contribution to the making of the plan. It has also built a special office for the staff on the roof of its building.

Photo: Elliott and Fry.

MR. THOMAS ADAMS.

The Architectural Poems of Thomas Hardy

NO other great poet save Mr. Thomas Hardy ever received the training of an architect. Other poets have, either from interest or for their purpose in writing, acquired some knowledge of chitectural terms, but as a little learning is a dangerous ing, they have had to be very careful how they made use such. Kipling is the only one who has been able with reness to put the right technical word in the right place, splaying an uncanny knowledge of building, mechanics, ipping, and the Bible alike. And yet—there is the touch the clever journalist about it all.

Other poets make up in sheer genius what they lack certain knowledge. They do not attempt, as do iters in the daily Press, to describe particularly, but d other words which have such a wealth of meaning to cheapen mere technical terms. Two verses quoted m Spenser's "The Ruines of Time" will exemplify :—

"To tell the beawtie of my buildings fayre,
Adorned with purest golde and precious stone;
To tell my riches and endowments rare,
That by my foes are now all spent and gone;
To tell my forces, matchable to none,
Were not lost labour, that few would beleeve
And with rehearsing would me more agreeve.

"High bowers, faire temples, goodly theatres,
Strong walls, rich porches, princelie pallaces,
Large streets, brave houses, sacred sepulchres,
Sure gates, sweete gardens, stately galleries,
Wrought with faire pillows and fine imageries;
All these (O pitie !) now are turned to dust
And overgrown with blacke oblivions rust."

Spenser : "The Ruines of Time."

Mr. Hardy's knowledge, however, is deeper. It is pro- sional, and so when he makes use of the term "quoin" tead of "corner" an architectural reader does not exclaim y Jove ! how did he know that ?" but reads it and passes ver as a common word.

t is a good many years now since Mr. Hardy was con- ted with architecture, and there is more architecture in earlier than in his later work, but architectural critics e always called his sentences "architectonic" (an minable word !), and professed to find evidences of a ful architectural training in his workmanlike selection placing of every word.

he early editions of "Wessex Poems" were, moreover, strated by the writer, and of the architectural quality hese illustrations there could be no doubt. But for some on these were omitted from the later editions, and can ad now only in the little pocket edition.

he first poem of any architectural character in Mr. dy's volumes is one dated 1867 and entitled "Heiress Architect." There are one or two technicalities aring here which none but an architect, or an archæo- t, would have readily used. Moreover, throughout is the foresight of the man who has planned, and cially in the architect's final response to his lady client has desired "some narrow winding turret to reach a where she may grieve alone." "It is a slight thing," pleads, "hence do not this last dear fancy slay." But rchitect is a man practical to the last degree, and his word is :—

"'Such winding ways
Fit not your days,'
Said he, the man of measuring eye;
'I must even fashion as the rule declares,
To wit : Give space (since life ends unawares)
To hale a coffined corpse adown the stairs;
For you will die.'"

Unless the lady was possessed of more "sweet reasonableness" than most clients, she must have departed, soliciting that sententious gentleman no more.

The next in the volume is "Rome : Building a New Street in the Ancient Quarter" (dated April, 1887), from which we may perhaps quote :—

"These umbered cliffs and gnarls of masonry
Outskeleton Time's central city, Rome;
Whereof each arch, entablature, and dome
Lies bare in all its gaunt anatomy."

The poet goes on to meditate how even amidst such great ruins the singing workmen shape their frail new stuccoed mansion "with no apparent sense that years abrade, Though each rent wall their feeble works invade, Once shamed all such in power of pier and groin."

The short poem, "Architectural Masks," which appears in the volume "Poems of the Past and Present," deals with something which has often perplexed us—how ugly houses are often inhabited by artistic people, and others of much architectural merit fall into the hands of people who do not care. It is quite clear that people's houses and furniture afford no index to their minds.

"The Church Builder" is a poem containing much that would delight the heart of the craftsman :—

"I squared the broad foundations in
Of ashlared masonry;
I moulded mullions thick and thin,
Hewed fillet and ogee;
I circleted
Each sculptured head
With nimb and canopy.

"I called in many a craftsmaster
To fix emblazoned glass,
To figure Cross and Sepulchre
On dossal, boss, and brass.
My gold all spent,
My jewels went
To gem the cups of Mass."

—only an architect could have written that.

In the last published volume, "Late Lyrics and Earlier," appears a fanciful poem, "The Two Houses"—an old and a new. And the old house talks to the new and the new to the old. The new house boasts of its modern wood, its hangings, and its water-pipe system, but the old house has memories—and ghosts, and overawes the new house into inquiring whether the day will come when it too will lodge shades, "and with such spectral guests become acquaint." It is assured :—

"'—— That will it, boy;
Such shades will people thee,
Each in his misery, irk, or joy,
And print on thee their presences as on me.'"

Over all—over every poem of life as well as of art—there is the brooding stillness of the interior of an old church. And those silences must have entered Mr. Hardy's soul on summer afternoons when he sat for hours sketching a font or the tracery of a west window.

HARRY JOHNSON.

The Tivoli Cinema Theatre

BERTIE CREWE and GUNTON and GUNTON, Associated Architects

A FURTHER stage in the rebuilding of a widened Strand has been reached with the completion of the new Tivoli Cinema Theatre, which has just been opened. The building carries on the line of the Savoy and Cecil hotels, though continuity is broken by a small jutting peninsula of old buildings which, one hopes, may soon be removed, for it is distinctly an eyesore, besides being a hindrance to traffic. At the moment the new Tivoli has the odd appearance of being set back in a forecourt formed by the peninsula on the left and the old buildings of the Strand on the right. This gives it a certain atmosphere of privacy and aloofness which, of course, is entirely unobjectionable, but since the theatre is simply a unit in a length of street façades, as such it ought to be seen.

The building has been designed with a good deal of restraint in the principal elevation. Architectural interest is concentrated in the centre, the wings being plain and formed by a series of three set-backs. Though of a purely formal character the elevation is not strictly symmetrical, the right wing being wider than the left owing to the placing of the entrance lobby upon that side.

The frontages are as follows: to the Strand, 122 ft.; to Adam Street, 92 ft.; to Durham House Street, 76 ft., a part of the building abutting upon the premises of the Adelphi Estate. The site is thus admirably suitable for a theatre of this description, and the fullest advantage has been taken of the three street frontages in arranging the exits.

The main entrance hall is entered from the Strand through a series of swing double glass doors, adorned with bronze grilles.

The floor is of marble, tiled to keep the same form as the stilted elliptical ceiling and cornice.

Directly facing the main entrance doors is a marble twin staircase divided by a marble balustrade, the one side leading up to the balcony, and the other to the foyer, and from thence to the circle.

On the right is a marble staircase leading down to the stalls, while on the left is a pay-box, circular in shape, executed in mahogany, and of a design in keeping with the main entrance doors. Another pay-box of similar design lies on the right immediately inside.

Mural decorations represent delicate draperies and pedestals. The whole of the ironmongery, including bronze grilles, door furniture, etc., has been designed to be in keeping with the general scheme of decoration.

All windows, glazed doors, and lights are copper glazed throughout, while the windows are hung to allow of cleaning from inside and so minimizing labour.

The public portion of the house has been planned in a way that ensures its being cleared in a minimum amount of time; three minutes would see the auditorium empty in a case of emergency.

All doors leading on to exit corridors and staircases are of hardwood, self-closing, and smoke proof, and are the full width of the passage into which they lead.

The auditorium is constructed of fire-resisting materials, the roof being asphalte on patent fireproof block flooring. The circles are constructed of reinforced concrete and steel, while the whole of the walls are steel-framed with brick filling.

The auditorium has perfect sight lines, with no columns to obstruct the view. The ground floor below street level is entirely taken up by stalls holding just over 900 seats.

Above the stalls is the circle, which is easily reached by reason of the stalls being as much below street level as the circle is above. The circle seats 637 people.

Above the back of the stalls, immediately beneath the circle, is a waiting-room on Strand level, a special feature being an open marble balustrading enabling people occupying the waiting-room to look down into the stalls and to hear the orchestra, organ, or other musical performance. Should any part of the house be full during the time people are waiting a transfer pay-box has been arranged to allow them, should they so desire, to be transferred to a part of the house which is not full. At the back of the waiting-room, forming a frieze together with spandrel sides, is a series of borrowed lights, amber tinted, which give the appearance of natural daylight. Interspaced are extract panels, whose purpose is to remove vitiated air from the stalls. This forms part of the ventilation of the main auditorium.

The balcony seats 572 persons.

The proscenium arch is 30 ft. wide, and just over 20 ft. on soffit. The ceiling expanding from the proscenium towards the main part of the auditorium, and terminated by an elliptical arch, has the appearance of a semi-elliptica funnel or inverted cone. This forms an admirable trumpe or amplifier for sound.

On either side of the roof, above-mentioned, are two arches and their supports, cutting into the minor arc of the elliptical ceiling, draped with gossamer fireproof curtains to avoid blanketing of sound, behind which are aperture to emit the sound of the organ, whose console is placed i the centre of the orchestra on centre line.

The main part of the auditorium is crowned by a shallow dome, whose centre merges into a cylindrical shaft ter minated by a sliding circular lantern of stained glass. Thi can be slid away during hot weather, leaving the shaft ope to the sky. The whole is automatically controlled.

The platform has been arranged to accommodate vocalis and soloists generally.. It has a system of lighting whic allows the whole of the stage portion to be flooded wit brilliant light. There is a drop curtain background cove ing the screen, which gives prominence to the artist.

Mural decorations to the stalls are carried out in mahogan wainscoting, surmounted by a rich bronze frieze of ba relief cherubim, broken at intervals by an elongated oct gonal frame glazed with amber glass, relieved by a ste cilled design, behind which lights are arranged to give cameo effect to the whole when lit.

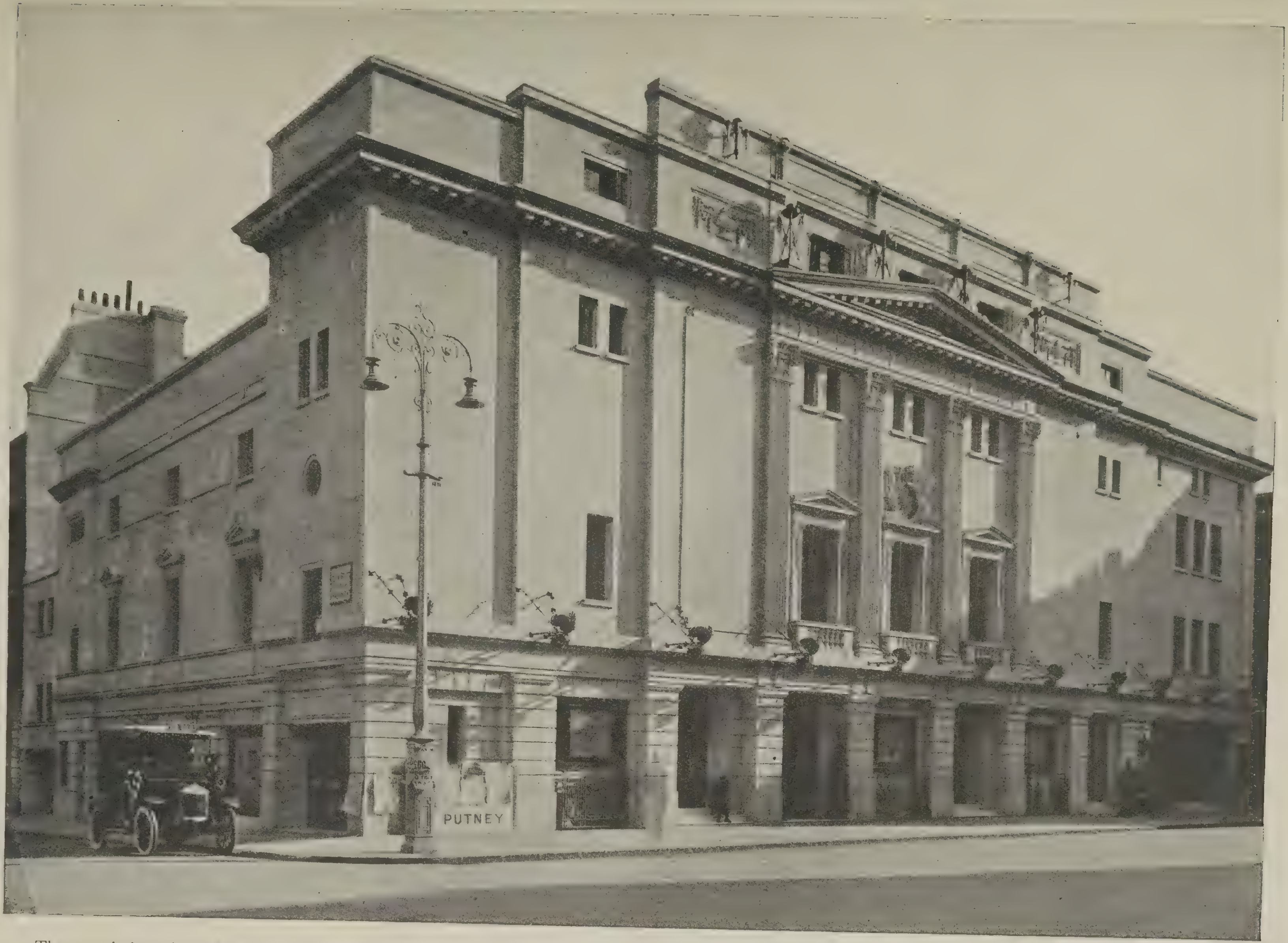
The carpets and draperies and chair coverings have be executed to the architects' design by a Parisian firm.

The circle is treated in a lighter style, the field bei divided into a series of panels surmounted by a rich corni with a panelled mahogany dado. The balcony is treat in a similar manner.

Beneath the main entrance hall and the portion of t Strand pavement immediately in front of same, there is Dutch buffet, which is entered by a pair of swing glass doo almost on centre of front elevation. A marble staircase lea down to the main buffet underneath the Strand paveme The walls and ceiling are treated with oak battens, form plaster panels, which plaster is treated with a rough scou effect common in old Dutch work. Massive columns w the same treatment support beams taking the ceiling. series of lay-lights glazed in old leaded-light work, w blown-glass bull's-eyes, gives natural daylight to the wh of the main buffet, and may be opened for ventilati At one end is an old Dutch-tiled hearth fireplace with overmantel, broad mantelshelf, and pipe rack bene A long bar is situated at the back wall, carried out in same style, with spacious cupboards and back fitti An open balustrade divides the greater buffet from a le one on a higher level. The moulds of the newels and ba ters, etc., have outlines the sections of which give cu which may be found on Dutch clogs.

The smaller buffet has been set aside for a lunch buffet. The bar is treated in a similar way to the o before mentioned. The windows overlook Durham H

Bertie Crewe and Gunton and Gunton, Associated Architects



The completion of the New Tivoli Cinema Theatre marks a further stage in the rebuilding of a widened Strand. The front elevation shows a good deal of restraint in architectural treatment. A feature is made of a series of ornamental bronze brackets, from which the façade is flood-lighted at night time.

THE LIBRARY
OF THE
UNIVERSITY OF ILLINOIS

treet, and are treated in the same way as the lay-lights bove mentioned.

An exit with a staircase as before described leads out nto Durham House Street.

A lavatory is provided at the end of this buffet, the door f which is masked in with the mural decorations.

The heating is by electricity, also the lighting. The ttings, bracket and pendant, are of an old lanthorn design n coinage metal.

The whole of the block extending from Strand to Adelphi rches, and overlooking Durham House Street, for the idth of the main entrance hall, has been confined to staff vatories, public lavatories, and management offices, etc., ith the exception of the main entrance hall itself, foyer, uffet, and staircases to various parts of the house.

In the basement are provided rooms for various artists, ale musicians, library, and lavatory accommodation, usical director, female musicians and lavatories, female ocalist and lavatory, male vocalist and lavatory, with aircase and escape to Durham House Street.

On the stalls level are stalls ladies' and gentlemen's vatories.

On the entrance level a large room is provided for female aff, with various toilet requisites.

On the circle level are circle ladies' lavatories, etc., and large office for the management, overlooking the Strand.

On the balcony level are balcony ladies' lavatories, and o offices and lavatory for management. Above this again e balcony gentlemen's lavatories, male staff lavatories, d a landing where a small telephone house-exchange is stalled.

Numerous smoke-proof inter-communication pass doors e provided throughout the house, giving access for the nagement to any particular part of the house by the ortest possible route.

Fire hydrants have been arranged all over the house in e most convenient positions. Sprinklers are provided to draperies, curtains in front of screen, and valance, uated so that they are automatically flooded in case of fire. While mentioning sprinklers, it is worth noting that the steelwork supporting the house in Adam Street has been fitted with a system of sprinklers in case of fire. This is in consequence of the steelwork being exposed by reason of there being vaults and sub-vaults immediately beneath the pavement. In the event of there being a fire the sprinklers come into operation and automatically ring an alarm bell situated on the outside of the building.

The heating and ventilation are accomplished by means of warm air extracted, upon the Plenum system, fresh air being forced into the auditorium at each level, after being washed and heated or cooled to suit the season, and extracted by means of exhaust fans in the roof and external walls. This system of heating and ventilation entirely prevents vitiated air and enforces a continual circulation.

Installed throughout the building is a vacuum-cleaning system which enables all parts of the house to be vacuum cleaned without inconvenience.

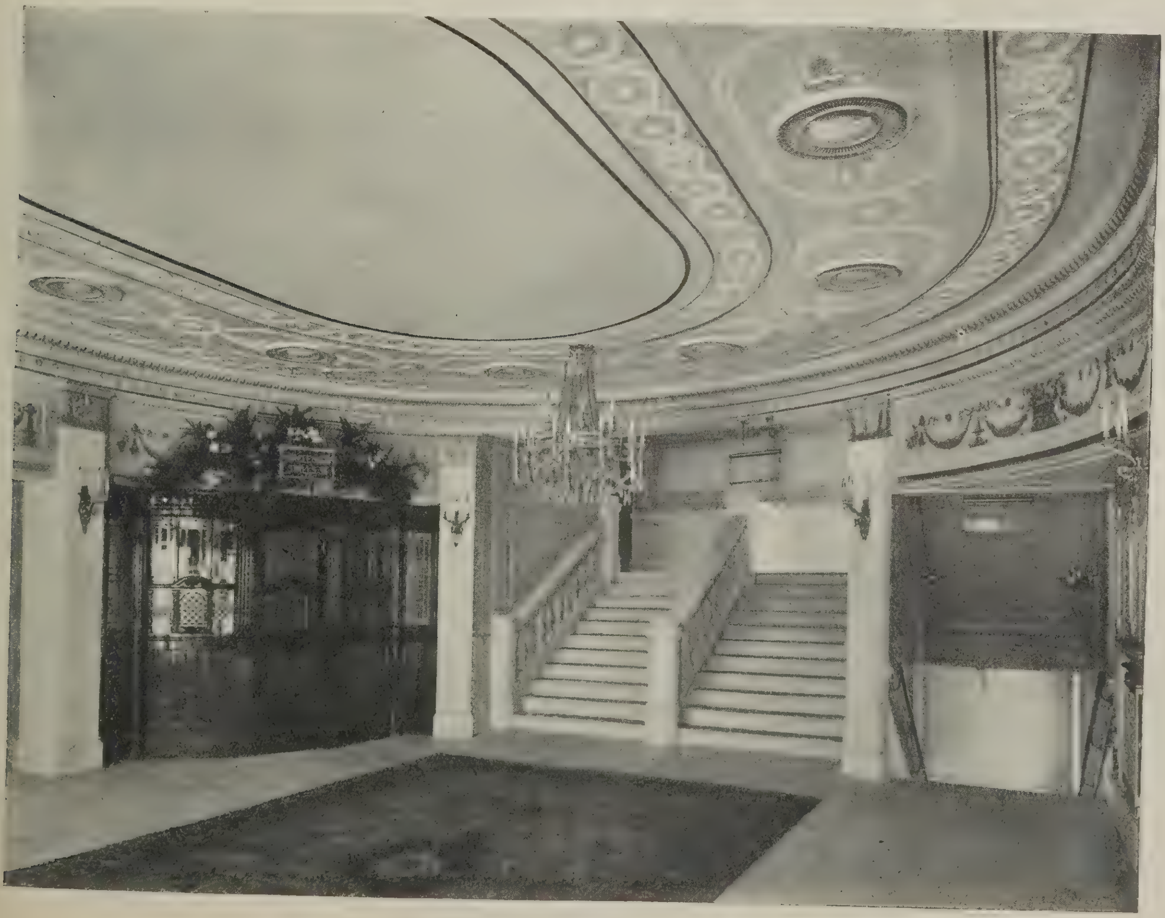
A suitable foyer has been arranged level with back of circle, which allows for expansion of incoming or outgoing patrons.

The house is fed by two separate systems of lighting from two separate sources, so that in the event of one system going out of commission the other provides all the necessary light for the safe working of the house.

The auditorium can be flooded with various-coloured lights and their combinations, and are worked on dimmers so that they can be gradually brought into life from a dull glow to a maximum brilliancy, and be made to die away with the same gradual process.

The whole is lighted by secret lighting, so that no naked light can be seen. A great feature in this respect is made of the main dome and lesser surrounding domes. The large dome has a span of 50 ft. Other lights are arranged in panels carrying out the cameo effect already described. The whole of the lighting is controlled from the biograph chamber.

A system of telephones is installed throughout the house, enabling any particular officer of the management to be



THE ENTRANCE LOBBY

communicated with, thereby facilitating the dressing of the house, etc.

The biograph chamber is fitted with two Ross biograph machines with every convenience of operation, rewinding room, and other apartments for various equipments, with separate emergency escapes over the roof.

Immediately under the Strand pavement is an artesian-well chamber, the well being 574 ft. deep, with the requisite pumps, etc. The water was found to be of exceptional purity. It is pumped into the large storage tanks on the roof for various requirements of the house.

The organ contains, among other features, a peal of bells ranging over four octaves, a full tympanum consisting of side drums, kettle drums, and pom-pom, and, what makes it unique, a complete xylophone stop. It has, in addition, three manuals and a convenience in changing stops for either hand or foot, besides many other improvements.

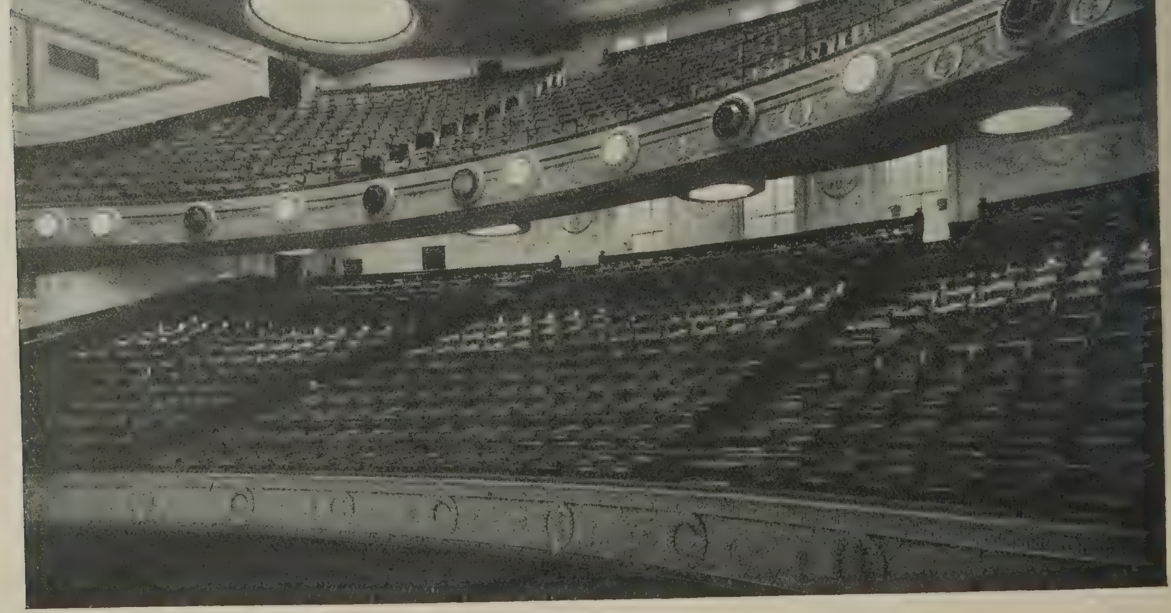
The lighting scheme was designed by the Illuminating Engineering Department of the G.E.C., in conjunction with Mr. Bertie Crewe. The whole of the electrical installation work was entrusted to the Berkeley Electrical Engineering Co. The exterior of the building facing the Strand is floodlighted by twenty-four G.E.C. floodlights, twelve equipped with 500-watt Osram gasfilled lamps and twelve with 200-watt lamps. These are mounted on ornamental bronze brackets and hidden by bronze screens. The novelty of the auditorium installation lies in the fact that practically all the lamps are concealed. There is a total absence of fittings projecting from ceiling or walls, even the police lighting, except the exit signs, being included in the indirect lighting scheme.

The main illumination is derived from the domed ceiling. As will be seen from the ceiling plan and sectional view reproduced, the ceiling consists of one large shallow dome, 54 ft. in diameter, and six subsidiary domes, 16 ft. in diameter. Hidden within a moulded cornice around the circumference of each dome is a row of Osram lamps in specially designed reflectors. These are arranged in three circuits, and are coloured amber, blue, and rose respectively. Each circuit is controlled by a dimmer, and the switching is so arranged that the colours may be used independently or may be blended together to obtain an almost endless variety of colour effects.

Under the gallery and balcony the lighting is supplemented by a number of ceiling panels of special design, which are arranged to reproduce the same colour effects as the main ceiling lights.

Additional illumination is obtained in various parts of the house by amber-coloured panels let into the walls. A number of G.E.C. projectors with colour sprayed Osram gasfilled lamps are also sunk flush in the front of the gallery to illuminate the proscenium arch.

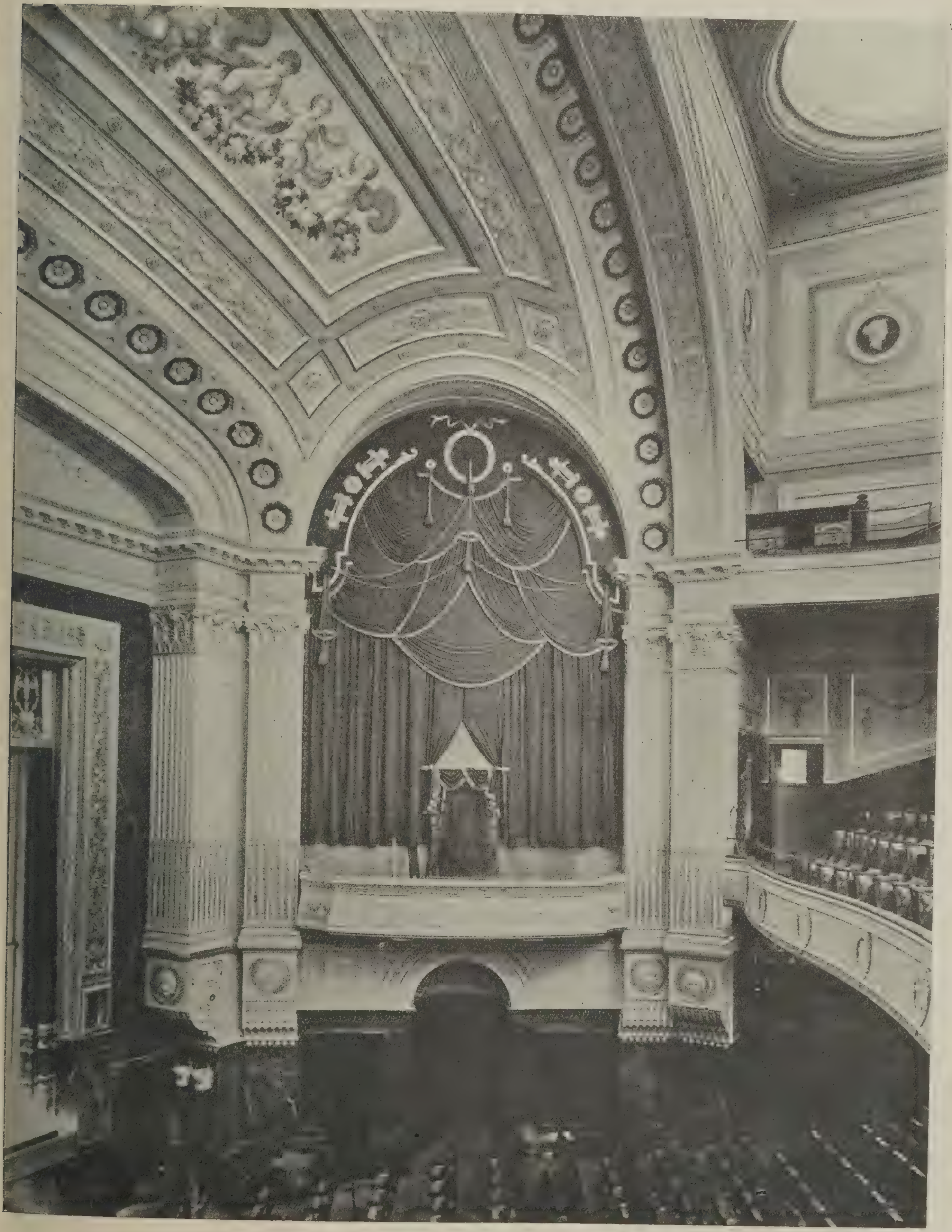
The general contractors were Messrs. F. G. Minter, of Ferry Works, Putney, who were also responsible for the stonework, plumbing and sanitary work, down pipes, and rainwater heads, special woodwork, special doors, etc., and under whom the entire contract has been carried out with complete success. The sub-contractors were as follows: Ragusa Asphalte Paving Co., Ltd. (asphalte and roofings); F. B. Francis (carved stonework); Moreland Hayne & Co., Ltd. (steelwork); Kleine Patent Fire-resisting Flooring Syndicate, Ltd. (fireproof floors and partitions); Adamit Co., Ltd. (stucco—Atlas White); F. Jukes (casements an casement fittings); Mellowes & Co., Ltd. (sanitary ware an fittings); W. B. Simpson and Sons (flooring—mosaic marble, stone, and stair treads); Berkeley Electrica Engineering Co. (electric wiring and electric light fixtures lifts and cranes, electric bells and telephones); F. de Jon & Co., Ltd. (plaster work—fibrous and modelled); Wotto and Sons (stained glass and leaded lights); Carter and Aynsley, Ltd. (art metal work and door furniture); and F. Juke (art metal work); Fenning & Co., Ltd. (marble work) H. Hargreaves & Co. (heating and ventilating); Jardin Smith & Co. (organ); J. H. Gray and Son (lightning conductors); F. Burkitt (fireproof curtains and doors); I Grand Sutcliff and Gell, Ltd. (wells and well-sinking Leyland and Birmingham Rubber Co., Ltd. (rubber tiling George Pixton & Co., Ltd. (chairs); British Vacuum Clean Co., Ltd. (vacuum cleaning plant); General Electric C (floodlighting and interior concealed lighting).



A GENERAL VIEW OF THE AUDITORIUM.

Current Architecture. 194.—The New Tivoli Cinema Theatre: Detail of Proscenium Ceiling and one of the Boxes

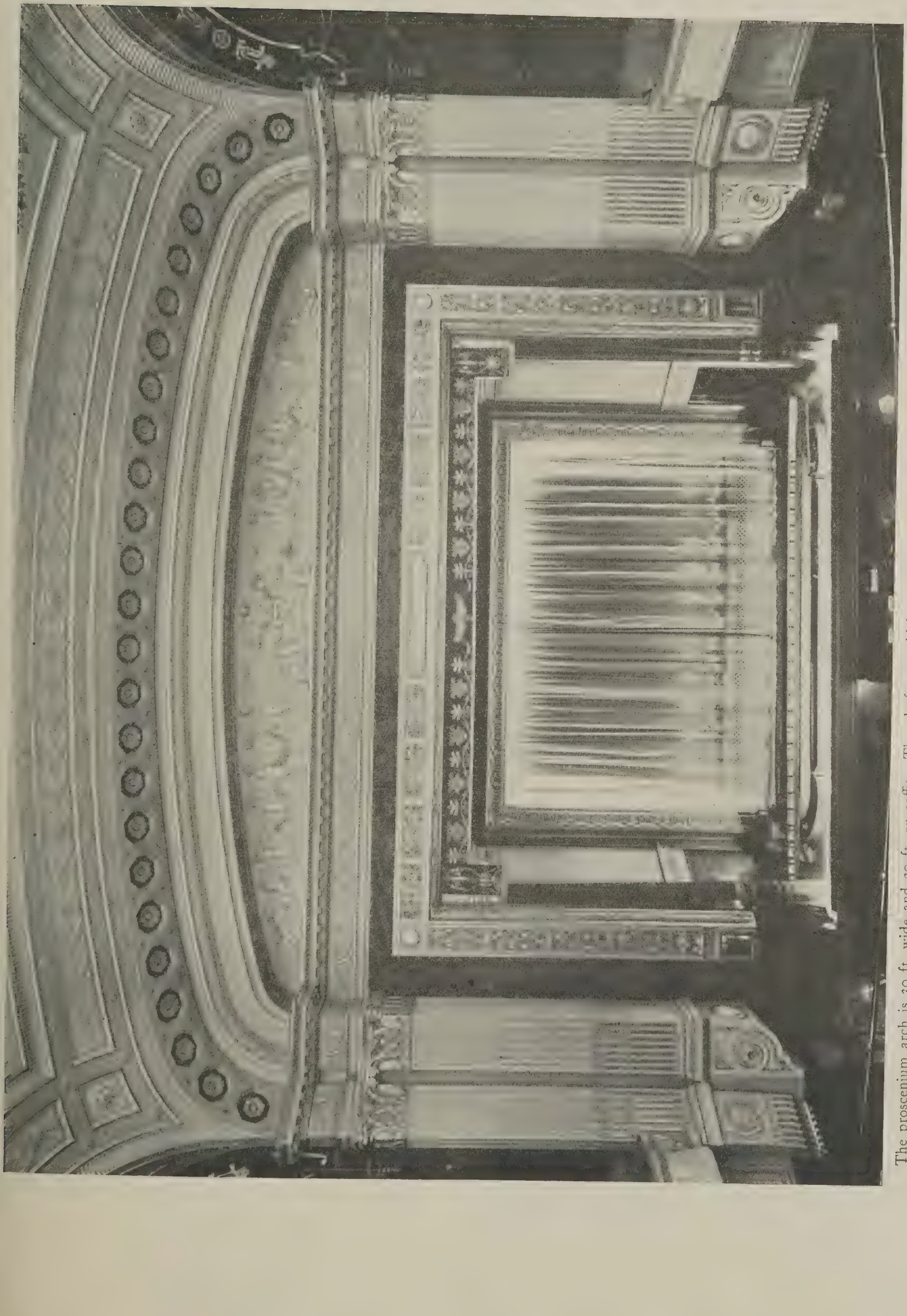
Bertie Crewe and Gunton and Gunton, Associated Architects



The decorative treatment of the interior of the Tivoli Theatre is Empire style throughout. Gossamer fireproof curtains are provided to the box arches, concealing the pipes of the organ. The ceiling, expanding from the proscenium towards the main part of the auditorium, forms an admirable amplifier of sound.

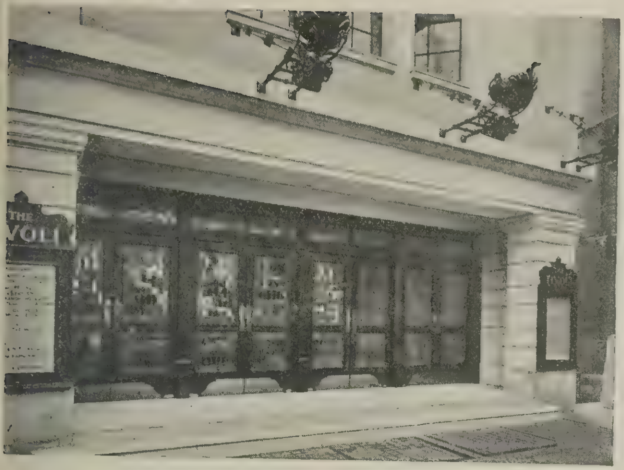
THE LIBRARY
OF THE
UNIVERSITY OF ILLINOIS

Bertie Crewe and Gunton and Gunton, Associated Architects

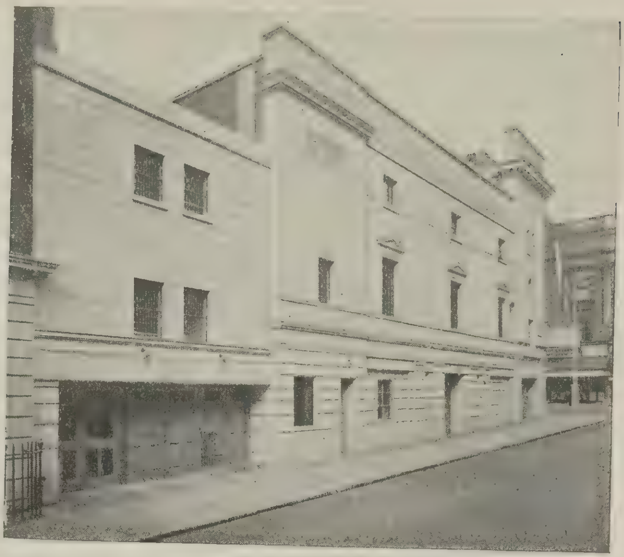


The proscenium arch is 30 ft. wide and 20 ft. on soffit. The platform, which provides accommodation for vocalists, has a drop curtain background covering the screen, which gives prominence to the artist. The whole of the stage portion can be flooded with brilliant light.

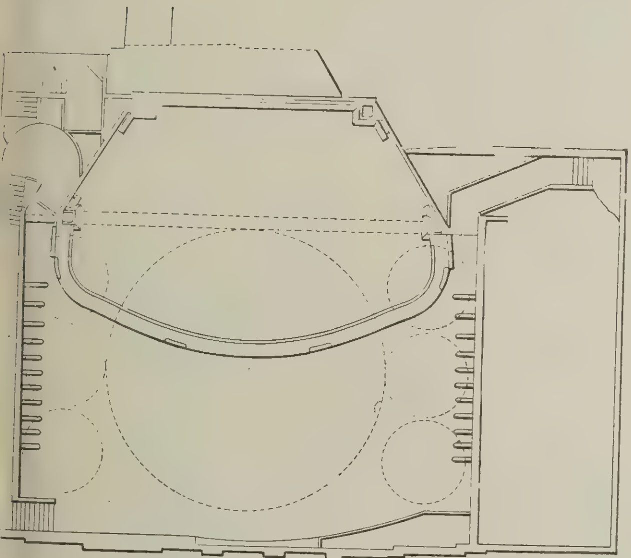
THE LIBRARY
OF THE
UNIVERSITY OF ILLINOIS



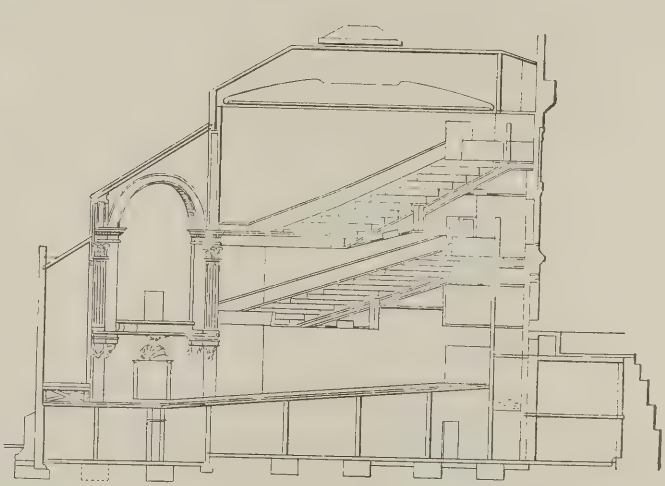
THE ENTRANCE DOORS.



THE ELEVATION TO ADAM STREET.

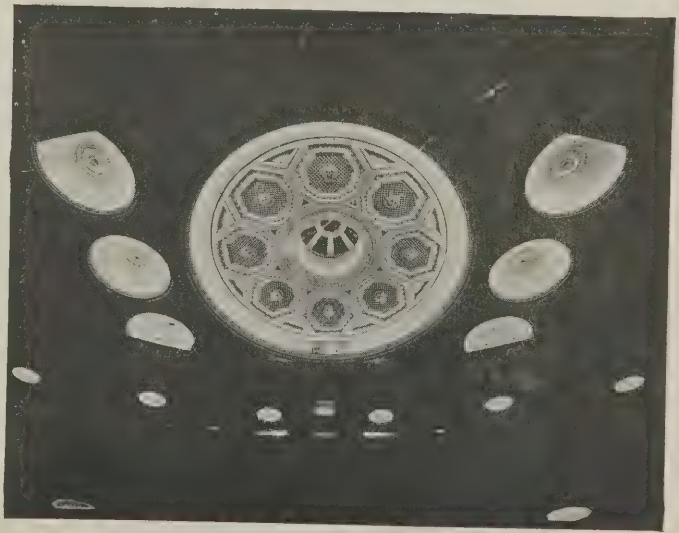


ROOF PLAN OF THE THEATRE.



A SECTION THROUGH THE THEATRE.

EXTERIOR OF THE THEATRE—FLOOD-LIGHTED.



THE CEILING WITH ITS CONCEALED LIGHTING.

THE NEW TIVOLI CINEMA THEATRE.

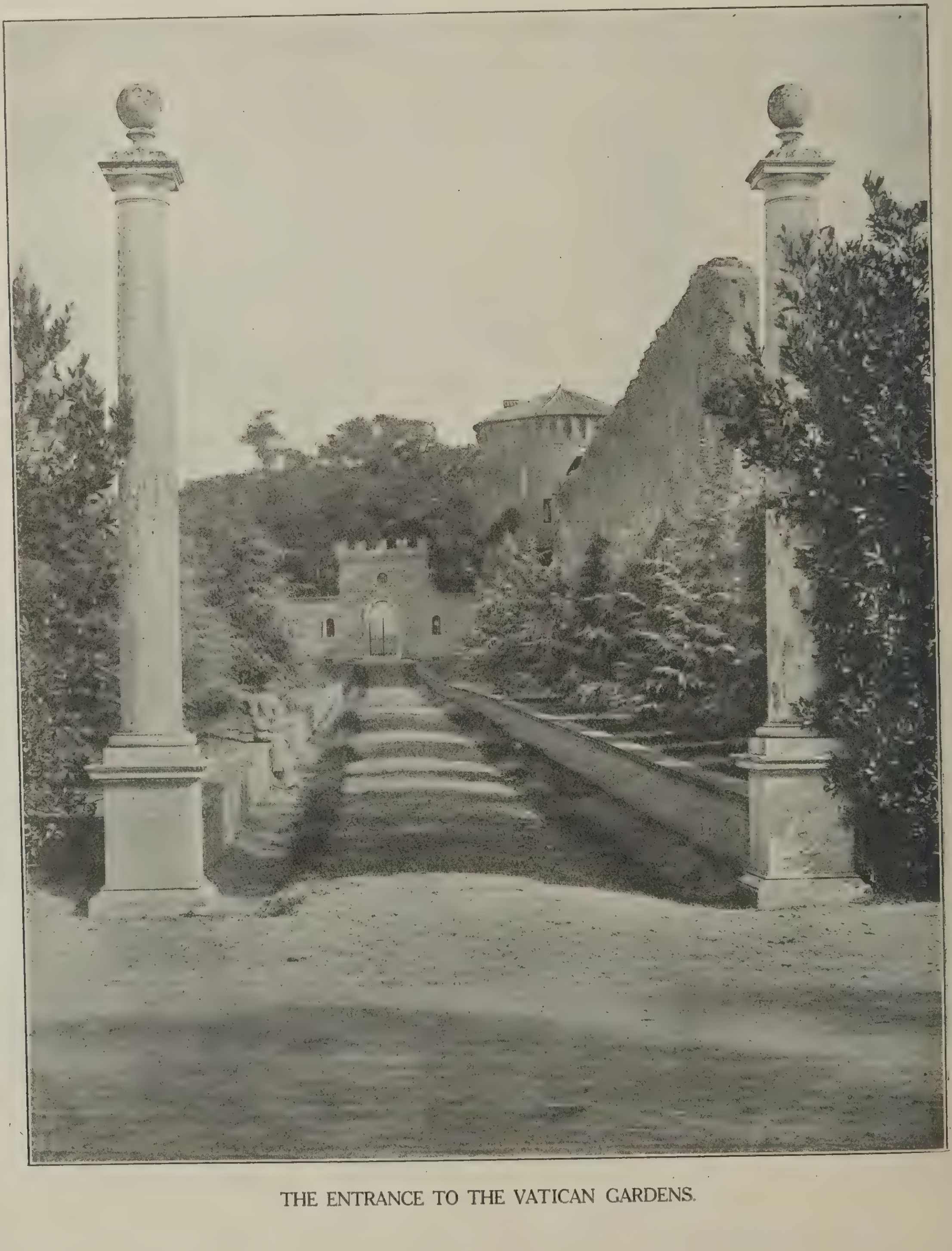
BERTIE CREWE AND GUNTON AND GUNTON, ASSOCIATED ARCHITECTS.

The Papal Villa in the Vatican Gardens

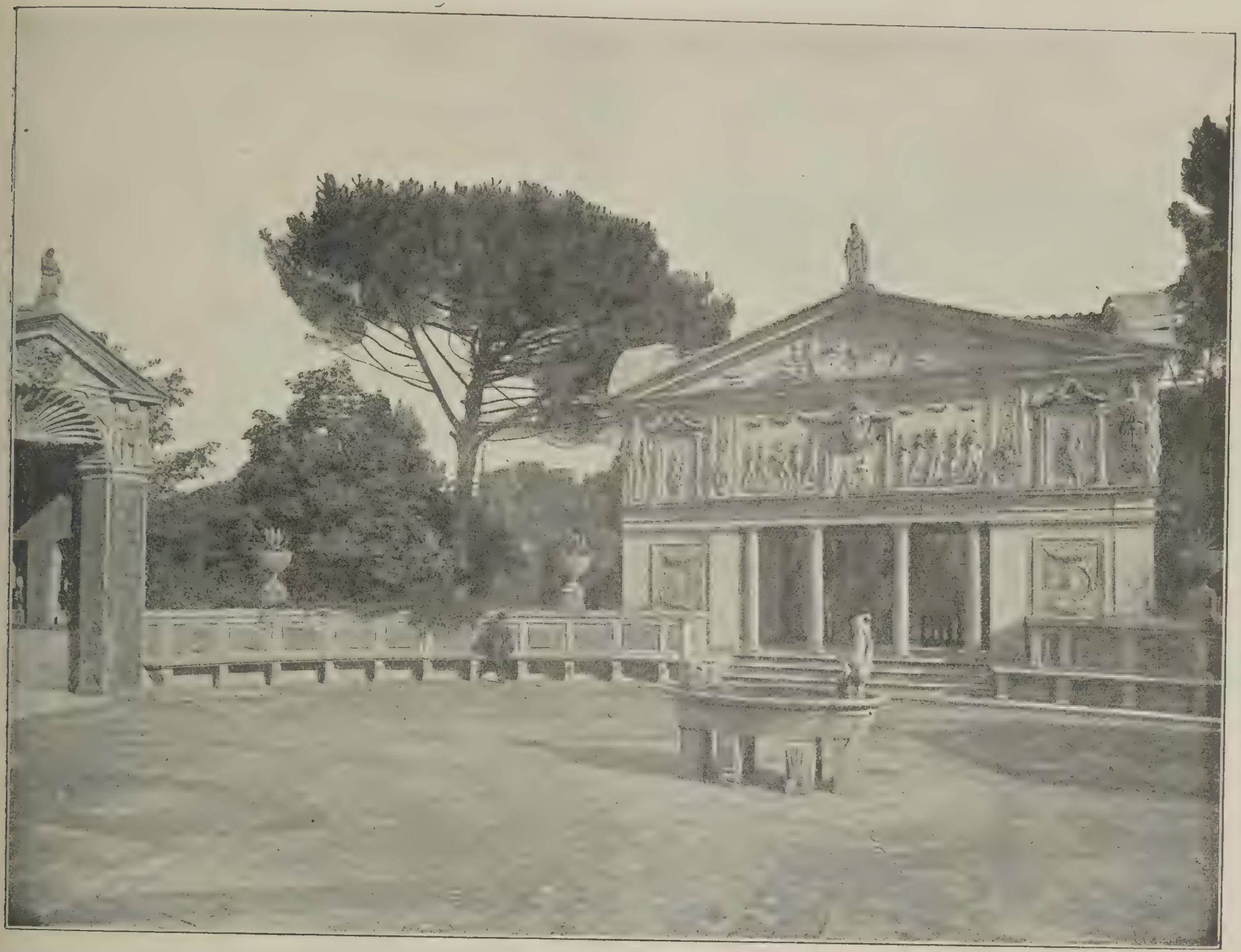
A NEW magazine that has very quickly found a niche for itself is "The Illustrated Review." The fact that it is edited by Mr. Hilaire Belloc is a sufficient guarantee of its literary quality; the further fact that it contains a regular feature ("On a Rambling Road") by Mr. G. K. Chesterton, is an indication of the popularity of its appeal. The policy of the paper is a wide one. The current issue (No. 4), for example, contains a number of features of varied interest, including "Teaching the Laws of Health," by the Rt. Hon. Christopher Addison, M.D.; "Concerning Fine Prints," "Animals in Modern Sculpture," by Kineton Parkes; "New Flags of Europe," by Cecil King; and fiction by J. C. Squire and Maurice Baring. As is to be expected in a modern magazine of wide and cultured taste—architecture has a prominent place. The current issue contains an interesting article on "The Papal Villa in the Vatican Gardens," by Grace V. Christmas, from which, by the courtesy of the publishers (Eyre and Spottiswoode, Ltd.) we are able to quote the following extracts and to reproduce the accompanying blocks.

A garden in England, says Miss Christmas, and a garden in Italy are two very different things. Many a time, in the scorching days of an Italian summer, I have visualized a cool, old-fashioned English garden with the harmonious colouring of its herbaceous borders, its velvety lawns, its rioting roses, its subtly blended fragrance of sweet peas and lavender, clove carnations, and mignonette, and often, too, in England, my inner vision has seen the stately cypresses and pine trees, the terraces and fountains and statues, the formal grouping of gorgeously tinted flower-beds, which I had learnt to love in the gardens of Italy.

The Casino del Papa, or, as it is sometimes called, the Villa Pia, was built by Pope Pius IV on a somewhat elevated spot in the shady gardens of the Vatican Palace, and frequently during the months of August and September



THE ENTRANCE TO THE VATICAN GARDENS.



SUMMER HOUSE ERECTED BY PIUS IV DURING THE SIXTEENTH CENTURY FROM THE DESIGNS OF PIRRO LIGORIO.

o XIII was in the habit of taking up his residence in that lightful retreat. The "loggia" overlooks Eternal Rome, d the breeze that cools the sultry air is wafted straight m the blue-green waters of the tideless Mediterranean, ich sparkles in the sunshine far beyond the purple dis- nce, miles and miles away.

Whether the successors of the venerable Pontiff resort change of air to the Villa Pia I cannot say, but it was a ot greatly beloved by Pope Leo. It is a charming little reat, and its appointments, besides being artistic, are o eminently up to date, a combination seldom seen in ly, where the finger of modernity is usually a destroyer the poetry of the past. It was here, when the world was unger, that Pope Pius IV was visited by his nephew, St. arles Borromeo, and where he inaugurated those meetings scribed as "Notte Vaticana," which were attended by all great philosophers and poets of the century. Here also is VIII and Gregory XVI held many of their audiences.

Designed by the famous architect, Pirro Ligorio, the la is decorated with paintings from the brush of Baroccio, chero, and Santi di Tito. It is lighted throughout by tricity, and can boast of a lift. The state-room, where liences are granted, possesses a very effective, if not hly artistic design in its electric lighting, for the vaulted f is painted a pale azure tint to represent the sky, and studded at intervals with small three-cornered holes. se, when the light is turned on, gleam out like stars. ding out of this state-room is the Pope's private study, ich is furnished in a severely plain style, and contains rge writing-table with a silver inkstand, and it was in apartment that Pope Leo composed those Latin verses ch so pleasantly beguiled his moments of leisure. It an American lady—so we were told by the courteous, ve-faced caretaker who does the honours of the Villa visitors—who, on the lookout for interesting souvenirs her rapid tour through Italy, appropriated the Pope's penholder to add to her (no doubt) large collection. Some time after her departure the loss was discovered by a servant who, fearing a reprimand for carelessness, replaced it at his own expense, but ever since that bygone episode all strangers have been subjected to a far stricter supervision.

There is a wild picturesqueness about these ancient pleasure grounds of the Vatican Palace that is very little in accordance with the English idea of a garden, for they are surrounded by the high walls of the Borgo, and interspersed with fountains and statues and shady avenues. With regard to cultivation, however, in the British sense of the term, there is none. When spring, with all her magic, has come to Italy, the groves are carpeted with purple fragrant violets and masses of many-hued anemones, and as even in spring the sun can be very ardent in his attentions the sound of water splashing over miniature cascades greets the ear with a refreshing sense of coolness. There is also an inner garden belonging to the Vatican visible from the windows of the Egyptian Museum, and here, so far as formal flower-beds are concerned, there is some attempt at cultivation. It is, in fact, merely the second quadrangle of the Vatican, planted with shrubs and flowers, and is called the "Giardino della Pigna." For in the semicircular niche at the end of the garden stands a gigantic fir cone, 11 ft. high, from which its name is derived. This cone, which, we are told, originally crowned the mausoleum of Hadrian, was at first removed to the front of the old Basilica of St. Peter's, and afterwards transferred to the spot which it now occupies, two bronze peacocks, also taken from Hadrian's mausoleum, standing on either side of it. It is to be seen in ancient frescoes of the old Basilica, and it evidently made a profound impression on the mind of Italy's greatest poet, for Dante compares it to the giant's head which loomed dimly through the mist in the last circle of hell:

> "La faccia mi parea lunga e grossa,
> Come la pina di San Pietro in Roma."

Constructing the Curved Stairway

THE matter of constructing a curved stairway seems to have always been somewhat of a mystery to the layman, but it is very simple and merely requires, like any other stairway, the work of a good stair builder. Where the stair-string under the handrail is closed with a partition, it is of course very easy to support the stairway on that partition, as all the constructional work of the stair can be entirely concealed. But, if the inner string under the handrail is without a partition to support it, one can then see under the stairs, and the construction must therefore be concealed in the stair soffit, just as in the case of a stair directly over another stairway beneath.

In this case, and when the outer edge or string of the stairway is formed by a partition or wall, the stair must be supported by braces or supports from that wall to the inner string of the stair. This inner string can, of course, be continuous from floor to floor, and together with the carriage or other support that is placed under or inside of it, forms in itself a sort of arch or truss that will take a considerable portion of the weight of the stairway. Then in the thickness of the soffit supports are carried out at an angle so that they follow the curve of the soffit, the outer end of one support being carried by another at an intersecting angle, which in turn transmits its load to another support, and so on until the load is carried to the floor from which the staircase starts. The thicker the stair soffit can be made the easier it is to provide sufficiently heavy supports, but even in a thin, graceful stairway, entirely of frame construction, the supports and carriages can be braced and trussed from the wall to the string, and from one brace to the other, so that a most rigid stairway can be built with little apparent support. Where a staircase is entirely free-standing, such as a curved stairway in a square well, the construction is done in the same manner, except that both inner and outer strings become continuous supports, with the braces trussed between them. Then at the mid-point of the stair, where it becomes more or less tangent to the wall, it is usually possible to provide an inconspicuous brace that is practically concealed from view.

When a stairway is of reinforced concrete, iron or steel, it is merely a definite engineering problem to provide sufficient strength to insure support, but it is possible to construct self-supporting stone steps so as to form a spiral stair merely by placing one solid stone step upon another until the top is reached and clamping them together with small iron braces near the inside edge, the whole then forming a keyed arch, which, like any arch, would collapse if one of the keys were removed.

In designing the spiral or curved stairway, the principal consideration must be that the risers and treads be properly proportioned at the point of usual travel; that is, that there be an easy relation of rise to tread at the place where a person usually walks up or down the staircase, which in an average stairway would be about 12 in. from the inside line of the handrail. Of course, in any curved stair the treads will naturally become narrower as they approach the railing and wider as they get farther from the centre of the curve. A spiral or curved stairway properly designed will be more convenient of travel and an easier stair than a straight stairway of similar proportion, as well as being more graceful and pleasing in appearance. The one thing that sometimes makes a curved stair difficult of ascent is the fact that the steps are brought so sharply together as they approach the handrail that they become too narrow to allow sufficient space to walk. In very steep spiral stairs, which must be crowded into a limited space, the risers are sometimes cut out to allow room for the feet, to avoid the stubbing of the toes that would occur if the risers were solid. There are many such examples in old American houses, where such a stair was often supplementary to the main staircase of the house. They can be made beautiful, but not comfortable for general use. In an ordinary commercial spiral stairway such as is often built around a centre post, the risers are generally entirely open.

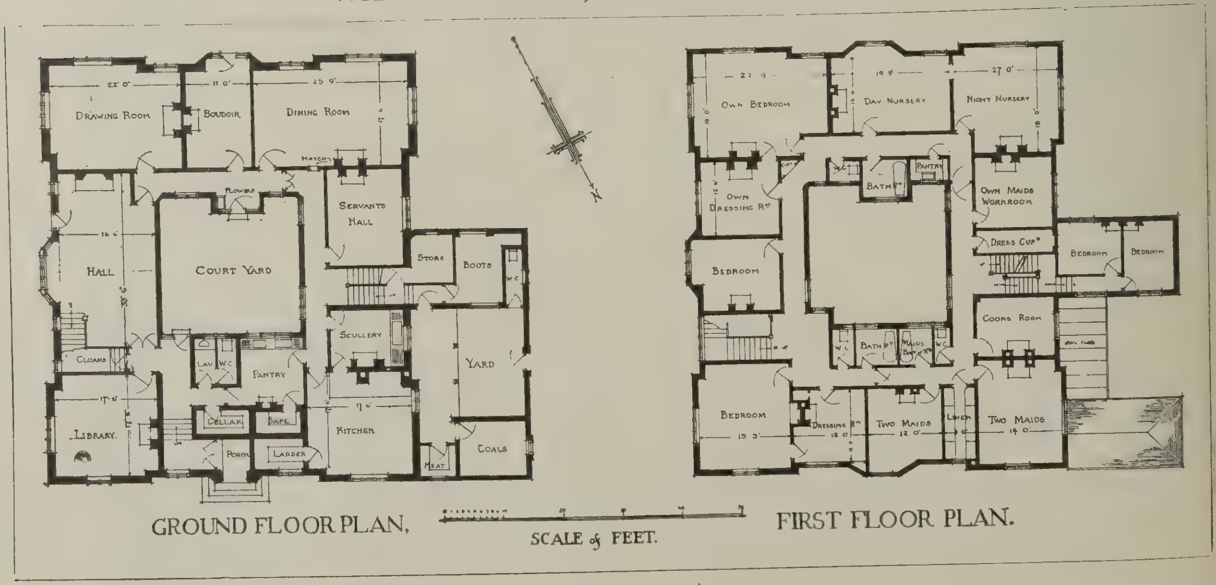
Such stairways are often sold from stock designs, usually of iron or steel, and represent the least possible space in which a stairway can be placed. They are made as small as 3 ft. 6 in. in over-all diameter, and, of course, are so steep that adequate headroom is secured with each complete turn of the spiral. About the only other point in which the design of a curved stairway presents a problem differing from that of an ordinary stair is in the matter of headroom, as occasionally the wellhole opening is so designed that, while there is sufficient headroom when one takes the usual line of travel, close to the rail, the sharp, radiating lines of the treads bring the outer portions of the lower steps so far out as to end where sufficient headroom may be lacking.

MOTT B. SCHMIDT.

(*Reprinted from "The Architectural Forum."*)

Sherwood, Newton St. Cyres, Devon

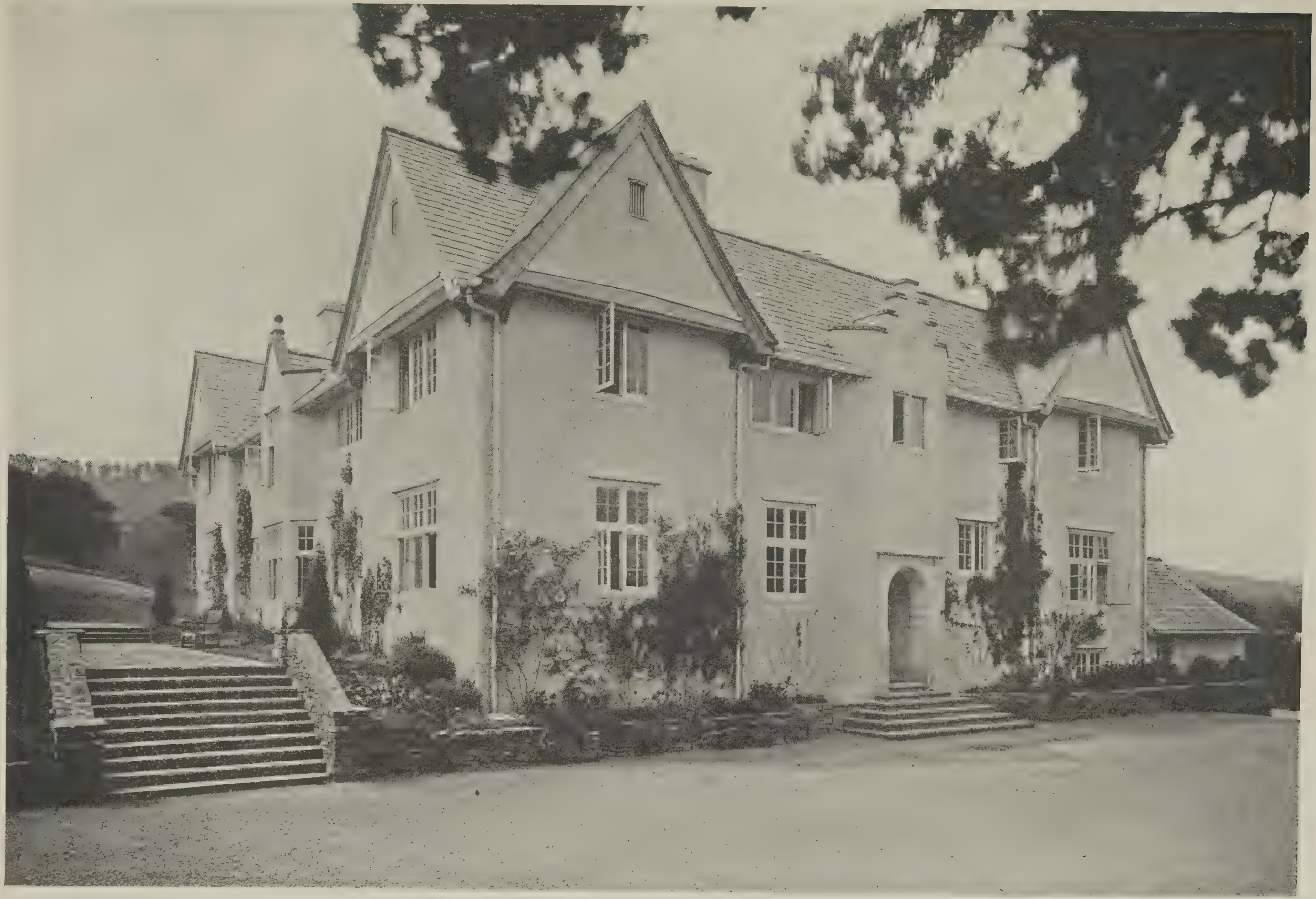
WALTER CAVE, F.R.I.B.A., Architect



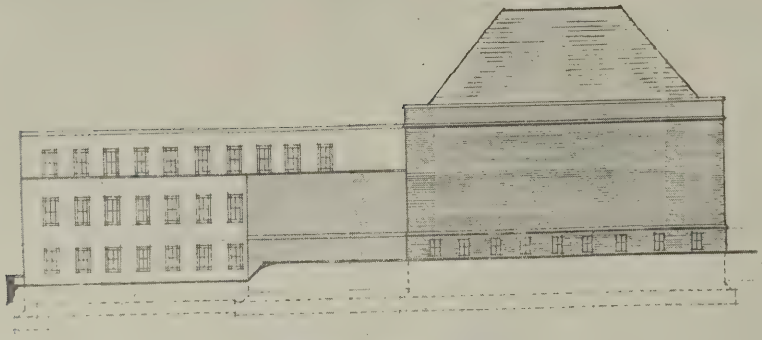
(*See opposite page.*)

Modern Domestic Architecture. 59.—Sherwood, Newton St. Cyres, Devon

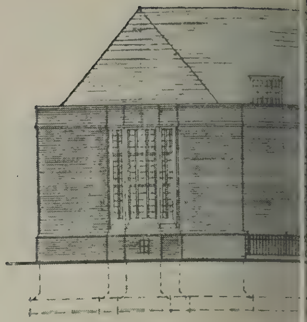
Walter Cave, F.R.I.B.A., Architect



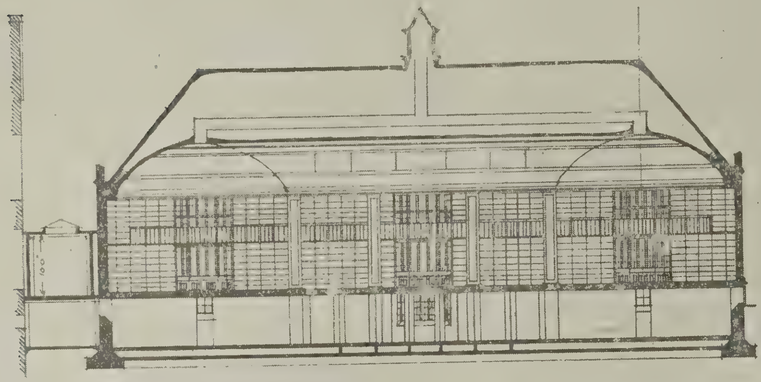
Brick with rough-cast facing has been used for this house, the roof being red tiled and having oak barge boards. The rooms are arranged round a central court.



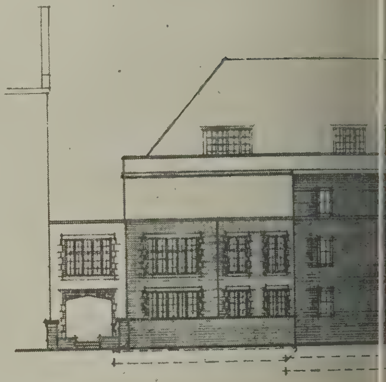
N.W. ELEVATION



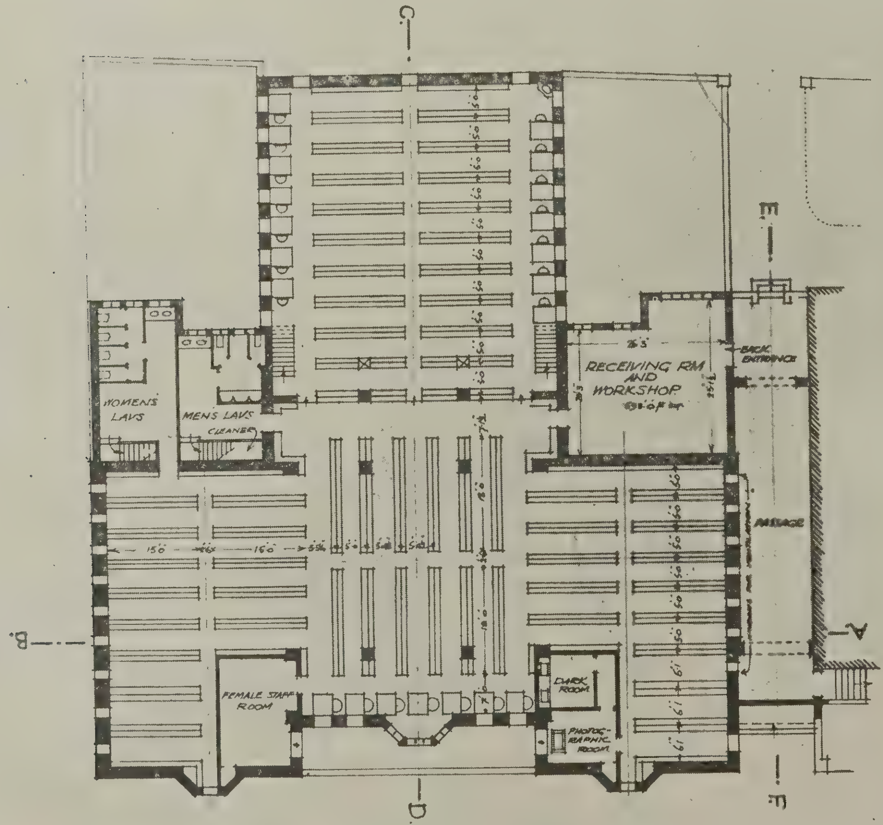
S.W.



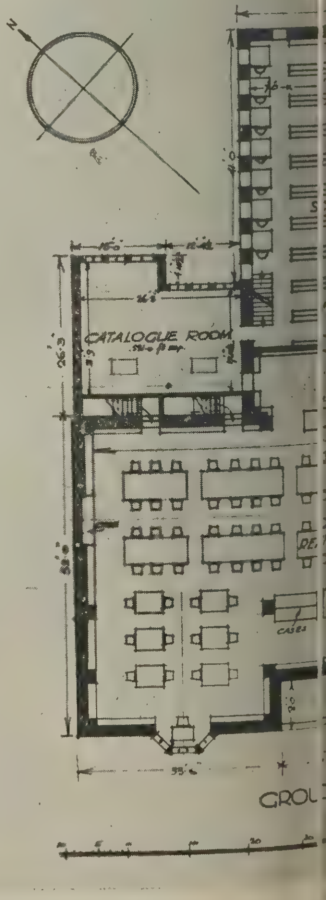
SECTION.A.B.



N.E.



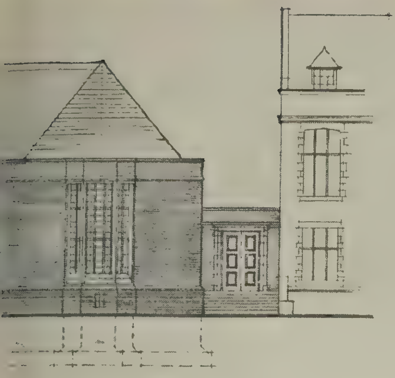
LOWER GROUND FLOOR PLAN

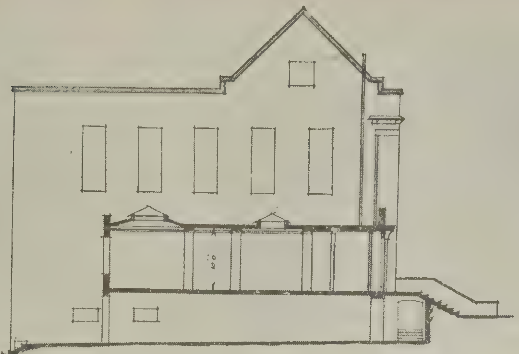


GROU

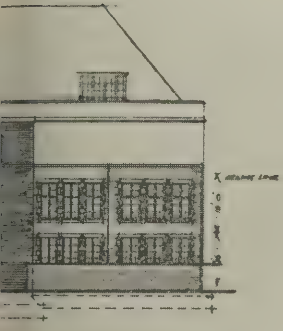
ARMSTRONG COLLEGE, NEWCASTLE-ON-TYNE, LIBRARY COMPETIT

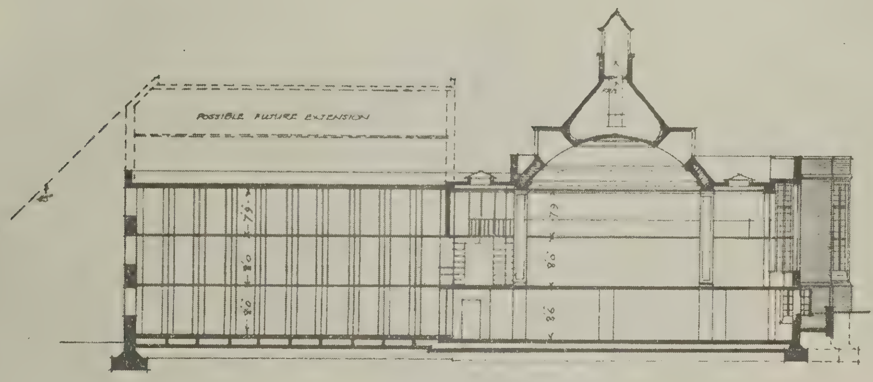
(The awards in this Compet





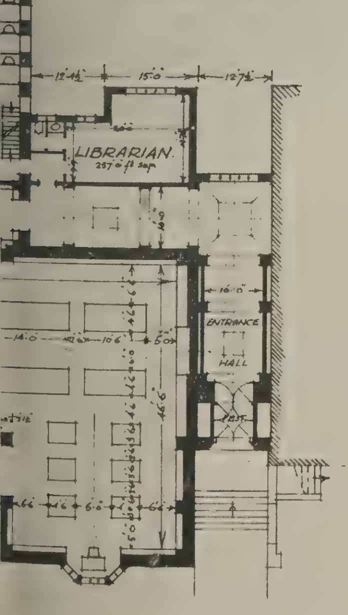
SECTION.E.F.



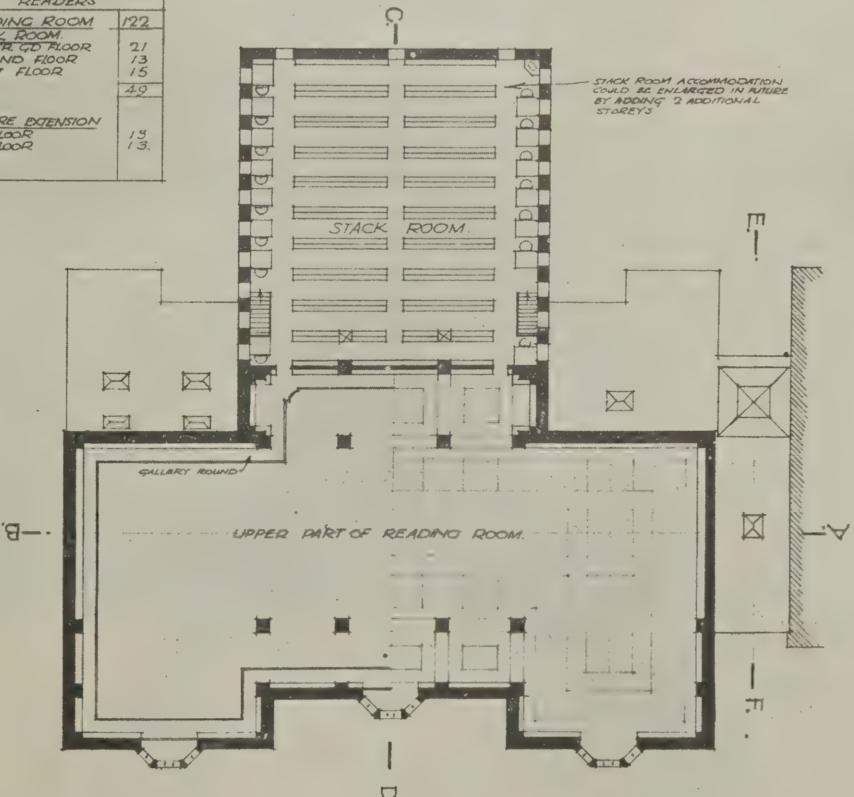


SECTION.C.D

SCHEDULE OF ACCOMMODATION			
BOOKS		READERS	
STACK ROOM		READING ROOM	122
LOWER GD FLOOR	98200	STACK ROOM.	
GROUND FLOOR	27600	LOWER GD FLOOR	21
FIRST FLOOR	29400	GROUND FLOOR	13
		FIRST FLOOR	15
	155200		49
FUTURE EXTENSION			
2ND FLOOR	29400		
3RD FLOOR	29400	FUTURE EXTENSION	
READING ROOM.		2ND FLOOR	13
1ST TIER	11700	3RD FLOOR	13.
2ND TIER	13500		



AN


C
STACK ROOM ACCOMMODATION COULD BE ENLARGED IN FUTURE BY ADDING 2 ADDITIONAL STOREYS
STACK ROOM.
E
GALLERY ROUND
B
UPPER PART OF READING ROOM.
A
F
D

FIRST FLOOR PLAN

MIATED DESIGN. A. DUNBAR SMITH, F.R.I.B.A., ARCHITECT.
in our issue of last week.)

Book Reviews

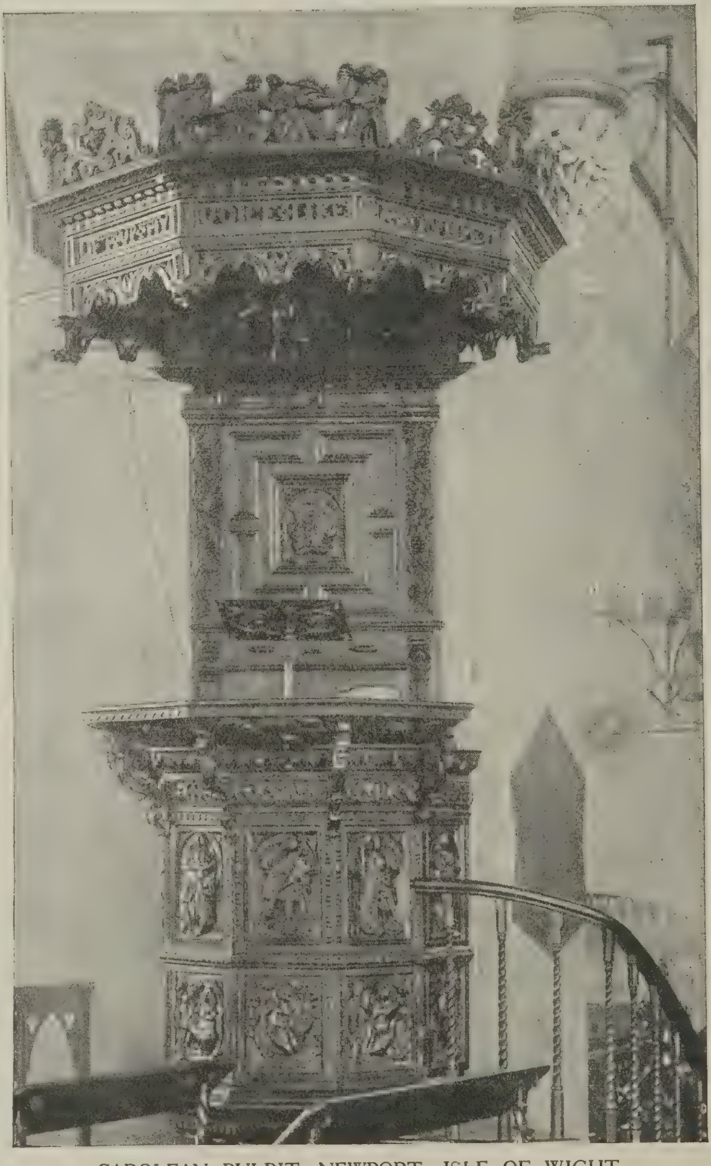
English Church Furniture and Fittings*

THE idea of this book, wrote the author before his death, grew out of its predecessor "The English Parish Church," which was published by Messrs. Batsford about the close of 1914. The writer was the joint author, in conjunction with Dr. Henry Harvey, of a book on somewhat similar lines, styled "English Church Furniture," but this work is projected on quite different lines. The present book is stated to be in no sense a mere repetition or abridgment of its predecessors—which aimed at producing long and complete lists, county by county, of such matters as fonts, pulpits, screens, etc.—and fully half of this book is of absolutely novel details which are not even alluded to in the "furniture" work.

Another distinctive feature is the wealth of new illustrations—chiefly from unhackneyed sources, and Mr. Aymer Vallance, M.A., F.S.A., whose friendship with the late Dr. Cox extended over many years, has written an introduction. A quotation from Charles Lamb strikes the keynote :—

"But wouldst thou know the beauty of holiness ?—go alone on some weekday, borrowing the keys of good Master Sexton, traverse the cool aisles of some country church : think of the piety that has kneeled there — the congregation, old and young, that have found consolation there—the meek pastor—the docile parishioner. With no disturbing emotions, no cross conflicting comparisons, drink in the tranquility of the place, till thou thyself become as fixed and motionless as the marble images that kneel and weep around thee."

The book is arranged in chapters dealing separately with the churchyard, fonts, pulpits and lecterns, screens and lofts, ironwork, painted glass, candelabra, etc., so that all are easy of reference. In his chapter on pulpits the author traces briefly their history, mentioning as he proceeds examples of the various periods, remembering to point out that there was no accepted position for the old pulpits, but that they generally stood on one side or other of the chancel screen. The north, or gospel side, was the commonest, but the south side, on which the men sat, was sometimes used. Occasionally, too, in the larger churches they were attached to a western pier of the nave, as in the grand stone example at St. Peter's, Wolverhampton. Among the finest of pulpits noticed by Dr. Cox is the elaborate canopied pulpit at Newport, Isle of Wight, of the year 1636. It is extremely fortunate that when the taste for novelties, encouraged by the late Prince Consort, swept away the old church in favour of a showy successor in 1844, this pulpit was spared. When complete with pulpit, tester, and pedestal, these Carolean compositions make a dignified presentment of the best woodwork of the seventeenth century. But the tastelessness of much of the last half century has succeeded, only too often, in dismembering them, and not infrequently in casting them out as worthless—the worshipful art of the first half of the seventeenth century has been broken up, or has been transhipped abroad.

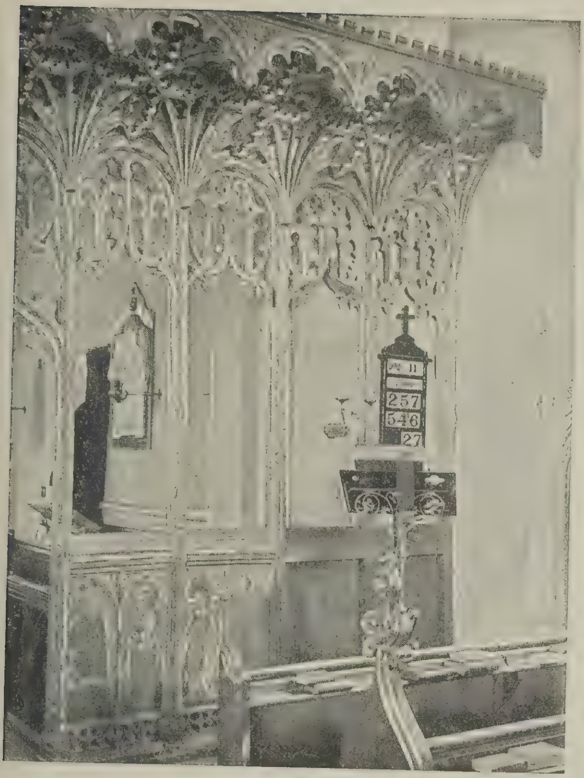

CAROLEAN PULPIT, NEWPORT, ISLE OF WIGHT.

In the chapter on screens and lofts, Dr. Cox notes that East Anglia is one of the richest parts of England for ancient screenwork, and that among the counties of East Anglia, Norfolk has the best examples. Suffolk, however, can show a particularly fine example of timber pendant vaulting at the church of Bramfield, near Halesworth. It is fortunate that the greater part of this magnificent screen is in a good state of preservation. The coved canopy works supporting the rood-loft floor project from the screen on the west side 30 in., and 27 in. on the east side. Remains of the original delicate painting on the screen itself, as well as on the saint-bearing panels of the lower stage, are abundant. The very small figures of angels in the intricate divisions of the vaulting work on the south side of the front of the screen (there is none on the north side) Dr. Cox tells us to particularly note : "They probably indicate the presence here of an altar to St. Michael and the Angelic Host."

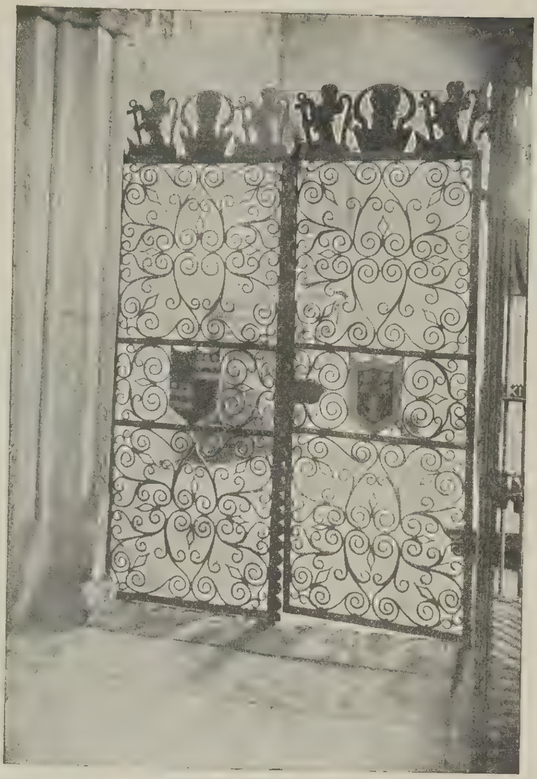
Decorative ironwork remained persistently Gothic in design and decoration long after the other crafts had succumbed to the Renaissance, and there is little advance of any kind in English ironwork from the fifteenth to the eighteenth century. "And such work as was executed in the intervening period . . . by no means improved as time passed." A very attractive piece of work, dating probably from the end of the seventeenth century, is shown from Farleigh, Hungerford, Somerset. The panels are filled with scroll ornament which, if rather feeble compared with later work, is a relief from the shapeless clumsiness of such examples as that from the Warburton Chapel. The central

---

* "English Church Fittings, Furniture, and Accessories." By J. Charles Cox, LL.D., F.S.A. London : B. T. Batsford, Ltd. Price 21s.



AN EAST ANGLIAN SCREEN WITH PENDANT VAULTING, BRAMFIELD, SUFFOLK.
(Late 15th century.)



WROUGHT-IRON GATE, FARLEIGH, HUNGERFORD, SOMERSET.
(Late 17th century.)

s contain heraldic shields, which were probably painted,
tom lingering from mediæval times, when most iron-
was coloured and gilt. The cresting is quaint, if
too heavy for the rest of the composition.

in and again Dr. Cox finds cause to cry out against
Philistine Church restorers, who in their ignorance
everything not 'purely Gothic.'" In a midland town
s seen an almost majestic eighteenth-century chan-
hanging in an hotel hall, with the name of the church
e it was taken imperfectly erased. "It will be
ly credited," he exclaims, "that the would-be re-
s of the interesting church of Gedling, Notts., in 1890
ly mutilated three old seventeenth-century chande-
twisting them up to make therefrom a singularly
ss lectern!"

of the best of the smaller brass candelabra noted by
thor is that which is dependent from the roof of
onden parish church. The orb bears this inscription:
this parish of Horsmondean the gift of Stephen
Rector. Anno 1703."

candelabra of the seventeenth and early eighteenth
ies are generally of brass, and are of distinctly
h design, if not in some instances of actual foreign
anship, although, says Dr. Cox, many of the finest
identified as the work of local craftsmen. These
abra usually have two tiers of branched candlesticks
nded stems springing from a central globe. From
esemblance to the radiating legs of a common house-
nsect they were commonly, if somewhat irreverently,
a century ago as "spiders." One usually looks in
r any reference to their date or price in old church-
s' accounts, for they were costly, and were, there-
enerally the gift of private benefactors. The central
of the chandeliers usually bears the name of the
and the date. The fine old Somersetshire church of
re, near Wells, used to be adorned with an excep-
handsome brass candelabrum hanging from the
of the nave, bearing the inscription: "The generous
Mr. John Tucker, of Blackford, in this parish, in
It hung there in solitary grandeur till 1854, when
a good maiden lady was moved to add two more modelled on the same plan.

The publishers state that Dr. Cox was engaged in the writing of this book for the last years of his life, and as the last of his ecclesiological series it will no doubt make a special appeal.

H. J.

Cardinal Wolsey at Hampton Court

Especial interest attaches to Mr. Ernest Law's little book, "Cardinal Wolsey at Hampton Court," in view of the recent opening to the public—after nearly four centuries—of three rooms situated on the south side of the Clock Court, behind Wren's colonnade, which are reputed to have been in the private occupation of Cardinal Wolsey. A description of these three rooms forms a prefatory historical note. The rooms are entered from the Guard Room at the top of the King's Staircase.

Until now they have been a "grace and favour" residence, and this wonderful example of Tudor domestic architecture has been almost unknown since the days when Wren masked Wolsey's palace with his splendid new front.

The beautiful Tudor Gothic work has come to life with surprising freshness largely because it was so long despised. The people of the eighteenth century in covering over the fine oak panelling and whitewashing the elaborate ceilings were, at any rate, preserving them for the days when they would be appreciated. The Office of Works has done the restoration with great taste. The three rooms overlooking the Dutch garden now look much as they did before Wolsey clothed them in his splendid furniture. Not altogether, because a Georgian sash window was put in place of a noble mullioned window in the largest room, and half the original ceiling here, with its dainty decoration, was dragged down at the same time. When Wren remodelled the palace he put up Renaissance cornices in the rooms, and now that these have been taken away you can see round the edges of the ceilings traces of the rich colours put there by Wolsey's artists. Underneath the thick coats of whitewash which still cover the ceilings may lie hidden those roofs of "gold and byse" (a rich light blue paint) of which Cavendish speaks in his poem.

You enter through a rediscovered Tudor doorway, which was covered in by Wren, into a small ante-chamber panelled from floor to ceiling with oak carved into an interesting variety of the linen fold pattern. In Wolsey's day the windows looked into Clock Court, but they are now darkened by a staircase which Wren built up against them. From this one goes into a larger room panelled in plain oak, with a fine open fireplace still black with the wood burnt in it centuries ago. There is a big oriel window from which all the old colour has long since gone. This room, they say, was Wolsey's privy chamber where he held conversations of state with foreign ambassadors in the time of his greatness.

The third and finest room has suffered most from the eighteenth century. It is curious to note that on the plain plaster that remained when Wolsey's ceiling was dragged down the setting out of the original design can here and there be traced. The panelling here is rather painfully modern On the grey stone of the fireplace arch can be made out a sentence in Greek which may have been scratched there by some idler in the Cardinal's train. From the tall windows one looks out on an exquisite picture—the sunk garden all aglow within its prim frame, and beyond that the rosy red of the old square banqueting hall by the riverside.

The ghost of the superb Cardinal would not feel at home in these swept and garnished rooms. Their magnificence in his time was one of the wonders of Europe, and the descriptions that remain almost make one's eyes ache with the splendours of tapestry and gold and silver and all the fine fruits of Renaissance artistry. Going back through the old door one remembers that there the Cardinal would come forth, all in red, preceded by his pursuivants-at-arms with a great mace of silver-gilt, and by gentlemen ushers calling out, "On, my lords and masters, on before! Make way for my Lord's Grace."

No visit should be made to Hampton Court before a reading of Mr. Law's book, and as it is in size convenient for the pocket, it will prove a useful guide. It is published uniform with an equally good book on Kensington Palace, which is by the same author.

H. J.

"Cardinal Wolsey at Hampton Court." By Ernest Law, C.B., with illustrations by Herbert Railton and other artists. London: George Bell and Sons.

RENAISSANCE CANDELABRA, WEDMORE, SOMERSET.

EIGHTEENTH-CENTURY CANDELABRA, HORSMONDEN, KENT.

(From "English Church Fittings, Furniture, and Accessories.")

Heat Transmission through Walls, Concretes, and Plasters

Since the Building Research Board was appointed three years ago by the Committee of the Privy Council for Scientific and Industrial Research, "to consider and direct the conduct of research on building materials and methods of construction," they have placed much useful information at the disposal of the architectural profession. Already special and other reports have been issued on a variety of matters, from the experimental cottages at Amesbury,
sand - lime and other
concrete bricks, experiments on floors, the
stability of thin walls,
and building in cob and
pisé de terre, to mention
a few, to experiments of
Dr. Ezer Griffiths for
the determination of the
thermal conductivitie
of representative wal
materials, plasters, an
concretes—a report o
which has just bee
issued.

Of the walls teste
by Dr. Griffiths the bes
proved to be the frame
timber wall. This ac
cords with common ex
perience; but it mus
not be forgotten tha
the heat-insulating pr
perty of such a wall
greatly reduced by lea
age of air if the out
skin is split or broke
From another result
is apparent that t
well-known heat-insul
ting quality of ordina
pisé (rammed eart
walls as compared wi
brick is due only
their extra thickne
On the other hand, t
chalk-cement concre
as used in one of t
Amesbury experimen
cottages, makes a w
three times better th
an equally thick one
London stocks in
ment. Ordinary ceme
concrete does not sh
up well; it is bet
when made with co
breeze aggregate, l
walls recently used
"housing schemes"
not thick enough to
effective. In this connection it is instructive to note t
three compound concrete walls, including coke-bree
made to the pattern of three special building syste
are each much worse than a solid wall of London stock
cement, or of Fletton bricks in lime, while they wo
hardly be comparable at all with a hollow 11 in. wall
London stocks. This result agrees with those rece
obtained in Norway, where two types of hollow conc
wall, one with three vertical cavities, were found not
"offer any advantages compared with the cheapest ty
of brick walls (one and a half brick Bergen hollow walls
one brick English hollow walls) either as regards heat
sulation, first cost, or strength.

The result obtained with one of the specimens is particu-ly interesting. The bricks in the wall were themselves llow; they were only 6 in. thick overall with 1 in. walls, a new type sanctioned for housing schemes by the Minis- of Health. The heat-insulating value of such a wall was and to be almost equal to that of a solid 9 in. wall of cks in cement.

It is clearly indicated in some of the results at the heat-insulating efficiency of a wall is seriously paired by a high moisture content. "It is obvious, n, that many porous materials, although excellent ulators when dry on account of their cell-like struc-e, would be worse than useless unprotected in exposed situations because of their capacity for absorbing and holding water."

The particulars given of the insulating value of cork slabs are useful for comparison with results obtained by other methods, cork slabs being a standard material for the walls of refrigerators.

The activities of the Board have overcome many of the constructional difficulties with which the profession is beset, and architects will doubtless be grateful. They will await the further reports of the Board with the greatest interest.

"Heat Transmission through Walls, Concretes, and Plasters." Experiments carried out at the National Physical Laboratory by Ezer Griffiths, D.Sc., with an introduction by H. O. Weller, B.Sc., M.Inst.C.E., Department of Scientific and Industrial Research, Building Research Board. Special Report No. 7. Price 1s. 6d. net; 1s. 7d. post free. H.M. Stationery Office.

The Use of Rolled Steel Joists

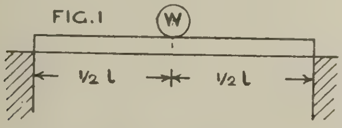
By PROFESSOR HENRY ADAMS, F.S.Arc., etc.

THE enquiries received by this JOURNAL from time to time as to the proper size for rolled steel joists in a given case, show that a brief article dealing with the subject will be useful to many ing architects. The tables issued by the manufacturers e the safe distribution loads on the standard sections, do not provide for cases of irregular loading. Whatever nature of the loading, it is only necessary to reduce the ct to maximum bending moment when all further iculty will disappear. The accompanying diagrams w different cases of loading, and the notes on each give maximum bending moment and the reactions at each R, being the left and R_2 the right. Fig. 1 shows a con-trated load in the centre as from a stanchion or a brick r. Fig. 2 shows a concentrated load out of the centre. . 3 shows two concentrated loads in any position, the ds being equal or unequal. Fig. 4 shows a uniformly ributed load over the whole span. Fig. 5 shows a dis-uted load over half the span. Fig. 6 shows a distri-ed load extending partly over the span from one end. . 7 shows a distributed load in any position on the span. Fig. 8 shows two such loads; in this case it will be necessary to get the maximum bending moment for load A by Fig. 5, then for load B by the same method, then B maximum will be as shown. Fig. 9 shows a load varying from maximum at the centre to nothing at the ends, as for a gable, or for the virtual load on a bressummer carrying a wall, the bonding of the brickwork relieving the bressummer from all but the area contained in an equilateral triangle. The loads should be computed in tons and the span taken in feet.

Having obtained the maximum bending moment in ton-feet in any given case, all one has to do is to multiply it by eight and divide by the span in feet: this will give the equivalent distributed load in tons on the girder, and referring to the tables of safe loads this load should be looked for under the heading of the span. Suppose, however, the span to be 11 ft. and the table shows only 10 ft. and 12 ft., the load that could be carried on 11 ft. span would be midway between those shown for 10 ft. and 12 ft.

For other cases, and stresses in general, reference may be made to "The Mechanics of Building Construction" (Longmans, 10s. 6d. net).

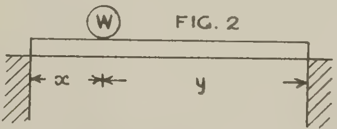
FIG. 1



B max. = $\frac{1}{4}$ WL

$R_1 = R_2 = \frac{1}{2}$ W

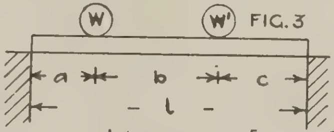
FIG. 2



B max. = $W\frac{x \times y}{x+y}$

$R_1 = \frac{y}{x}W$, $R_2 = \frac{x}{y}W$

FIG. 3

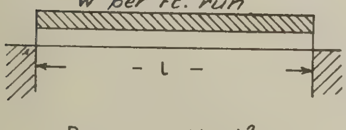


B max. = $\frac{W'c(a+b)}{l} + \frac{c}{b+c}\left[\frac{Wa(b+c)}{l}\right]$

or = $\frac{Wa(b+c)}{l} + \frac{a}{a+b}\left[\frac{W'c(a+b)}{l}\right]$

whichever is greater

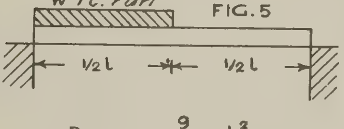
FIG. 4



B max. = $\frac{1}{8}$ wl^2

$R_1 = R_2 = \frac{1}{2}$ wl

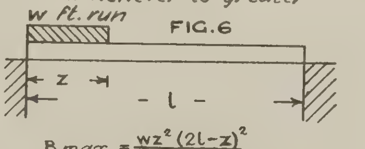
FIG. 5



B max. = $\frac{9}{128}$ wl^2

$R_1 = \frac{3}{4}$ wl, $R_2 = \frac{1}{4}$ wl

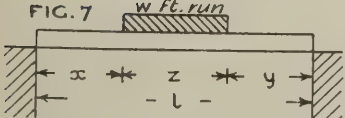
FIG. 6



B max. = $\frac{wz^2(2l-z)^2}{8l^2}$

$R_1 = wz - R_2$, $R_2 = \frac{wz^2}{2l}$

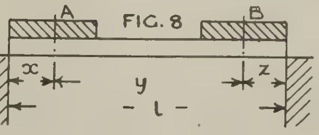
FIG. 7



(approx.) B max = $wz\left(\frac{xy}{l}\right) - \frac{wz^2}{8}$

$R_1 = wz - R_2$, $R_2 = wz\left(\frac{x + \frac{1}{2}z}{l}\right)$

FIG. 8

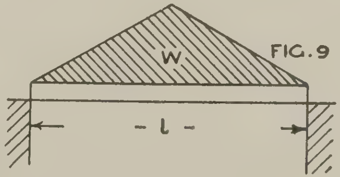


B max. = $B_A + \frac{x}{x+y}(B_B)$

or = $B_B + \frac{z}{z+y}(B_A)$

whichever is greater

FIG. 9



B max. = $\frac{1}{6}$ WL

$R_1 = R_2 = \frac{1}{2}$ W

The Planning of Hotels and Licensed Houses

By ALEXANDER F. PART

(*Author of "The Art and Practice of Innkeeping," etc.*)

> "Order is Heaven's first law."
>
> POPE: *Essay on Man.* Ep. iv. 40.

THOUGH "old houses mended cost little less than new before they're ended," it seldom falls to the lot of an architect to design an entirely new hotel or licensed house. Still more seldom is either the one or the other built on a new site, owing to the difficulty of obtaining new licenses or "removals." In the case of the new house or an alteration of an existing one the primary object to bear in mind is that it has to earn revenue. The hotel or licensed-house architect must therefore, above all things, be a practical man.

Since the building is one which has to attract the public it should occupy a sufficiently commanding position so that it is unable to escape the public eye, even at a distance. It must be apparent to the casual wayfarer that it is a house of public resort, and reliance should not be made solely upon signboards or the like. Since the house is usually situated upon a public road or street, it is not always possible to contrive that its important rooms, public as well as private, face the best aspect for sunlight and advertisement. If that is the case, it is very unfortunate, particularly for an hotel, because the frontage, however small, must be attractive, while sunlight is also a contributory factor in the popularity of any house. If the back view from the hotel is clear and attractive, then the difficulty will be easier to overcome.

Sunlight is of much greater importance in some rooms of an hotel than in others. Thus the lounge or hall and the best bedrooms should face south, or slightly south-east or south-west—not north. Sunlight is also advantageous in a coffee-room or drawing-room, but it is not so important in a bar or billiard-room. The most expensive luxuries in an hotel are rich windows that exclude the light, and passages that lead to nowhere. Kitchens, larders, etc., are best with a north aspect, and the bath-rooms, water closets, linen-room, and staff accommodation may well occupy the coolest positions. The approach should be as spacious as the exigencies of the site permit, and the ground should be as nearly level as possible, so as to avoid unnecessary steps.

Another important element to bear in mind is the saving of labour. This should be considered with a view to limiting the number of the staff, rendering their work efficient and easier, and to saving trouble and fatigue to the guests. The planning of the house and its fitments and furnishings must reflect this in the most thorough manner. Every member of the staff saved represents a capital saving of approximately £2,000, or £100 a year in cost plus leakage. The accommodation provided for the staff must be convenient, healthy, and comfortable. This involves not only a fairly intimate knowledge of the details of the business, but also of the psychology of labour.

The client must have precise ideas of exactly what he requires the professional man to carry out; mere description is not enough. He must undertake minute calculations relating to every department of the house as it is, and as he hopes it will be, both on the debit and credit sides. He must calculate the sub-divisions of the trade, and estimate the proportions of the accommodation required by the different classes, such as coffee-room, commercial, chance, and bar customers respectively. He should estimate the growth of the neighbourhood, the permanence of any increase, and how much (if any) is due to the personality of the proprietor or manager, or to some impermanent or unreliable attraction, bearing in mind that it is more difficult to reduce the accommodation than to increase it.

The position of the house for trade is important. If the house is in possession of a garden, or grounds convertible into a garden, it should be contiguous to the hotel, so that it may be an actual amenity, as well as a source of supply of flowers, fruit, and vegetables. The accessibility and propinquity of the garage and stockrooms, if required, are also factors of importance in connection with some houses.

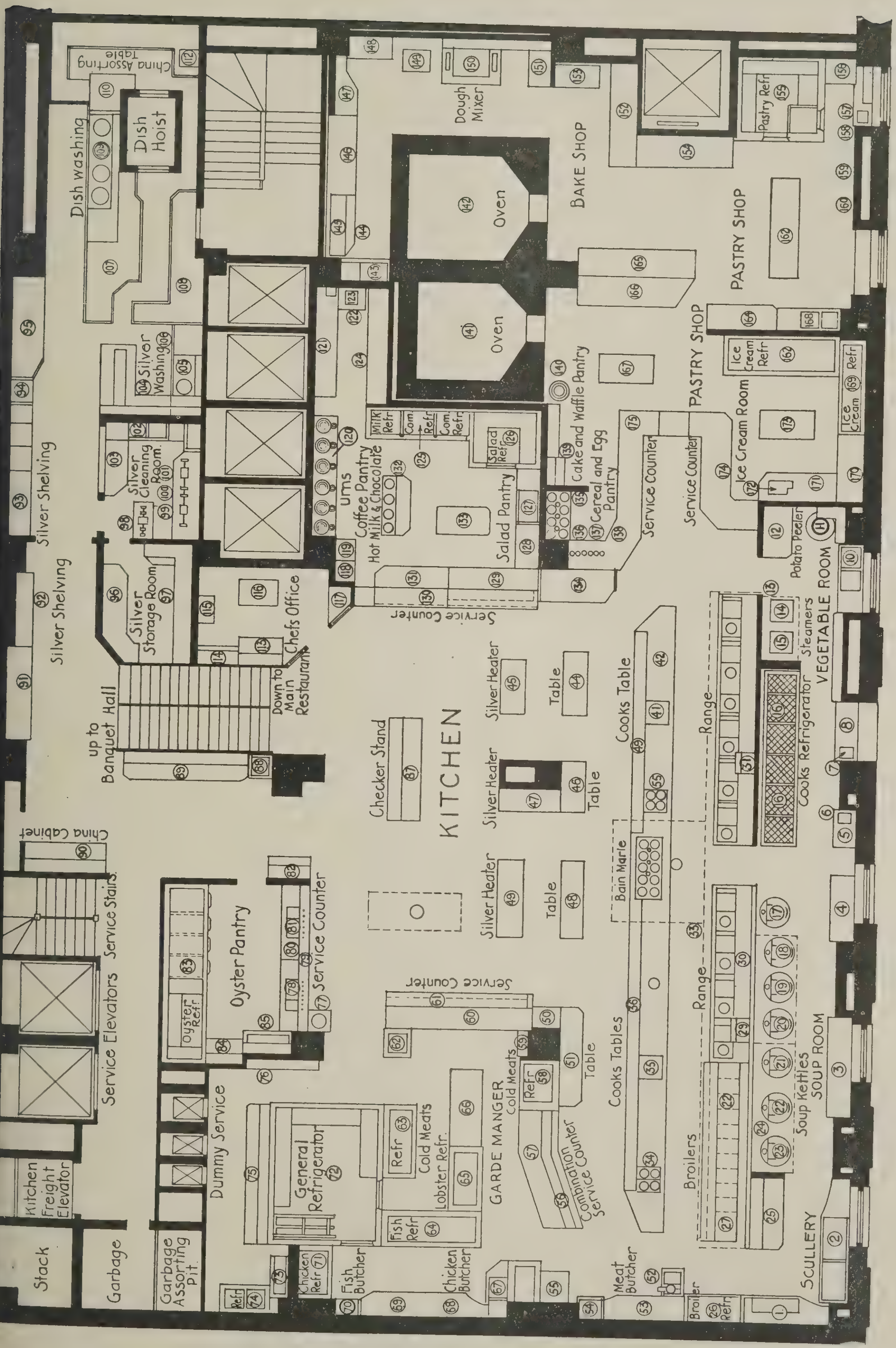
It is not enough to build a well-balanced house, in the sense that the public rooms are in accordance with the size of the house and the number of bedrooms. An hotel or licensed house may require, for instance, very extensive dining and banqueting accommodation, or quite modest premises in these respects. It all depends upon the requirements of the trade intended to be done in the house. Before, therefore, an architect can usefully put a pencil to a design he must be fully instructed on all these matters.

Speaking generally, unless the site is to be fully utilized, it will be wise to arrange for the addition of extra accommodation in any part of the premises, should the occasion arise, without entailing serious structural alterations to the premises. In a new building, therefore, and where practicable, in alterations to an existing one, steel joists should have an ample span, so that subsidiary partitions may be knocked out without interference with the main supports of the house.

It is a common mistake in adding bedrooms to a house to plan too many double-rooms. Any modern hotel with pretensions to first-class should contain a series of rooms which can be let out either in suites, or separately, with bathrooms and water closets attached. Every new hote should be provided with a fixed basin and hot and col water supplies at all reasonable hours. Some, at least, o the bedrooms nearest to the hotel kitchen services shoul be adaptable for use as private dining-rooms, and th dressing-rooms attaching to them for service, so that a plug for attachment to a movable electric hot-plate should b available. This interchangeability of accommodation i a matter which should be studied throughout the house I have frequently converted a loss into a profit by adaptin rooms for use for other purposes, at a comparativel infinitesimal cost. Elasticity of design is, therefore, o prime importance.

An hotel or licensed house should be regarded, primarily as a selling agency. The art of the architect lies in conveying, by means of building materials, an invitation to th particular clientele for which the hotel is designed to cate This may seem trite enough, but it is not quite so simple matter as may be supposed, for the architect must avoi frightening off persons of moderate means by a ponderou or too imposing display of magnificence and, on the othe hand, of failing to allure them. Let simplicity, even degree of severity, and economy be the keynotes of design and, if I may make a suggestion, without too much pr sumption, it is that it should be made a rule not to devia from a straight line without a very good reason! Is the anything more fearful than imagination without tast unless it be ignorance in action? I may, perhaps, ventu upon another maxim, which applies particularly to t planning of public rooms. Build, first, the shell, and do n be in haste to erect subsidiary partitions, which subseque events or trial may show to be unnecessary or wrong placed.

Devise your plan so as to show the furnishing of t various rooms, not casually arranged, but as you plan



PLAN OF HOTEL KITCHEN, SHOWING A PRACTICAL ARRANGEMENT OF SERVICES AND APPARATUS.

(*For key to plan see page 438.*)

have it, including such items as the position of the electric light switches, lighting, bells, service indicators, beds, and bell indicators. Let your engineer illustrate the lay-out of the kitchens and offices, wash-ups, store-rooms, cold chambers, etc., exactly, and do not let him overload the house with plant in the first instance. Extra time and money spent upon detailed plans will save subsequently many times the cost in petty annoyance and extras.

The American systems of hotel planning are in the main only adaptable over here for the building of very large hotels. The tendency there is to build very large caravanserais, and the reasons for this are not uninstructive. First, because menial labour is scarce and not efficient, and so in order to make expensive labour-saving appliances worth while, it is necessary to secure large revenue returns. Secondly, because the Volstead Prohibition Law has removed a large part of the revenue, which formerly occupied comparatively small space and required but little labour. The operation of this law has necessitated the addition o sleeping accommodation, partially to offset the loss o profits on drinks. Thirdly, because a far larger section o the American public utilizes hotels, partly owing to th great distances to be traversed and partly to the shor supply of domestic labour available, than does our Britis public at home. The majority of the labour-saving appliances are, therefore, not very practical in Great Britain fo use in an hotel of moderate size, though there are man exceptions.

(*To be concluded.*)

Key to Plan of Hotel Kitchen

(*See page* 437.)

1. Pot sink, with shelving above.
2. Large pot sink.
3 and 4. Preparing table.
5. Hall's "kitchen king."
7. Potato cutter.
8. Preparing table.
9. Shelving.
10. Vegetable sinks.
11. Potato peeler, Delphire.
12. Preparing table with shelving above.
13. Copper drip pan under steamers.
14 and 15. Compartment steamers.
16. Cooks' refrigerators.
17. Copper cooling kettle.
18 to 22. Copper steam-jacket kettle.
23. Cast-iron grease kettle.
24. Copper drip pans under kettles.
25. Pot and pan table with shelving above.
26. Broiler cooks' refrigerator.
27. Charcoal broiler with gas lighter.
28. Ten gas broilers.
29. Gas salamander above range.
30. Four-fire range.
31. Gas salamander above range.
32. Six-fire range.
33. Ventilation hood above ranges, etc., to vent kitchen.
34. Closed bain-marie in front of broilers.
35. Cooks' sink of German silver.
36. Elevated hot shelves.
37. Heavy steel cooks' tables.
38. Large closed bain-marie pan, enamelled.
39. Elevated hot shelves.
41. Cooks' sinks of German silver.
42. Heavy steel cooks' tables.
44. Wood service table.
45. Russia iron brass-trimmed silver heater, wood top.
46. Wood service table.
47. Large Russia brass-trimmed silver heater.
48. Wood service table.
49. Russia iron brass-trimmed silver heater, wood top.
50. Small Russia brass-trimmed silver heater.
51. Wood service table.
52. Enterprise electric meat cutter.
53. Meat cutting bench of maple.
54. Heavy butcher's sink.
55. Meat-cutting sectional block.
56. Carrara white glass service shelf.
57. Combination service refrigerator.
58. Cold meat refrigerator.
59. Service sink.
60. Combination service refrigerators.
61. Carrara white glass service shelf.
62. Bouillon service cabinet.
63. Cold meat refrigerator.
64. Fish refrigerator.
65. Lobster refrigerator.
66. Wood preparing table.
67. Chicken butcher's sink.
69 and 68. Wood cutting bench.
70. Fish butcher's sink.
71. Chicken refrigerator.
72. General kitchen refrigerator.
73. Vent duct.
74. Crushed ice refrigerator.
75. Dummy service tables with shelving above.
76. Wall wood shelving.
77. 16-in. marble mortar and stand.
78. Special counter and sink.
79. Carrara white glass service shelf.
80. Oyster counter with slate slabs.
81. Special counter sink.
82. Wood kitchen cabinet.
83. Oyster pantry refrigerator.
84. Wood table with shelving above.
85. Crushed ice service refrigerator.
86. Cooks' dining tables.
87. Checkers' counter.
88. Drinking-water sink.
89. Kitchen closet and shelving above.
90 and 91. Kitchen storage cabinet.
92. Kitchen closet with shelving above.
93. Wood table with shelving above.
94. Special silver sinks.
95. Heavy wood dish table.
96. Silver storage closet with drawers.
97. Silver storage cabinet.
97. Silver storage cupboard with drawers and shelving.
98. Dilg knife polisher and table.
99. Hamilton and Low buffing motor.
100. Wood table to support machine.
101. Scratch brush motor.
102. Washing sinks.
103. Wood table.
104. Wood table for clean silver, with shelving.
105. No. 3 Blakeslee silver washer.
106. Special soaking sinks.
107. Clean silver and china table.
108. Wood table for soiled silver.
109. No. 7 Blakeslee dish washer, special.
110. Wood receiving table for dishes.
111. Wood soiled dish table.
112. Sink in table for soaking dishes.
113. Chef's desk.
114. Chef's cabinet.
115. Chef's clothes closet.
116. Chef's dining table.
117. Assistant chef's desk.
118 and 119. Copper nickel-plated roll warmer.
120. Battery of urns and cup heater under.
121. Wood table and special shelving above.
122. Wood table.
123. Coffee pantry sink.
124. Wood table and special shelving above.
125. Milk and pantry refrigerators.
126. General pantry refrigerators.
127. Salad pantry sink.
128. Wood preparing table.
129. Combination service re frigerator.
130. Carrara white glass ser vice shelf.
131. Coffee pantry servic counter.
132. Special steam bowl German silver top.
133. Wood preparing table.
134. Wood closet and servi counter.
135. Special cereal cooker.
136 and 137. Four-buck Curtis egg boiler.
138. Wood service counter.
139. Cake griddle and speci waffle irons.
140. Gas pastry stove.
141. Double deck past oven.
142. Single deck bread ov
143. Bread shop sink.
144. Wood table with ir bread closet above.
145. Iron bread closet.
146. Wood work table.
147. Wood preparing tabl
148. Iron proofing oven.
149. Flour sifter.
150. Triumph electric dou mixer.
151 and 152. Steel dou trough.
153 and 154. Preparing ta of wood.
155. Bakery refrigerator.
156. Marble slab.
157. Wood work table.
158. Sink in table.
159. Copper pastry kettl
160. Copper pastry ke tilting.
162. Wood preparing tab
163. Pastry shop sink.
164. Wood flour bins.
165 and 166. Wood prepa table.
167. Wood service table.
168. Special ice cream frigerator.
169. Ice cream storage frigerator.
170. Wood special cabin
171. Wood service table
172. Sink in table.
173. Wood service table shelving above.
174 and 175. Wood se counter.

Correspondence

Helping Japan

To the Editor of THE ARCHITECTS' JOURNAL.

SIR,—The Japanese are artistic, clever, adaptable, and ersevering, and it may be that their nation possesses a perfluity of architectural talent of its own. If the Japanese overnment would welcome the assistance you have so ndly suggested (in a leading article last week) there are ndoubtedly many capable and adaptable young men here ho would welcome the opportunity to render assistance a people so sorely stricken, and at the same time greatly rengthen their own powers and enlarge their ideas by bbing up against the art and the wonders of a new world.

It would appear that men with town-planning experience ould be of especial value.

Yours faithfully,

W. T. JONES, F.S.A.
(President N.A.A.)

Retirement of Mr. Maurice Adams

Mr. Maurice B. Adams, F.R.I.B.A., the architectural itor of "The Building News," is to retire at Michaelmas ter fifty-one years' continuous service. No other architect s been engaged in the conduct of a professional journal r so long a time, the tenure of the editorship of "The uilder" for forty years by Mr. George Godwin, F.R.I.B.A., ing the sole instance of a similar kind. "The Building ews" Designing Club was personally conducted by Mr. dams for thirty-seven years, and several of those who ere members of it during that period have since become ell-known architects either at home or in the Colonies.

For a quarter of a century Mr. Adams was also hon. cretary of the Royal Architectural Museum and Art hool in Tufton Street, and the scheme for presenting the useum and its remarkable collection to the Architectural ssociation was originated and carried through at his ggestion. The acquisition of this property by the association subsequently enabled that society to secure its present arters in Bedford Square when the museum trustees nfirmed the transfer of the casts and examples to the ctoria and Albert Museum, South Kensington. Mr. lams at one time served as one of the judges of the works bmitted in the national competitions for medals and izes. He designed the Lord Leighton Memorial Art hool and Polytechnic at Camberwell and a number of raries and institutions for Mr. Passmore Edwards, luding the School of Economics, which the latter pre-nted to the University of London, and the design for ich was selected in competition. Blickling Hall, Norfolk, s altered and restored by Mr. Adams for Constance Lady thian. He was, too, connected with Bedford Park at start in 1878, and built the School of Art and Memorial apel of All Souls' Parish Hall. He also completed the urch.

Competition News

mpetition for a new Assembly Hall and Extension of Existing Council Buildings, Eastleigh.

The Competitions Committee of the R.I.B.A. call attention of Members and Licentiates to the fact t the Conditions of the above Competition are not in ordance with the Regulations of the R.I.B.A. The mpetitions Committee are in negotiation with the omoters in the hope of securing an amendment. In meantime Members and Licentiates are advised to e no part in the Competition.

War Memorial Buildings, Dudley.

A new competition for a war memorial building and tower at Dudley is announced. Detail particulars are given in the competition table below.

Eastleigh Assembly Hall.

Members of the Society of Architects are notified that the conditions of the above competition are not in accordance with the regulations and they are requested not to take part in it without first ascertaining from the secretary that the conditions have been approved by the Council.

Southsea Common Lay-out and Development Competition.

The following copy of a notice has been issued by the R.I.B.A.: "Members and Licentiates of the Royal Institute of British Architects must not take part in the above competition because the conditions are not in accordance with the published regulations of the Royal Institute for architectural competitions."

List of Competitions Open

Date of Delivery.	COMPETITION.
Sept. 29	Extensions to the Poor Law Institution, Premium £50. Apply Clerk to the Wirral Board of Guardians.
Sept. 30	Designs for a series of plaquettes in bronze illustrative of London as the capital city of the Empire, or of one or more of her main architectural features. Designs should be submitted in the form of models in plaster. The following prizes are offered: One prize of 100 guineas, two prizes of 50 guineas, three prizes of 25 guineas. Apply Deputy Master of the Royal Mint, London, E.C.1.
Sept. 30	The best colouring of a design for the vestibule connecting 315–317 Oxford Street with 17–19–21 Dering Street, Messrs. Thomas Parsons and Sons' new offices and showrooms. Prizes: 100 guineas, 50 guineas, 25 guineas, and five consolation prizes of 10 guineas each. Assessors—Sir Edwin Lutyens, R.A., F.R.I.B.A., Sir David Murray, R.A.,P.R.I., H.R.S.A., Sir John Lavery, R.A., Mr. Frank Brangwyn, R.A., and Mr. E. Guy Dawber, F.R.I.B.A. Apply Competition Department, Messrs. Thomas Parsons and Sons, 315–317 Oxford Street, London, W.1.
Oct. 1	The Student Welfare Committee, University of Glasgow, invite Competitive Designs (limited to architects having an office in and practising within the Municipal Boundaries of the City of Glasgow) for a pavilion to be erected on the University Athletic Ground at Westerlands, Anniesland, at a cost of £10,000. Assessor, Mr. Alexander N. Paterson, A.R.S.A. Apply Honorary Secretary, Student Welfare Committee, The University, Glasgow.
Oct. 1	Lay-out of the Bull Green Site and part of the centre of the Town of Halifax. Premium £50. Apply, with deposit of £1 1s., to Mr. Percy Saunders, Town Clerk, Town Hall, Halifax.
Oct 15.	Lay-out of a river embankment promenade, adjoining the River Thames below Barnes Bridge, for the Chiswick Urban District Council. Premiums: £105, £52 10s., and £26 5s. Apply Mr. E. F. Collins, Clerk, Town Hall, Chiswick, W.4. Deposit £1 1s.
Nov. 5	Art Gallery for Hull. Assessor, Mr. John W Simpson, PP.R.I.B.A. Apply, with cheque for £2 2s., to Mr. H. A. Learoyd, Town Clerk, Guildhall, Hull.
Dec. 10	The War Memorial Committee of the Burgh of Coatbridge invite designs for the erection of a War Memorial on a site in the West End Park. The estimated cost of the work amounts to £3,000, and premiums of £75, £50, and £25 are offered for designs placed first, second, and third respectively. Assessor is Mr. James Lochhead, F.R.I.B.A., Hamilton. Apply Town Clerk. Deposit £1 1s.
Jan. 1	The Imperial War Graves Commission invite architects who served during the war as members of the Military, Naval, or Air Forces raised in any part of the British Empire to send in their names for admission to a competition for the designing of memorials to the missing to be erected by the Imperial War Graves Commission at Bethune, Armentières, Cambrai, and Soissons. Applications for particulars of premiums and other regulations from those desiring to compete are to be addressed to the Secretary (Works Branch), Imperial War Graves Commission, 82 Baker Street, London, W.1, and must be received there not later than January 1, 1924, and must be accompanied by a statement giving particulars of the war service and professional career of the applicant and clearly stating which of the memorials it is desired to compete for. Deposit, two guineas for each set of plans. The Assessor is Sir Aston Webb, K.C.V.O., P.R.A.
Jan. 5	Memorial Building and Tower, Dudley. The Council of the County Borough of Dudley invite Competitive Designs from duly qualified Architects for the "Brooke Robinson Memorial" Building and War Memorial Tower comprising a Public Hall, Coroner's Court, small museum, and a new sessions court. Premiums £300, £200, and £100. Mr. W. Curtis Green, A.R.A., F.R.I.B.A., Assessor. Conditions of competition, together with a copy of the site plan, can be obtained on application to E. W. Tame, Town Clerk, Town Clerk's Office, Dudley, with deposit of £2 2s., which will be returned on receipt of bona-fide designs, or if the Conditions are returned within 14 days of the date of receiving answers to questions. All designs must be sent by January 5 to the Town Clerk.
No date	The Eastleigh and Bishopstoke Urban District Council invite designs for the extension of their existing Council buildings, and the erection of an assembly hall, on the site adjacent. Premiums: 50, 30, and 20 guineas. Apply, with deposit of £1, to Mr. J. Lawrence, Clerk to the Council, Council Offices, Eastleigh.

Contemporary Art

The London Salon of Photography.

The opportunities of studying photography in its artistic aspects are rare in London, and the present International Exhibition is one which is excellent both in its singularity and in its high standard. There are 400 exhibits, and of these 10 per cent. are of architectural subjects, which prove that from the artistic point of view architecture is *par excellence* the medium of expression for the artistic photographer. Not even the landscapes offer the same high achievement, and the figure work, apart from the portraits, falls far below either. How is it that the nude in photography always looks so silly and forced? Even the partly-clad dancers look false and unreal; all are posed, and the pictures are photographs of poses. The painter can interpret and so produce an interest more than momentary; the photographer can only record. In architecture and landscape, however, the photographic artist has static subjects to his hand, or rather to his lens, and his art consists in selection.

There is no doubt that in this exhibition there are examples of architectural photographs of great accomplishment. The cottages and houses treated by J. Ainger Hall, Forman Hanna, J. Arthur Lomax, J. Dudley Johnston, C. J. Symes, Louis J. Steele, and Arthur Ford are admirable subjects; that modern buildings offer such is also apparent in the works of J. H. Anderson, J. P. Edwards, Hector Murchison, H. C. Torrance, and E. G. Boon. As to the picturesque in ancient buildings there are ample examples of fine selection and execution in the prints of C. L. St. J. Loe, P. Klepikoff, L. Misonne, J. Ortez Echaque, Jas. McKissack, R. Rigby, W. J. Clutterbuck, Adolphe Langfier, A. Uriarte, Charles Job, and F. B. Dyer, the "Arundel" of the last being altogether admirable. Old bridges, and even new bridges, have afforded opportunities for the exceptional skill of Alex. Keighley, Marietta Ralli, Arthur Banfield, and S. Bridgen, and fountains have attracted J. Tournay, as well as Marietta Ralli. Sunlight and moonlight with their telling shadows have absorbed the energies and powers of R. S. Lovejoy, J. Vanderpant, Henry A. Hussey, and Christopher Symes, and Charles Job has recorded a beautiful architectural vista in the "Cemetery of Alassio." Margaret Watkins is a "modernist," and in her still-life she approaches the cubist problem, which she strives very cleverly to solve in her two prints "Design" and "Rhythm," and offers a very interesting contribution to the whole problem of criticism.

The Gieves Art Gallery.

Although the paintings and pastels of Henry T. Wyse, the Scottish painter, are based on landscape, they are essentially pieces of decoration. They make no pretence to naturalism, and yet they are in essentials naturalistic. Ornament is best when it is conceived and executed in this manner, especially as in this case its interest is amplified by rich and satisfying colour. There is no attempt, of course, at pattern in Wyse's work, but of solid design there is plenty. The artist also exhibits some examples of his ceramic work, which is sound, and at this exhibition there are examples of the attractive pottery of W. S. Murray and R. F. Wells.

Instruction by Exhibition

Decoration is essentially a craft in which the ablest craftsmen will differ as to method, and it it also a craft in which, while the main tools used are, in essence, those in use generations ago, the materials to be applied have changed rapidly under the influence of the paint chemist, the wallpaper designer, and the inventor.

Thus there is always something new in decoration, as regards both design and method, and the craftsman who would keep up to date must make the most of every means of informing himself of developments.

One of the objects of the Decorators' Exhibition to be opened at the Holland Park Hall on October 17 is to show both the craft and the public the latest developments in the various departments of the craft.

Incidentally, there is no more interesting development than that in the method of educating the young decorator, and of this there will be much evidence at the exhibition.

Proposed Lombard Hall, Little Britain, E.C.

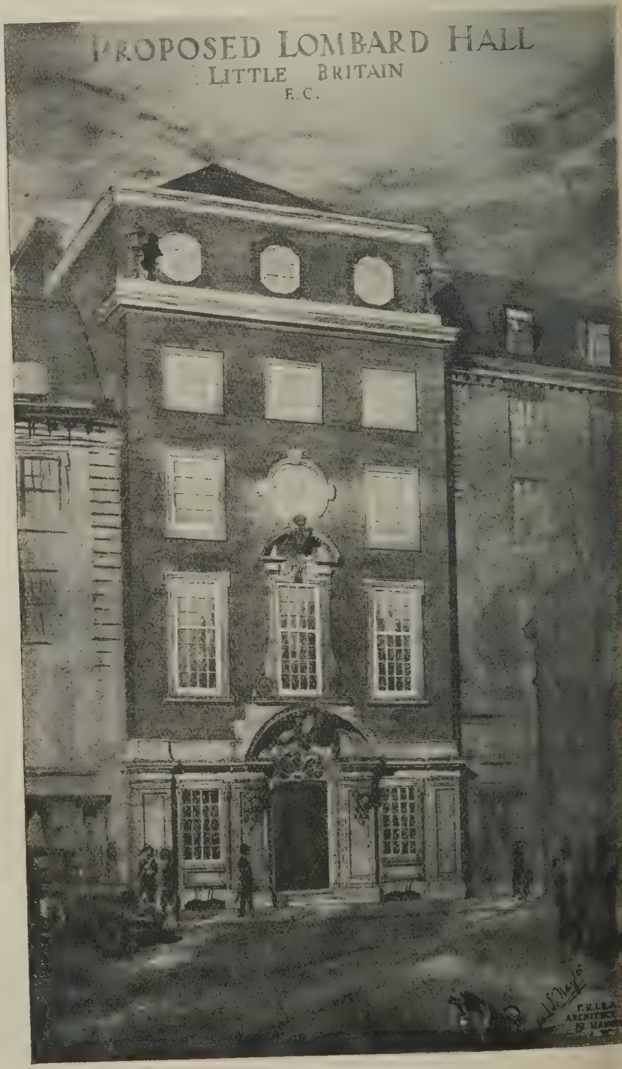
The illustration shown is a perspective view taken from sketch plans prepared and submitted by Mr. J. J. S. Naylor, F.R.I.B.A., for a proposed hall or headquarters, subscribed for by the pawnbroking trade.

An effort has been made in the design to produce a building in sympathy and keeping with some of the famous city halls of the seventeenth and eighteenth centuries.

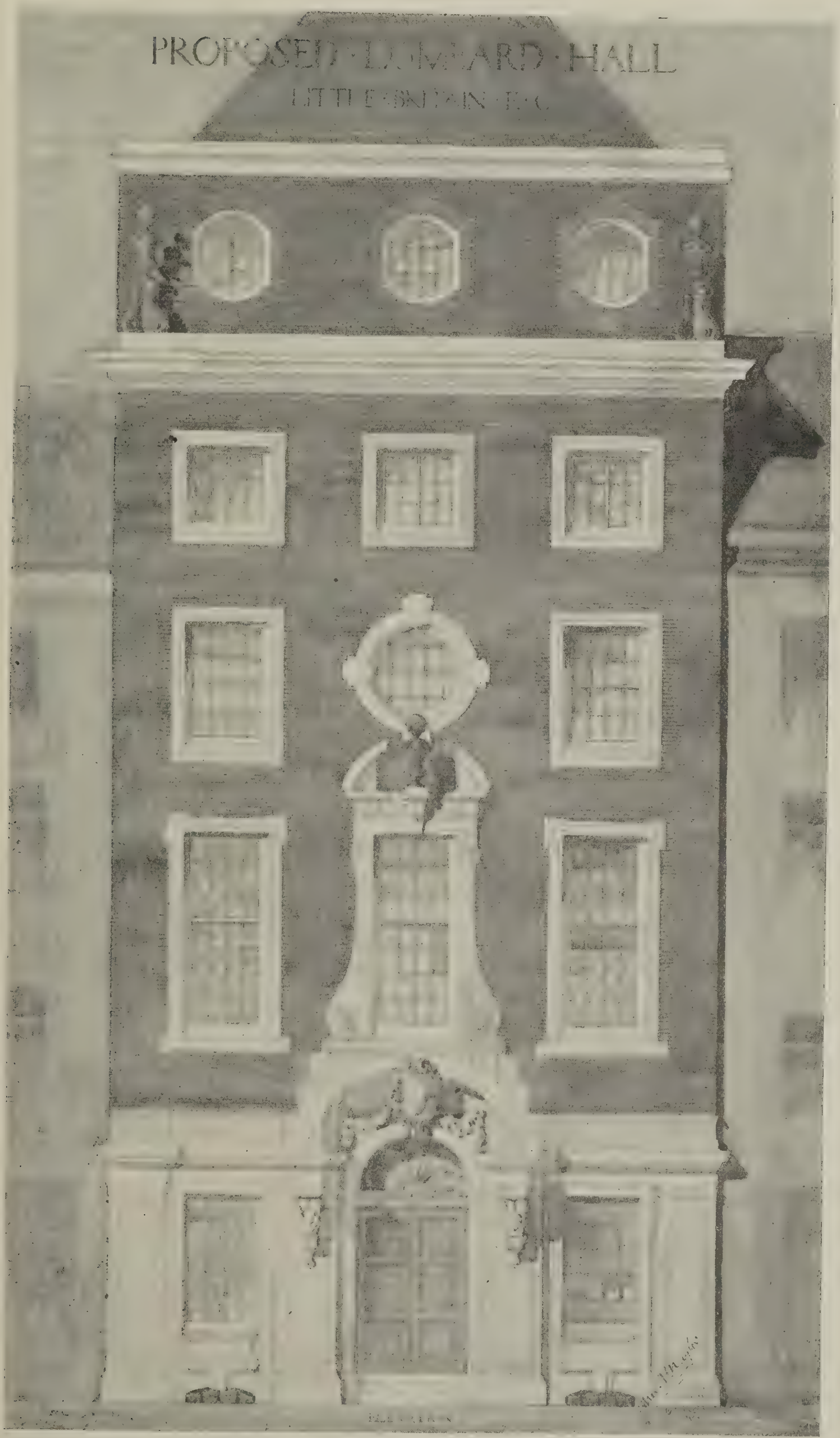
The plans comprise accommodation for a noble reception hall on the ground floor, together with a large committee or council room on the first floor and with various offices devoted to trade interests, which include several societies and the administration of a large and important charity, founded and maintained by the pawnbroking trade; there is also accommodation for a housekeeper on the top floor.

The importance of this trade in the thirteenth century is not generally known, but the Lombard merchants, who were the great moneylenders of that time, settled in England *circa* A.D. 1274, taking up their first residence in Lombard Street.

They played the chief part in the exchanges of the period, having kept up their connection with the wealthy Italian Republics, and the pre-eminence and success of the Medici family at Florence in financial and commercial matters caused the London Lombards to adopt the palle of this house as a sign or device, from which comes the familiar sign of the three golden balls still suspended over the pawnbrokers' establishments.



A PERSPECTIVE VIEW.



PROPOSED LOMBARD HALL, LITTLE BRITAIN, E.C.
J. J. S. NAYLOR, F.R.I.B.A., ARCHITECT.

Victory Scholarship, 1923

The Jury appointed by the Council of The Society of Architects to adjudicate upon the drawings submitted in the Victory Scholarship this year have awarded a Gold Medal and the prize of one hundred pounds for the design sent in by Mr. B. M. Flegg of the Architectural Association. The whole of the designs in the final Competition are on view in Bedford Square. A full criticism of the drawings will be given in due course by Mr. Arthur J. Davis, F.R.I.B.A.

The programme for the final round, which was held *en loge* in London on Saturday, July 14, 1923, was as follows :—

SCHEME FOR HYDROPATHIC ESTABLISHMENT.

1. *Site and purposes of buildings.*

The promoters of the scheme desire to erect a group of buildings which would serve the purpose of providing medicinal baths, for the cure of various ailments. The site is on high ground overlooking a valley, in which are situated medicinal springs for which the locality is famous. It is not limited in extent, but the total layout shown on the drawings should not exceed six hundred feet in the direction of the main road, and eight hundred to the S.W. of the main road.

2. *Buildings required.*

(*a*) Main building.

(*b*) Administration building for manager and senior staff.

(*c*) Pump room for the supply of water, and water storage.

(*d*) Garage to accommodate twenty cars.

3. *Main building.*

The accompanying plan of the site shows that the approach will be by a main road running N.W. and S.E. intersected at right angles by another road running N.E. The N.E. side of the main road is bordered by hotels and residential blocks. As the ground falls to the S.W. it will be possible to utilize the lower portion of the site for grottoes, tea rooms, etc., of which a pleasing architectural feature might be made. It will be permissible to form an area on the main road if desired. A covered colonnade, arcade, or portico should be planned on the S.W. side to provide protection from the weather and ample space for the patients to promenade. The final design should show the arrangement of approaches, terraces, gardens, etc., in proximity to the buildings. All paths should be designed so as to avoid steep gradients as they will be used by invalids and bath chairs.

The establishment will be for the use of male and female patients in equal numbers (sixty of each). Apart from the rooms (specified in the appended list) which will be common to both sexes, it is advisable to allot one side of the building to men and the other to women. The dressing-rooms should be conveniently grouped in close proximity to the treatment rooms.

4. *Accommodation required. Main building.*

(*a*) Common to both sexes :—Recreation room ; reception room ; reading and writing room.

(*b*) For men and women separately :—Twelve treatment rooms, each approximately 80 sq. ft. in area ; two treatment rooms, each approximately 100 sq. ft. in area ; three treatment rooms, each approximately 280 sq. ft. in area ; three or four bathrooms ; four attendants' rooms, each approximately 60 sq. ft. in area ; towel store ; thirty dressing cubicles, each approximately 60 sq. ft. in area ; rest lounge on each floor ; lavatory for about sixty patients ; attendants' lavatory.

(*c*) Service section, not to be duplicated :—Boiler house ; coal and fuel store ; workshop ; engineers' store ; laundry ; linen store ; general drug store ; electric intake room ; goods entrance.

5. *Floors of main building.*

(*a*) Lower ground floor :—This floor will contain such treatment and dressing rooms as are not included on the ground floor ; and also the service section given above.

(*b*) Ground floor :—This floor should be level with the street, and lead through to the terrace overlooking the valley. It should comprise : Reception room ; reading and writing room ; recreation room ; a portion of the treatment and dressing rooms, etc.

(*c*) First floor :—This floor should provide residential accommodation for the nursing staff, with common dining-rooms and kitchen, and for the caretaker. The nursing staff will include ten male and ten female attendants.

A goods lift and two passenger lifts should be provided ; one of the latter sufficiently large to accommodate a stretcher. No residental accommodation for patients is required.

6. *Drawings required.*

Esquisse :—Scale 32 ft. to the inch. One plan, indicating the layout in a general way, but giving the planning of the various buildings in detail. S.W. elevation ; one cross section.

Finished design :—Scale 16 ft. to the inch. One plan of ground floor ; one plan of lower ground floor ; one of these plans should show the general layout. S.W. elevation one cross section.

Board of Architectural Education

Exhibition of Designs of Students Exempted from the R.I.B.A Final Examination.

The designs submitted by students exempted from th final examination (with the exception of the subject o Professional Practice) are on exhibition from Monday September 17, to Wednesday, September 26, 1923, in clusive, in the University of London Bartlett School c Architecture, Gower Street, by permission of the Universit College Committee. The exhibition will be open dail between the hours of 10 a.m. and 5 p.m., Saturdays 10 a.n and 1 p.m.

The R.I.B.A. Board of Architectural Education silve medal for the recognized schools is awarded for the best se of designs submitted at this exhibition.

This year the following schools, which have courses (five or more years' duration recognized by the Roy Institute for the purpose of exemption from the fin examination, have sent exhibits : The Architectur Association, Liverpool University School of Architectur Glasgow School of Architecture, Robert Gordon Technic College, Aberdeen.

The exhibition of designs submitted by students exempt from the intermediate examination is being held by pe mission of the Council of the Architectural Association the studios of the Architectural Association, 34-36 Bedfo Square, W.C.

Fire Losses

Report of the Royal Commission

The annual cost of fire defence and direct loss caused fires in this country, states the report of the Royal Comm sion on Fire Brigades and Fire Prevention, which w issued as a Blue Book (Cmd. 1945, 8s. net), has in rece years much increased, and may at present be estimated about £25,000,000.

The Commissioners were :—Sir Percival Laurence (cha man), Sir Joseph Petavel, F.R.S., Sir Sampson Sladen, Vincent Caillard, Sir Maurice Fitzmaurice, Mr. A. L. Dix Lieutenant-Colonel Guy Symonds, Captain V. L. Henders Mr. J. T. Burns, Mr. Hedley Peters, and Mr. H. E. Stilg M.I.C.E.

Government buildings and their contents, it is poin out, are of immense value. None of the buildings is insur Some of them, more particularly the older ones, are subj to serious risks from defective lighting or heating insta tions, or the use of inflammable materials in their constr tion, and in some there is the risk of their being invol an outbreak should occur on adjacent premises. Even ickingham Palace, the Commissioners were informed, is "entirely non-fireproof construction and subject to the avest risks." Somerset House was also mentioned as a ilding of non-fireproof construction, and a source of great xiety to the Office of Works, having regard to the unique d priceless documents stored within its walls.

The Commission state that it seems desirable that steps ould be taken by the London County Council to deal ore expeditiously with the more urgent cases of inadequate eans of escape in buildings coming within the scope of the ndon Building Acts. The Commissioners recommend that e conversion of houses into flats should be subject to the nsent of the local authorities, especially as regards the eans of escape, construction of hearths, etc. Wooden ildings of a permanent character are regarded with disvour, and it is recommended that a licence from the local thority should be required in the case of wooden bungaws of the type common at seaside resorts. It is also recomended that provision should be made in by-laws or local ts as to the separation of shops from residential accomodation, and for means of escape from the latter. In that nstruction of shop premises it is important that structural etal work should be encased with some suitable material ting as a non-conductor of heat. It is proposed that the ligation to provide reasonable means of escape in factories d workshops to the satisfaction of the local authority ould be extended to all factories where more than twenty rsons are employed, new factories where ten or more rsons are employed on any floor above the ground floor, d factories scheduled as "dangerous." The attention of al authorities, it is suggested, should be given to the provision of adequate means of escape in places of public worship, and arrangements should be made for the periodical inspection of churches, hospitals, libraries, and schools by officers of the fire brigade. Local authorities should be empowered to require the provision of adequate means of escape in the case of hotels, boarding houses, boarding schools, etc., with sleeping accommodation for more than fifty persons, and in the case of those with accommodation for more than twenty persons, if exceeding two stories in height.

Precautions in Theatres.

In many theatres, especially in the smaller towns, the report states, the conditions from the point of view of fire precautions and means of escape are very unsatisfactory and constitute a serious risk. Among the precautions which the Commissioners suggest should be enforced in all new theatres and music-halls are :—

(*a*) Provision of glazed lantern over the stage to ensure that if a fire should occur on the stage the flames and smoke might find a vent without invading the auditorium;

(*b*) Separation of the stage from the auditorium and the dressing rooms; and

(*c*) Provision of adequate exits and stairways.

In the case of existing theatres the more important precautions should be carried out in all cases. All theatres should be regularly inspected by officers of the fire brigade. (New Home Office regulations were issued this month.)

In the London Fire Brigade area it is suggested that the County Council should give further consideration to the question of permitting automatic fire alarms to be connected directly with the fire stations.

Enquiries Answered

nquiries from readers on points of architectural, constructional and legal interest, etc., are cordially invited. They ill be dealt with by a staff of experts, whose services are specially retained for this purpose. If desired, answers will be sent direct through the post. In no case is any charge made for this service.

WIRED PLATE GLASS AND SUN.

"Architect" asks : "What action does the sun have (if y) upon plate glass reinforced with wire netting ?"

Occasionally a sheet of wired plate in a skylight will ack from no apparent cause, which may possibly be due internal stresses set up by the sun's heat. A very large gregate area of such glass, however, has successfully thstood such influences, which may be regarded as atively negligible.

G.

SIZE OF ROLLED JOISTS.

"Student" enquires : "Could you tell what section S.J. should be used to carry the following :—

"1. Span 14 ft., carrying ½ B wall 8 ft. 6 in. high, with o corner fireplaces as sketch ?

"The builder has used a 9×4 in. section and carried one d on a 4½ in. wall, without any padstone !

"2. A steel joist takes a distributed load over half its an. Can this be taken as the reaction at the one end ? e other merely bearing on the wall.

"Is it possible for you to give a short article on simple oblems like the above, as to the mode of obtaining the quired section ? The text-books are all too elaborate."

In reply to the first question the wall will weigh, say, tons, and to carry that a 9×4 in. by 21 lb. R.S.J. will sufficient. The corner fireplaces coming on the end of e girder, where the stress due to the wall is much reced, will not require any addition. A padstone at least t. long should have been inserted at each end, or a piece 4×3 in. by 9½ lb. rolled joist to answer the same purpose.

In reply to the second question the reaction at the ends will be $\frac{3\frac{1}{2}W}{14} = \frac{1}{4}W$ at the free end, and $\frac{10\frac{1}{2}W}{14} = \frac{3}{4}W$ at the loaded end, W being the amount of the load.

An article as suggested appears in this issue.

HENRY ADAMS.

DECORATED DOORWAY IN LEEDS DISTRICT.

"W" asks : "Can you give me any information regarding the whereabouts of a small decorated period doorway near Leeds, or in the neighbouring district ? I am desirous of measuring it in connection with a small series of doorways of different periods that I am studying."

—Possibly the very charming little doorway to the turret stair at the north-west corner of Beverley Nave would suit ; or, alternatively, Selby, Howden, and Patrington have interesting, though more imposing, doorways. Why not consult the book on Yorkshire churches which was published in Leeds in 1844, and which is certain to be in the Public Library ? It might give a more accessible example.

HOW TO FELL A TALL CHIMNEY.

"H. J." writes : "With respect to the information given in your last issue as to the methods of felling a tall chimney, there is one other method which may be of interest to 'A.' The method is in some respects similar to the second one described, with the exception that a rope or cable is belted round the top of the shaft, and this is pulled steadily in the direction in which the chimney is required to fall."

The Week's News

Chester Cathedral.

The sum of £13,373 has been received towards the £20,000 required for the restoration of Chester Cathedral.

Change of Address.

Messrs. Chas. Heathcote and Sons have removed from 110 Cannon Street to 38 Parliament Street, S.W.1.

New Laundry and Baths, Bethnal Green.

Bethnal Green Council propose spending £100,000 in building a municipal laundry, slipper and swimming baths.

Painting L.C.C. Schools.

L.C.C. school interiors are to be repainted every tenth year in future instead of every eighth.

New Hall for Ilfracombe.

Ilfracombe Council have decided to borrow £8,600 for the purpose of altering the existing Victoria Pavilion into a new concert hall.

Lord Roberts Memorial in St. Paul's.

Preparations are in hand for setting up in St. Paul's Cathedral the memorial to Lord Roberts, which will take the form of a tablet.

Parish Hall Extension.

It is proposed to extend the parish hall at St. Barnabas, Temple Fortune, Golders Green, by providing a club-room and cloak-room at a cost of about £1,000.

New "Arts Theatre," London.

The new theatre which Mr. Laurence Cowen, the playwright, is building immediately facing Drury Lane Theatre, is rapidly approaching completion, and is to be named the Arts Theatre.

Glossop's New P.O.

Glossop's new post office, which has been erected in Victoria Street at a cost of about £7,000, has been opened. The architect is Mr. A. Myers, A.R.I.B.A., F.S.I., senior architect to His Majesty's Office of Works.

New Open-air Bath, South Shields.

An open-air swimming bath on the North Beach, South Shields, has been opened. It is part of an improvement scheme which provides for the erection of shelters, shops, and tea rooms, at a total cost of £30,000.

Lincolnshire's Big Road Scheme.

Spalding Rural Council has received a 75 per cent. grant from the Ministry of Health for a big road scheme costing £31,000 in South Lincolnshire. This is the first grant of its size made out of the Road Fund to any council in England.

Newcastle War Memorial.

It has now been definitely arranged that the unveiling of the city war memorial in Eldon Square will take place on Wednesday, September 26. Mr. Charles L. Hartwell, A.R.A., London, has been responsible for the work.

Big Scheme, Wolverhampton.

Efforts are being made to commence the scheme for a road between Birmingham and Wolverhampton in the autumn. A modified scheme has been prepared for a 100 ft. road, costing £229,000, instead of a 150 ft. road, which would have cost £450,000.

Workmen's Houses at Southport.

Some delay has arisen in the building of workmen's houses at Southport owing to the uncertainty as to whether the Ministry of Health will grant a subsidy. Representations are to be made to the Ministry of Health that Southport is a suitable place for the granting of such subsidies.

Huddersfield War Memorial.

Huddersfield War Memorial, which is being erected on a commanding site in Greenhead Park, will very probably be unveiled in the spring of next year. It is to consist of a column towering 60 ft. high from the base, partially surrounded by a Grecian colonnade.

Scarborough Scheme.

Scarborough Corporation's scheme to erect a large public hall, dance hall, restaurant, etc., on the site of the present Olympia dancing hall and the portion of the St. Nicholas' Gardens fronting the South Bay, has been rejected by the Ministry of Health.

Aldershot War Memorial.

A war memorial is being placed on the walls of the sanctuary of the Garrison Church at Aldershot in memory of the 17 members of the Royal Army Chaplain's Department, who gave their lives in the war. The work has been carried out in oak and alabaster, and provides a fitting and handsome adornment of the church.

The Rowland Hill Statue.

When the memorial to the London troops was erected outside the Royal Exchange, it was found necessary to remov the fine statue by Onslow Ford of Sir Rowland Hill, th originator of the penny post. This is now to be re-erected outside the General Post Office in King Edward Street, an arrangements are being made for a formal unveiling by Lor Southwark.

Safety in the Stove.

Mr. H. Teeling Smith, director of Messrs. Smith and Wel stood, speaking at a Rotary Club luncheon at the Hotel Ceci said that in consequence of investigations carried out by collier owners precautions had been introduced in all anthracite pi which practically made it impossible for explosions in anthra cite coal stoves, such as were experienced last winter, to occu in the future.

The National Gas Exhibition.

The National Gas Exhibition, which is being held at Birmin ham this month under the patronage of His Majesty the Kin was opened on Monday, September 17, at 3 p.m., by th Right Hon. the Lord Mayor of Birmingham, Alderman S David Davis, supported by Mr. D. Milne Watson, president the National Gas Council of Great Britain and Ireland, an Sir Arthur Duckham, K.C.B., past-president of the Socie of British Gas Industries. The exhibition will remain op until Wednesday, October 3. A special feature will be made cookery lectures and demonstrations to be given at 3.30 a 7.30 daily; and in addition a series of popular lectures has be arranged.

Tile Trade Boom.

The reaction on British trade of industrial conditions other lands is well illustrated in the pottery trade at prese Owing to a prolonged strike by sanitary ware operatives in t United States, winter employment is assured in the sanita ware section of the industry in this country. Substant orders have reached England, and when these have been f filled there are arrears of Canadian and other Colonial ord to be made up. The practical elimination of German co petition as a result of the occupation of the Ruhr, and the mand for decorative tiles for the walls and flooring of n houses, have caused a boom in the tile trade, and overtime being worked. On the other hand, foreign competition led to a depression in the home markets for china and gene earthenware.

Promenade for Seaton Carew.

The scheme for the widening of the Seaton Carew P menade and the construction of a bathing pool, to be submit to the West Hartlepool Town Council, will cost something £42,000. A sea wall about 1,600 ft. in length is to be c structed from the existing wall at Staincliffe to Station La at an average distance of 90 ft. from the cliff. An area about five acres will be taken in, which it is proposed to out in ornamental walks, lawns, and rockeries. The bath pool is to be 200 ft. long by 100 ft. wide, and the cubicles be placed under the promenade. A shelter capable of acc modating 1,500 people will be constructed of reinforced c crete at the end of the new promenade. The provision of h tennis courts and putting greens at Seaton Carew is also un consideration.

Civic Societies and their Aims

In reading a paper at the Conference of Civic Societies, rs. Victor Branford said :—

The civic society exists to discover, maintain, and develop hat we may call the soul of the city, a soul which will neces-rily be various as are cities themselves, but which needs express itself through certain common channels. The ost obvious expression is in the buildings, from homes to hurches and other public buildings, and in the gardens, arks, and open spaces with their considered lay-out or ccidental development. Here desires and aspirations are rystallized in stone and brick, embodied in the use of art nd nature, or thwarted and repressed. Here is recorded e history and tradition of each place, and here also we ok for its possibilities.

So it is essential that the civic society should turn its ttention to the survey, that its members should realize hat the place has been, what it is, and what are its possi-ilities for good and evil. But surveys are not only of place, hey must be of folk and work also. We need to know the fe of the people, the work they do, the opportunities, or ck of them, for artist, poet, and playwright. Here in the odern city we are too apt to find a lack of such oppor-unities for development of the inner life, which seems to xplain the lack of beauty we too often observe in the out-ard surroundings.

Civic societies stand for the attempt to bring together hese two needs and meet them both by a voluntary union f citizens, determined to make the most of their community.

The civic society works through various committees or ctions. These may be separate societies working on a derated basis as committees of the civic society, and there much to be said for this method, which is adopted, for xample, by the Richmond Civic Association and the local ranch of the League of Arts. The object of such federa-ion is to unite all those aiming at development of the life f the spirit in a place with those aiming at bettering the nvironment by better housing, better education, or in ther ways, so that they combine consciously in the service f that place and the realizing of its ideal. It is the remaking f the community, and nothing less, which is the problem f the civic society.

To sum up, the civic society achieves its aim in the first lace in so far as it brings together all other bodies in the cality in a common determination to make the most of heir city or region, in a common vision of what it may be-ome. In the second place in so far as it ensures through tudy and survey of the local conditions, and through co-perating with the more technical surveyors and town-lanners, as well as with practical sociologists, that this ision shall not be of the nature of a misleading dream or astle in the air, but shall be founded on knowledge of the ast and present by which the future must in some sense e conditioned.

Obituary

Mr. A. W. Tanner, A.R.I.B.A.

We regret to record the death, on August 4, of Mr. ugustus W. Tanner, at the age of eighty. He had only tired from active professional work two years ago, and as the oldest Associate on the R.I.B.A. register, having een elected in 1870, his serial number being 72.

After serving his articles with Mr. Giles, of Craven Street, trand, he entered the offices of the late George Edmund treet, R.A., and acted as one of his principal assistants uring the erection of the Law Courts. He afterwards ntered into partnership with Mr. Romaine-Walker, and, nder the name of Romaine-Walker and Tanner, carried n private practice until 1896.

In 1883 he was appointed District Surveyor for Hatcham, nder the Metropolitan Board of Works, and in 1896 for otherhithe, part of Camberwell, Hatcham, and St. George's-in-the-East, under the L.C.C., when the acceptance of this office rendered it necessary for him to dissolve partnership with Mr. Romaine-Walker. He was again reappointed by the L.C.C. for the district of St. George's-in-the-East in 1907, and retained that position until his retirement in 1921.

Having acted as district surveyor for about thirty-eight years, he naturally had a wide knowledge of the old Building Act and its many amendments. He had a keen sense of justice and, in his official capacity, held an equal balance between the letter and spirit of the law. A picturesque personality, quick to anger and equally quick to forgive, an indefatigable worker, and a really good fellow has gone to his well-earned rest.

Mr. J. B. Everard.

The death took place at Leicester of Mr. John Breedon Everard, M.I.C.E., one of the best-known engineers in the Midlands, at the age of seventy-eight. He was responsible for the scheme for obtaining a water supply for Leicester from the Derwent Valley. He designed numerous public buildings for Leicestershire, and was engineer for several important waterworks schemes. He was a Fellow of the Royal Geological and other societies, and had served as High Sheriff for Leicestershire.

Public Utility Societies Amendment Regulations, 1923

The Minister of Health, in pursuance of the powers conferred on him by section 19 of the Housing, Town Planning, etc., Act, 1919, and section 6 of the Housing, etc., Act, 1923, and of all other powers enabling him in that behalf, and with the approval of the Treasury, hereby makes the following regulations :—

1. These regulations may be cited as the Public Utility Societies Amendment Regulations, 1923, and shall be construed as one with the Public Utility Societies (Financial Assistance) Regulations, 1919,(*a*) the Public Utility Societies (Financial Assistance) Regulations, 1920,(*b*) the Public Utility Societies (Sale of Houses) Regulations, 1920,(*c*) the Housing (Societies and Trusts) Amendment Regulations,(*d*) and the Public Utility Societies (Financial Assistance) Regulations, 1922.(*e*)

2.—(1) The percentage of the annual loan charges referred to in paragraph (2) of section 19 of the Housing, Town Planning, etc., Act, 1919, shall after the 31st day of March, 1927, subject as hereinafter provided, be 40 per cent. instead of 30 per cent., and paragraph (1) of article 2 of the Public Utility Societies (Financial Assistance) Regulations, 1920, shall be read and have effect accordingly.

(2) It shall be a condition of such increase from 30 to 40 per cent. :—

(*a*) that the society shall have paid all debts owing to the Crown in respect of materials supplied by the department of Building Materials Supply; and

(*b*) that in any case in which the Minister is satisfied that some person, firm or body corporate carrying on business was instrumental in promoting the society for the purpose of providing houses for persons employed in such business, such person, firm or body corporate shall, if the Minister so requires, guarantee by way of collateral security the repayment of any loan advanced by the Public Works Loan Commissioners and payment of interest thereon.

(3) Nothing in these regulations shall impose any liability on the Minister to pay to a society the increase aforesaid as regards any part of the Exchequer subsidy, properly attributable to houses already sold by the society, in respect of which the liability of the Minister at the date of the sale has been or will be, by virtue of article 3, of the Public Utility Societies (Financial Assistance) Regulations, 1920, as amended by the Public Utility Societies (Financial Assistance) Regulations, 1922, discharged.

3. Paragraph (ii) of article 6 of the Public Utility Societies (Sale of Houses) Regulations, 1920, and the second schedule to the same regulations are hereby revoked.

4. In article 7 of the last-mentioned regulations for the words from "at a price" to the end of the article there shall be substituted the words "at a price less than that approved by the Minister."

5. Article 8 of the Public Utility Societies (Sale of Houses) Regulations, 1920, shall have effect as though the words "as shown by the said second schedule" were omitted therefrom, and as though for the words "and, thereafter, to 30 per cent. of the annual charges" there were substituted the words "and, thereafter, to 40 per cent. or to 30 per cent. of the annual charges (at whichever rate the subsidy payable to the society is for the time being calculated)."

(a) S.R. & O., 1919, No. 1428.
(b) S.R. & O., 1920, No. 134.
(c) S.R. & O., 1920, No. 107.
(d) S.R. & O., 1921, No. 1193.
(e) S.R. & O., 1922, No. 527.

The Earthquake in Japan

In the course of a leading article "The Daily Telegraph" says: It will be interesting to see whether in reconstructing their cities the Japanese engineers are able to devise methods of construction which may lessen the perils of an earthquake. The evidence at present available is somewhat conflicting, but it may be noticed that, according to Mr. Egger, the Imperial Hotel, "a massive stone building," was "standing rock-like and entirely intact" after the great shock, whereas the ancient walls of the Imperial Palace grounds had crumbled into ruin. He believed that four out of every five modern structures survived the earthquake, though many of them were afterwards burnt. It would be well to know whether reinforced concrete buildings stood the strain as successfully as some engineers have predicted. Much depended, no doubt, on the nature of the subsoil under each of the larger structures, for some at least of the modern brick buildings survived. However this may be, we are sure that the Japanese will in the near future have a new Tokio and a new Yokohama even more imposing than the cities which are destroyed.

A Hint for Architects

There are a good many important buildings in course of erection in Liverpool just now—Woolworths, the New Empire, the new dancing hall in West Derby Road—to mention only three; and the public is showing a good deal of interest in their progress from day to day. Why is it that it never occurs to the architects or other responsible persons to display in some conspicuous position a pictorial plan which will show what the building is to look like when it is completed? It would add tremendously to the general interest in the work that is going forward and it would be an effective means of advertisement into the bargain.—"Liverpool Daily Post and Mercury."

Cockersand Abbey

Some Results of the Recent Excavations

In the last six weeks, writes a special correspondent in "The Manchester Guardian," excavations have laid bare what has long been fascinating matter of dispute among antiquarians—the ground-plan of Cockersand Abbey. Although Cockersand in its heyday ranked third among the monastic houses of Lancashire, few except the antiquaries have ever come across its curiously out-of-the-way remains. They lie on an exposed lowland between the estuaries of the Lune and the Cocker—a part of the Lancashire coast a little to the south of Morecambe that is swept by crueller winds and visited less than any other—and they consist only of an Early English chapter-house standing barnlike beside small masses of masonry and the footings of ruined walls. They are not particularly beautiful, but they are not unsightly either, and by their melancholy setting and pathetic decay they tease the imagination.

When this thirteenth-century abbey was levying tithes in nearly two hundred townships it was separated from the fertile countryside which it served by the quagmires of Thurnham Moss, and even now that the marshes have been drained, and all that was for the monks grey, disgusting swamp is green pasture land, the solitary approach to the site of their home is by a road that curves preposterously like a well-flung lasso. It is a road that seems to remember the marshes. The fields about which it winds circumspectly are not yet acquitted of smooth treachery.

This austere remoteness has always given Cockersand a romantic appeal, and antiquaries have felt themselves compensated for the insignificance of its heaps of masonry by comparison with the nobly suggestive remains of Rievaulx or Bylands. It was to this bleak shore, they remember, that Hugh Garth, "an heremyt of great perfeccion," retired from the society of his fellow subjects of Henry II, and was supported in his still retreat by the charitable gifts of those who chanced to hear about him and respected his holy way of life. He built for himself among the melancholy marshes a hermitage, and, thus detached from the world, might have perfected some peculiar exaltation of soul had he not been a man of warm human sympathies which the world would not willingly let cool. The diseased and the outcast sought him out, and his mind soon outgrew the idea of solitary exaltation. He resolved to systematize his casual acts of charity, and with help from William de Lancaster (or, perhaps, it would be fairer to say William de Lancaster's charitable wife) he created a hospital in the wastes.

When Cockersand shared in the ruin of the rest of the larger religious houses the tokens of its wealth were scattered with a ruthless hand, and there has remained only the chapter-house and an inventory to hint at its former riches. The interior of the chapter-house is a fine piece of thirteenth-century work, with a handsome vaulted roof in four quadripartite bays supported by a central shafted column with carved foliated capitals. It has been preserved as a burial-place of the Daltons of Thurnham. The ground plan of the rest of the buildings has been variously conjectured until an exploration committee, organized at Liverpool, secured funds and began some weeks ago to remove the turf overlying the foundations.

Already one capital error of conjecture has been disproved by the excavating enthusiasts. A Lady Chapel, generally supposed to have been on the east of the Abbey Church, has been found adjoining the northern transept, an unusual position, which is only to be found elsewhere at Ely. The church itself is now discovered to have been even larger than was thought likely. It was over 170 ft. long internally from east to west, and nearly 80 ft. wide across the transepts. Where there were said to have been three chapels there would now seem to have been only two. The cloister garth measured 72 ft. by 66 ft. It contains at its south-west corner the remains of a wide staircase which led up to the frater or refectory. Judging from the dimensions of the cellarage below the refectory it seems that the frate was a big apartment, some 65 ft. long and about 22 ft wide. Another apartment, 21 ft. by 22 ft., adjoined the eastern side.

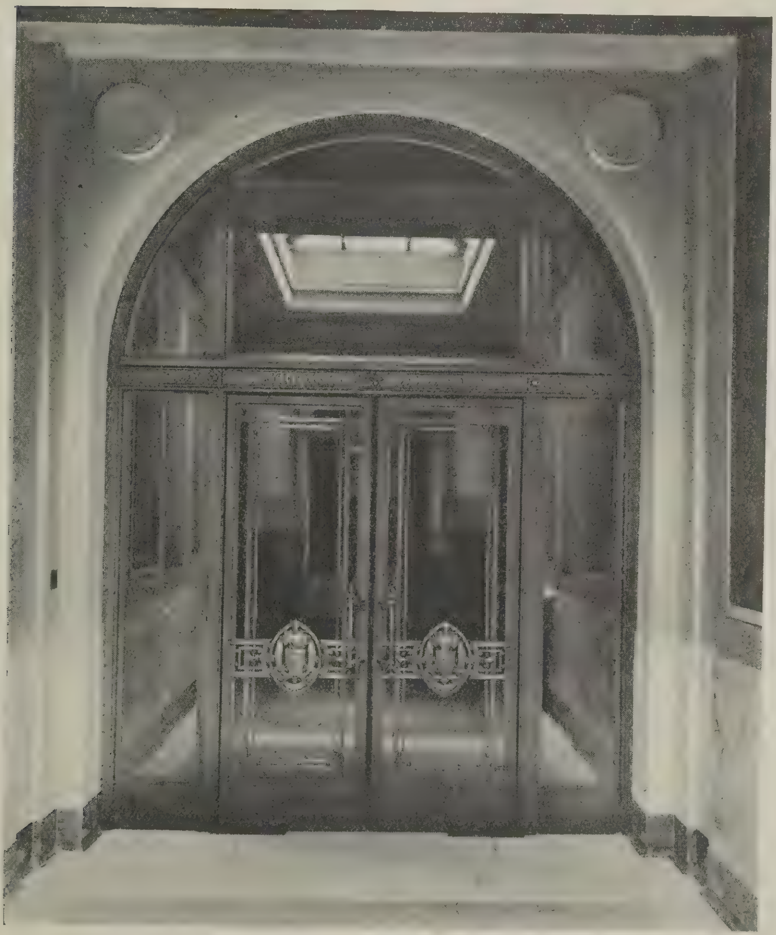
The foundations of the warming-room where a fire alway burned through the late autumn and winter, may be seen on the south side of a vestibule that formed the approach to the chapter-house. In the farm orchards have been discovered the ruins of the infirmary. On the south side of th presbytery worked stones resembling a well lining abou 2 ft. 10 in. in diameter have been unearthed, and the grea drain of the Abbey has been detected close to the tall mas of ruinous masonry by the sea-wall (known locally as John' Hall). The drain is built of red sandstone and is big enoug to allow of a man walking within. It has also been foun that certain areas are full of fragments of stained-glas windows, lead cames, moulded masonry, and ornamenta floor tiles. The supervision of the work of tracing the mai walls and of clearing some special areas was undertake by Mr. John Swarbrick, of Manchester.

Wednesday, September 26, 1923.

Vol. LVIII. No. 1499.

THE ARCHITECTS' JOURNAL & Architectural Engineer

With which is incorporated "The Builders' Journal."



GLASGOW MUNICIPAL BUILDINGS EXTENSION.
Bronze doors dividing bridge corridor from old building.
WATSON, SALMOND, AND GRAY, FF.R.I.B.A., ARCHITECTS.

27-29 Tothill Street, Westminster, S.W. 1.

Current Architecture. 196.—Glasgow Municipal Buildings Extension: One of the Connecting Arches across John Street

Watson, Salmond, and Gray, FF.R.I.B.A., Architects

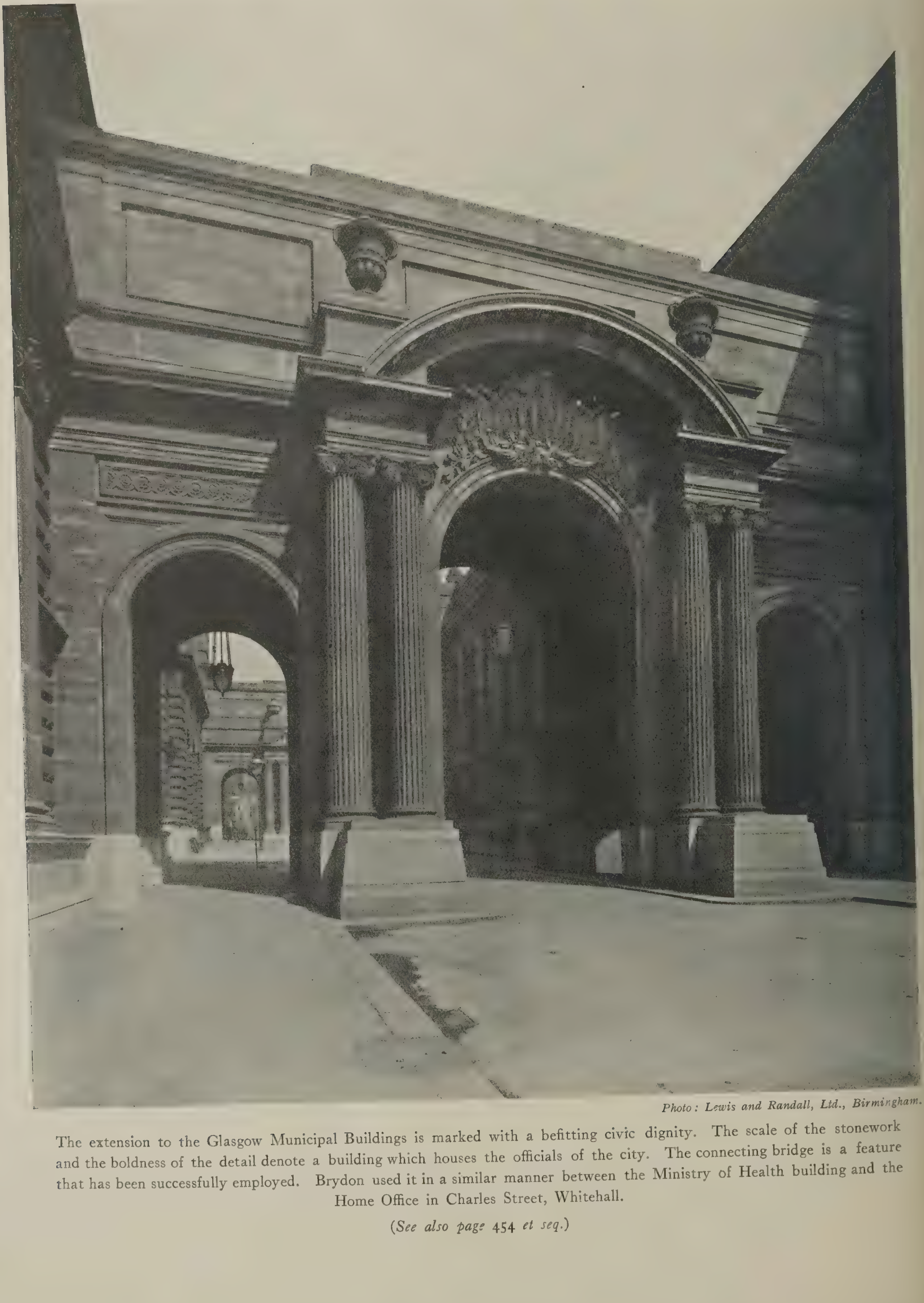


Photo: Lewis and Randall, Ltd., Birmingham.

The extension to the Glasgow Municipal Buildings is marked with a befitting civic dignity. The scale of the stonework and the boldness of the detail denote a building which houses the officials of the city. The connecting bridge is a feature that has been successfully employed. Brydon used it in a similar manner between the Ministry of Health building and the Home Office in Charles Street, Whitehall.

(*See also page* 454 *et seq.*)

THE

ARCHITECTS' JOURNAL

27-29 Tothill Street, Westminster, S.W.1.

dnesday, September 26, 1923

Volume LVIII. No. 1499

Holiday Thoughts from France

A LONG railway journey at the end of a holiday affords a rare opportunity for the adjustment of impressions, for making comparisons, and for drawing conclusions. Of all the continental ıntries which architects and, indeed, others, visit on :ir holidays, France is the most frequented. Propinquity ne is sufficient to account for this, but whatever the sons, France is a country that repays many visits on :ount of the immense versatility which it comprises ween its northern and its southern sea borders; a satility that is to be found in its people and in the con- ıration of the country, no less than in its architecture and ts dialect.

ɜoing through this great, rich, and varied country the ervant traveller, particularly if he be an architect, not fail to make certain reflections. What is it that dis- guishes this land, not only from his own, but also from or most others in which he may have travelled? Is it just this: France consistently refused to participate the industrial revolution? The result of this supreme dom is a country free from vulgarity, from ostentation, n oppression; a country where the arts flourish and ere their value is understood; a country truly demo- tic both spiritually and politically; a country which s thriftily and which, therefore, prospers.

uch things cannot be without reflecting their presence nation's architecture, and indeed it is perhaps from this rce that they may first make their impression felt, at rate upon the architect.

here is nothing ignoble either in industry or in com- ce; indeed, the one may be said to be a virtue, and the er a necessity; both thrive in France. Yet industrialism commercialism, using these words with their accepted lern connotations, bring ugliness and evil in their train. land fifty years ago was given over to the one; to-day s given over to the other. In France there is no mployment; in England there are more than a million mployed. Fifty years ago industrialism expressed itself ur architecture—slums, congested cities, monotonous ırbs, chaotic lay-outs, are all the architectural expres- of industrialism, and even large important public dings seemed to take on the aspect of factories. To-day mercialism is expressing itself in our architecture, and ost the entire west end of London is being rebuilt rding to its creed. Some have ventured to prophesy these great, uncouth buildings are only fulfilling an emeral need; let us hope that this is true, for they seem expressive of an aggressiveness and a prodigality that, ss checked, must lead ultimately to national ruin. ıer or later there must come a return to decency, to ality, to the art of living, when the night will no longer ıade hideous with sky signs, or the countryside defaced advertisements; when the arts can flourish freely and for their own sake, and when man may have leisure for contemplation.

In France there is industry without industrialism (few workers display greater industry than the French peasant, who labours daily from before sunrise to after sundown); consequently, although many of her towns are given over to manufacture, none of them is entirely defaced, entirely chaotic, nor utterly without grace. Similarly there is commerce without commercialism, and, therefore, it is not necessary to destroy the heart of Paris to satisfy the needs of shopkeepers. In every French town there is to be found grace and dignity. The tradition in architecture has continued unbroken since the eighteenth century because the tradition of life has continued unbroken. It is for this reason that Englishmen feel that France is still a country of the *dix-huitième*. She is not, but she has avoided the break with the past which every country subscribing to industrialism inevitably suffered.

It must not be concluded that recent French architecture is always above reproach—experiments with *l'art nouveau* have disfigured many a suburb—but such things are, on the whole, expressive of a misdirected ebullience of spirit rather than a wrong national outlook.

In every part of France, whether it be a small town of the *midi* with its *place*, and its double rows of bleached plane trees; a rich industrial town of Burgundy, with its broad busy tramline-threaded streets; a quiet sleepy provincial town with its *hôtel de ville* and symmetrically disposed municipal theatre and prefecture; a small country town without drainage or water supply; or the capital itself—there is always a consistent decency and dignity about the town as of that of a people deeply conscious of the fact that it is their relations to each other that are of paramount importance in life.

For that reason the insistent personal note, the vulgar and aggressive desire for self-advertisement, the hectoring and bullying tone of the self-seeker are absent in French architecture. Why? Because the Frenchman realizes that far more important than the vulgar personal success of a swollen bank balance are the amenities of national life, in which the rights of every individual are respected. English commercial architecture to-day is frankly insulting; its mere vastness but tends to accentuate and belittle the human individual, which by its very scale it reduces to utter insignificance. Humility is a virtue, and many great buildings have the power of begetting it in the human mind, but they are buildings dedicated to inspiring purposes. To be made conscious of human insignificance on entering a cathedral is fit and proper, but to feel the same sensation on entering a multiple store to buy a collar-stud or a reel of cotton is to suffer an insult. A man may not resent feeling a worm in the presence of a far greater personality than his own whom he reveres and respects, but he does resent being treated as one by a hectoring, blustering bully who has attained to a position of eminence by reason of his disregard for the feelings of others.

Because France refused to participate in the orgy of the industrial revolution she is not to-day obliged to spend millions of pounds in street-widenings and slum clearances, and the great works of the eighteenth and early nineteenth century, when half Europe was rebuilding, are still satisfactory to-day.

Travelling northwards across France, then, these are some of the chastening thoughts that arise; they are the crystallization of a few weeks' observations and unconsciously gleaned impressions. They explain, too, why it is that instinctively every country turns to France for guidance in matters concerning the arts and the humanities; why every country, in a greater or lesser degree, envies her; why Paris is the one city in the world to which every person turns, for although London is larger, and New York is richer, Paris epitomizes all that is best in our western civilization (a category that includes the U.S.A. and Canada). And this is because the people of France know how to live; they recognize the rights of the individual; and these rights extend through the whole texture of life. It is no mere political creed, but an attitude of mind, and the same attitude of mind which fifty years ago would not allow all the amenities of life to be swept aside by industrialism will not now permit the decencies of life to be disregarded by commercialism. This is the lesson which may be read everywhere in France by those with eyes to see, but particularly in her architecture.

Architecture and Industry

"Why," asked a trade unionist at the Industrial Welfare Conference, "should not the architecture of a mill be as beautiful as a church?" The question is of too indefinite a nature to be directly answered. For one thing it assumes that churches are necessarily beautiful and mills ugly—an assumption that must at once be challenged. We know of churches not a few that have not the remotest claim to "beauty," while, on the other hand, there are mills without number that fulfil all the canons of fine architecture. The speaker's meaning is, however, perfectly clear. Ugliness, while not the inevitable expression of any particular type of building, has, through the lamentable shortsightedness of our manufacturing predecessors, come to be almost exclusively associated in the popular mind with buildings devoted to industrial purposes. That there is no necessary association between ugliness and industrial buildings has been demonstrated by numbers of modern architects. Many of the factories put up during the late war were exemplary in their architecture, and in their arrangements for the comfort and convenience of the workers. This is as it should be, and regarded merely from the financial point of view the investment represented is a sound one, for the individual reacts with extraordinary sensibility to his environment. Architecture has too long been regarded as a luxury. Actually it is one of the vital necessities if, as a race, we are to keep mentally and physically up to concert pitch. The wider employment of the architect's services means better, healthier, and more beautiful factories, and consequently more contentment among, and better output from, those who work in them.

The Revival of the Arcade

Is the arcade, these many years out of favour, again coming into its own? The reflection is stirred by the announcement that it is proposed to include one as a shopping centre within the building, originally intended for an hotel, whose steel framework has so long stood gauntly in Piccadilly overlooking the Green Park. Arcades are still a familiar feature of the Metropolis, though many have disappeared. In Piccadilly, of course, there is the famous Burlington Arcade with, almost immediately oppo-
site, the smaller one designed a dozen years ago by Mr
Thrale Jell; while at the rear of the Carlton Hotel and Hi
Majesty's Theatre, we still have the Royal Arcade (originall
the Opera Colonnade) designed by Nash and his pupi
Repton. This arcade has never enjoyed the popularity o
its great rival in Piccadilly, possibly because it is so fa
away from the main shopping centre; at almost any tim
of the day you may find it deserted. Yet it is perfec
architecturally, with many delightful shop fronts. Amon
other famous nineteenth century arcades was the Lowthe
Arcade in the Strand, designed in 1830, which, eight
years later, had to make way for Coutts's Bank; and th
Exeter Arcade, opened in 1851, which, however, had onl
a short lease of life. For the arcade idea, in the moder
sense, we are undoubtedly indebted to the French, for i
was only after the Napoleonic wars, when the Continen
became open to English visitors, that arcades began t
find such favour in London. It cannot be doubted tha
the popular *passage* of the French capital was the prototyp
of much similar and later work on this side of the Channe

External Ironwork

Some people learn by experience, some by observati
or intuition, while others never learn at all. Among t
last-named must be included those architects (or shou
we say manufacturers?) who persist in designing entire
unsuitable ironwork for open-air positions. Architect
especially the Gothicists, were great offenders during t
nineteenth century. Barry in the Houses of Parliame
Street in the Law Courts, and Scott in the Home Office
to name only three of the ringleaders—put the m
delicate and fanciful stuff outside their buildings, and
the same time put a standing charge on posterity
repairs. Cusps, fronds, tendrils, and other tenuous natur
istic ornamental devices are well enough indoors, but wh
they are put outside they become easy prey for the elemen
Hence the need for constant tinkering and renewal
rusted parts. We thought, however, that the day for t
sort of thing had gone by. But it is not so. Not a f
recent buildings have displayed external ironwork of ext
ordinary tenuity. If building owners are prepared to p
for the privilege of a fanciful display of this kind noth
more need be said; but if efficiency and low cost of upke
are desired, then it cannot too often be repeated t
external ironwork should be as simple as possible in
parts with easy accessibility for periodical repainti
which ought to be the only necessary upkeep charge.

Uninsured Public Buildings

The fact, revealed by the report of the Royal Commiss
on Fire Brigades and Fire Prevention, that Governm
buildings are not insured—not even buildings such
Buckingham Palace or Somerset House—seems to h
created some little public consternation. Calm reflect
however, must show that in the case of many, indeed m
public buildings, insurance is entirely out of the quest
Where is the insurance company that would be prepa
(without the imposition of ruinous premiums) to cover
fire risk of the immensely valuable contents of such build
as the National Gallery, the Tate Gallery, or the Bri
Museum? It would be infinitely cheaper in the long
for the nation itself to bear any actual loss. Westmin
Abbey, it appears, is an exception to the rule in the ma
of insurance. According to "The Manchester Guardi
before the war policies were in existence for more
£100,000, and of late years an additional policy has
taken out at Lloyd's which raises the protection to al
a quarter of a million pounds. Every precaution, of co
is taken against fire, the Abbey containing an elab
system of water mains, which is regularly inspecte
officers of the London Fire Brigade. The building is
guarded inside and out night and day.

The Planning of London and New York

By THOMAS ADAMS, F.S.I.

(Chairman Advisory Planning Group of Plan of New York and Environs)

COMPARISONS between great cities are always interesting; and no two cities are more interesting to compare than London and New York. Such a comparison will form an appropriate introduc- on to this paper. These cities are the two greatest in ze and importance in the world. The next decade is likely determine which of them is going to out-distance the her in size; and probably also which of them by reason courageous planning for the future will advance in ont of the other in commercial importance. Just the county area represents London as a civic entity ore correctly than the small administrative unit called e City of London, so the combined boroughs of anhattan, Queens, Brooklyn, and Bronx represent New ork as a city rather than the older administrative unit at lies in the comparatively small area of Man- ttan Island. But London has long spread its influence yond the County boundaries, and New York beyond the undaries of its four boroughs. The area of Greater ndon for purposes of planning has been regarded as tending to a radius of fifteen miles or more from Charing oss, and as including an area of about 1,000 square miles d a population of approximately 8,000,000. This was area dealt with by the Arterial Roads Conferences in 1913-16 as appropriate for studying the highway com- nications of Greater London. These conferences carried t their studies in six sections or sectors, and it is interest- to note that the still larger region selected for study in western metropolis is also divided into six sectors. hough New York is growing up with a greater density of ulation than London, it has to plan for a wider area. is is mainly due to the character of its site, with its icult physical features. The great business heart of New rk will always be Manhattan Island, about thirteen miles g by three miles wide. Apart from a narrow neck of land t is only separated by the canal-like Harlem River on north from the Bronx, there is no direction where New rk can extend beyond Manhattan without being ham- ed by difficult physical obstructions.

reat rivers intersecting a city provide wonderful harbour lities, but, of course, add to the difficulties of city expan- . What is called "commuting" in New York—the elling between the country or suburban home and the e of work—has greatly increased in recent years. muting to a distance of fifteen or twenty miles is quite mon, and cases of daily journeys of fifty to sixty miles not unknown. A distance of fifteen miles from down n Manhattan to beyond its northern extremity still can ravelled for a cost of only five cents.

he area included in the region being dealt with in the of New York and its environs which is now in course reparation, and for which a preliminary sum of £100,000 been appropriated to be spent in five years, comprises t 5,200 acres. The population within this area is nated at approximately 9,000,000. If the growth con- es at the same ratio as at present, it is computed that it reach an aggregation of 29,000,000 in 2000.

a region is selected in the London area of the same size he New York region it would include all Middlesex Surrey, about half of Kent, Essex, and Hertfordshire, portions of Berkshire, Buckinghamshire, and Sussex. square miles would include all land within about forty radius, with some portions extending to fifty miles, the centre of London. On the north-east it would take uthend and extend to include Colchester; on the north uld take in Biggleswade and extend to include Bed- on the north-west it would take in Leighton Buzzard and Aylesbury, and extend to include Oxford; on the west it would take in Henley and extend to include Reading; on the south-west it would take in Aldershot and Guildford; on the south it would include corridors to Brighton and Eastbourne; on the south-west it would go to Lewes, with extensions to Hastings, Ashford, and Faversham.

They conceived, in commonplace terms, a city as a place where people congregated to engage in industry and to transact business—and where to accomplish these things they needed houses to live in, means to travel, to obtain drinking water, to dispose of wastes, to educate their children, and to enjoy facilities for recreation and culture. That such a place should function to the best advantage in respect of industry and living conditions, was the proper aspiration of the people for whose convenience, enjoyment, and profit it existed—however far they might fall short of attaining it as a consequence of ignorance or misdirection of effort. In making plans for the building of a city or for its expansion, that aspiration must always confront the town planner. If it was order and beauty that was sought, either by creative design or by restraint of liberty, then the individual purpose must be merged in that of securing the common weal. If what was striven after was efficiency, the purpose would not be achieved in the long run unless the fruits of the efforts made were shared in common.

The New York Plan of 1811.

Manhattan Island was planned in rectangular fashion, with wide streets, in 1811. He had heard criticisms of this plan. He wondered if they placed themselves in the position of those who made that plan, could they say truly that it was not a good plan? Let them remind themselves that when that plan was made there were no railroads, nor street railways, nor fast steamships of great size, nor automobiles, nor high buildings. The first horse-car was operated in Fourth Avenue in 1832—and up to 1873 all street railways were operated with horses. The first elevated railroad in New York was not operated until 1868—and it was only as recently as 1904 that the first rapid transit subway express line was placed in operation. The motor-'bus was the last step in the evolution of 'bus traffic that had been going on for 74 years. The pleasure and commercial motor-cars and the skyscrapers had developed side by side within the memory of most of them—and the greatest problems of the modern city were not the result of neglect of any remote period, but of conditions created by new forms of building, of transportation, and of transit in the past twenty-five years. The present generation had created them, and it was their duty to solve them.

If one turned from the plan of New York to the plan of Washington, one found greater spaciousness, but the site permitted it and the objective was different. They also found diagonal avenues, some of which might have been introduced into Manhattan with advantage, but not to the same degree of advantage, having regard to the different physical characteristics of the site. Whatever defects the New York plan of 1811 may have had—they were small compared to the defects of the later nineteenth and early twentieth century planning of the surrounding areas—if consideration is given to the conditions and knowledge existing during the respective times when these plans were made.

The new part of the City of Edinburgh—one of the most beautiful cities in the world—was planned during the same period as Washington and New York. It was laid out in squares, crescents, and straight streets by Craig, the architect. It differed from many other cities that had been planned in that the buildings were erected in great groups

---

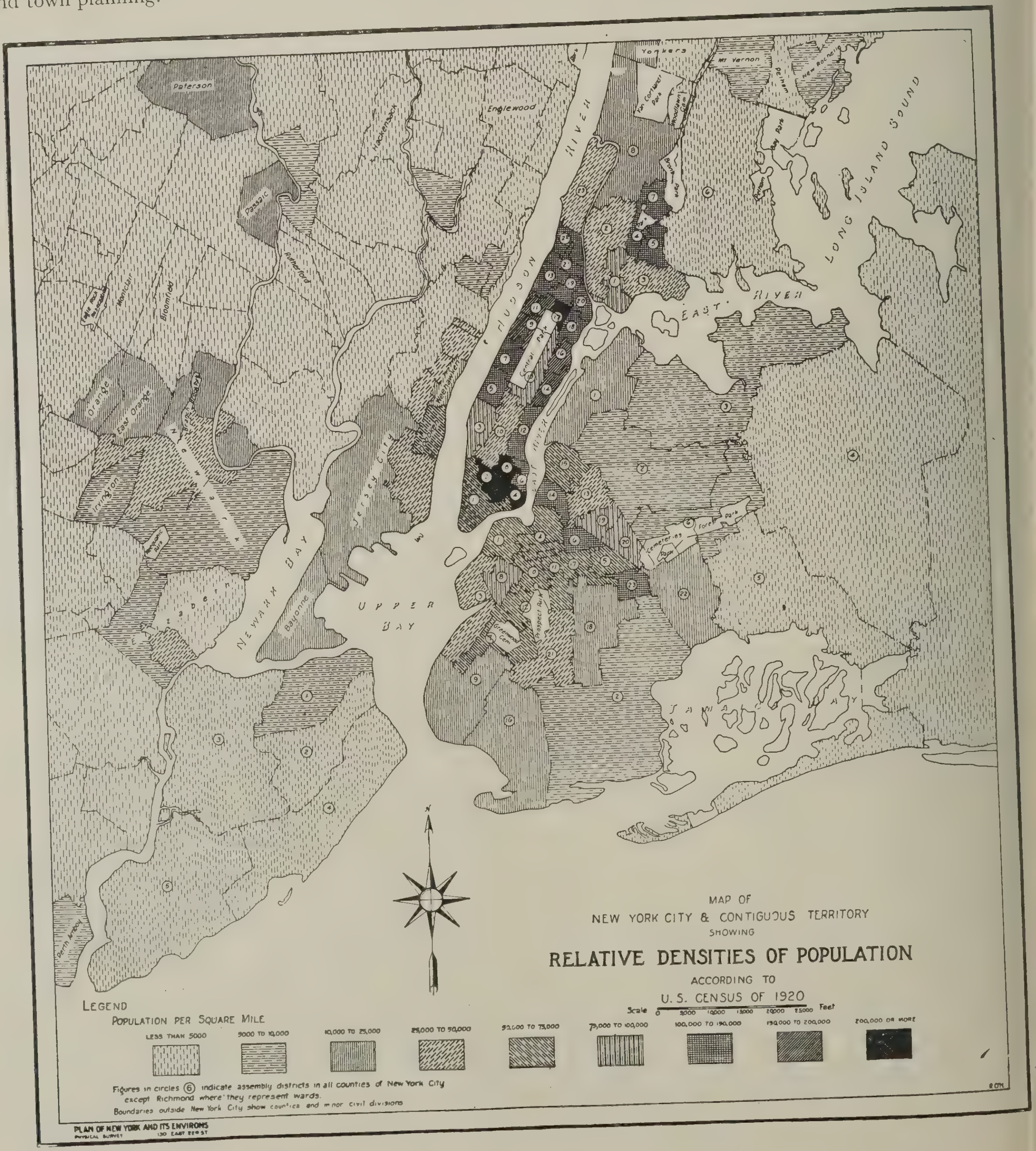
A paper read at a meeting of the Town Planning Institute.

by architects—amongst whom were the Brothers Adam. In addition to the natural beauty of the site, it has the elements of beauty in the unity, harmony, scale, and adaptability of the design of its buildings—all because an adequate degree of architectural control was permitted in the building of the city. For thirty or forty years the architects of Edinburgh were dominant in influence—with the result that few cities attracted more visitors to enjoy its beauties and pay tribute to the vision of the city fathers of 1780 to 1815. But later the railroad came—the plan of the architects fell to pieces—freight yards cut off parts of squares and crescents and blocked main thoroughfares, and since then Edinburgh has been allowed to grow without a plan. During the growth of railroad transportation, highways became less important and town planning became neglected. For the first sixty or seventy years of railway development no one appears to have been able to visualize what was going to happen, and a long period of drift set in. Now the highway is coming back to its own—it is competing with the railroad for many purposes, and with the renaissance of the highway travel has come the revival also of city and town planning.

Committee on New York Plan.

A meeting was held on May 10 of last year, when the committee which had been organized was addressed by Mr. Herbert Hoover and other Ministers, and the work was started of making a survey and preparing a plan.

The committee had Mr. C. D. Norton as chairman. Mr. Norton, unfortunately, died last month, and his death had been a great loss both to the United States and to city and town planning. He was one of those men who inspired respect and regard, and, as an American said, "He could sell you anything," which meant that he could convince one of the desirability of doing what he thought should be done. The other members of the committee were Robert de Forest, Frederick A. Delano, John M. Glen, Dwight W. Morrow, and Frank L. Polk. The committee were fortunate in having Mr. Frederick P. Keppel as secretary, although, unfortunately, he had to resign in October to take up other important duties. Messrs. Delano and Norton as young men in 1908 were two of the leading organizers of the Chicago City plan. Some of them no doubt had seen the book of that plan, and they would remember seeing the beautiful drawings of Guerin at Burlington House in 1910.



These two men were the chief executives behind Mr. Burnham in the preparation of the plan. They came to New York and over a year ago inaugurated the work of preparing a plan for the city and environs. But they had learned a good deal in the interval that had elapsed since they took part in planning Chicago. Amongst other things, they had seen the enormous influence of the garden city movement and the necessity of dealing with wide areas surrounding the city, and not merely with the land immediately affected by urban growth. They conceived the idea of making a comprehensive survey of a region within a radius of forty to sixty miles of the centre of Manhattan as the basis for a plan. New York and its environs were being dealt with as one region. It was divided into different sectors, but the whole scheme was being co-ordinated and dealt with in one operation. London was being dealt with in separate sections. In West Middlesex seventeen local authorities had combined together to have a regional plan prepared, and another group in the Thames Valley have done the same thing. So the problem was being dealt with, but not with the same co-ordination as in New York. For one thing, the amount of money available in New York was greater, and this enabled the operation to be carried out on a comprehensive scale.

Surveys.

The New York survey, so far as physical conditions were concerned, was well advanced. It was in charge of Mr. Nelson P. Lewis, who for a year had been engaged in making studies and maps of the physical conditions of what was known as the New York region. That work would continue. As there were no maps of the city and surroundings similar to the Ordnance maps of England, much work had to be done in making special maps. The Economic and Industrial Survey is in charge of Professor McCrea and Professor Robert M. Haig. The Social and Living Conditions Survey is in charge of Mr. Shelby M. Harrison, and the Legal Survey is to be carried out by Mr. Edward M. Bassett and Mr. Frank B. Williams.

Last October Mr. Raymond Unwin paid a visit to New York and submitted a report, in which he suggested to the Committee what appeared to him to be the hypothesis which should be accepted as the basis of any investigation.

Mr. Norton, before he died, took an important step in making an appointment of a group of men called the Planning Advisory Group, to make a study of the planning problems in the region. This group consisted of Mr. Nolen, landscape architect; Mr. Bennett, architect; Mr. Bartholomew, one of the principal zoning experts in the United States; Mr. Olmsted, a prominent landscape architect; and Mr. Ford, who is also an architect; and myself as chairman. Each of these planners had been assigned a sector for preliminary study. His own sector comprised an area of 1,000 square miles.

He had ventured to give the details of the organization for two reasons. In the first place, no one person has the knowledge to enable him to plan a large city, although some of them had tried to plan small ones. It needed a group of men, including an engineer, an architect, a landscape architect, a lawyer, and others. The actual preparation of the plan must be confined to professions which were represented in the technical sections of their Institute, with legal advisors always at their side to keep them from operating in too difficult directions. The New York group had been appointed to prepare a report to be submitted in October next, dealing with the dangers and opportunities; the directions in which developments were taking place or were likely to take place; where it was advisable to extend open spaces, improve the highway system, and so on.

The Awards in Two Big Competitions

Mr. Herbert J. Rowse, a young Liverpool architect, has won the competition for the great building which the Holt Line intend to erect in Water Street, Liverpool. The company have the option of going up to 150 ft., and if they do so—and in these times of economy it seems not unlikely—the new building will far overtop the Royal Liver building and make a great difference to the skyline of Liverpool, and even give our American visitors an idea of "home from home."

It is a sensational ending to an architectural competition which ranks with those of the London County Council, the Port of London Authority, and the Liverpool Cathedral. Mr. Gilbert Scott was the assessor, and the architects who competed were Sir Edwin Cooper, designer of the Port of London Authority building; Messrs. Willink and Dodd, designers of the Cunard Building, Liverpool; Mr. Davis, of Mewès and Davis, who designed the Royal Automobile Club; Mr. Curtis Green, designer of the Wolseley Company building in Piccadilly (which received the award last year as the best building of the year); and Mr. Arnold Thornely, who designed the Dock Board Offices, Liverpool.

Mr. Rowse's success in such circumstances is as sensational as the winning of the London County Council Hall competition by Mr. Ralph Knott when in his twenties. Mr. Rowse is a Liverpool man, the son of a local builder, and is about thirty years old. He was a pupil of Professor Reilly some ten years ago at the Liverpool University, and won the Holt Travelling Scholarship. He visited the United States and Canada, and at Winnipeg worked under Mr. Frank Simon at the Manitoba House of Parliament. Mr. Rowse at one bound now takes his place among the architects of great undertakings by which the English architecture of our time will be judged. The building will cost at least £1,000,000.

The Masonic Temple Competition, Birmingham.

The assessor, Sir Banister Fletcher, F.R.I.B.A., has made the following awards in the above competition: First premium, Mr. Rupert Savage, F.R.I.B.A.; second premium, Mr. Samuel S. N. Cook; third premium, Mr. Hurley Robinson.

MR. RUPERT SAVAGE, F.R.I.B.A.

Winner of the Birmingham Masonic Temple Competition.

Glasgow Municipal Buildings Extension

WATSON, SALMOND, and GRAY, FF.R.I.B.A., Architects

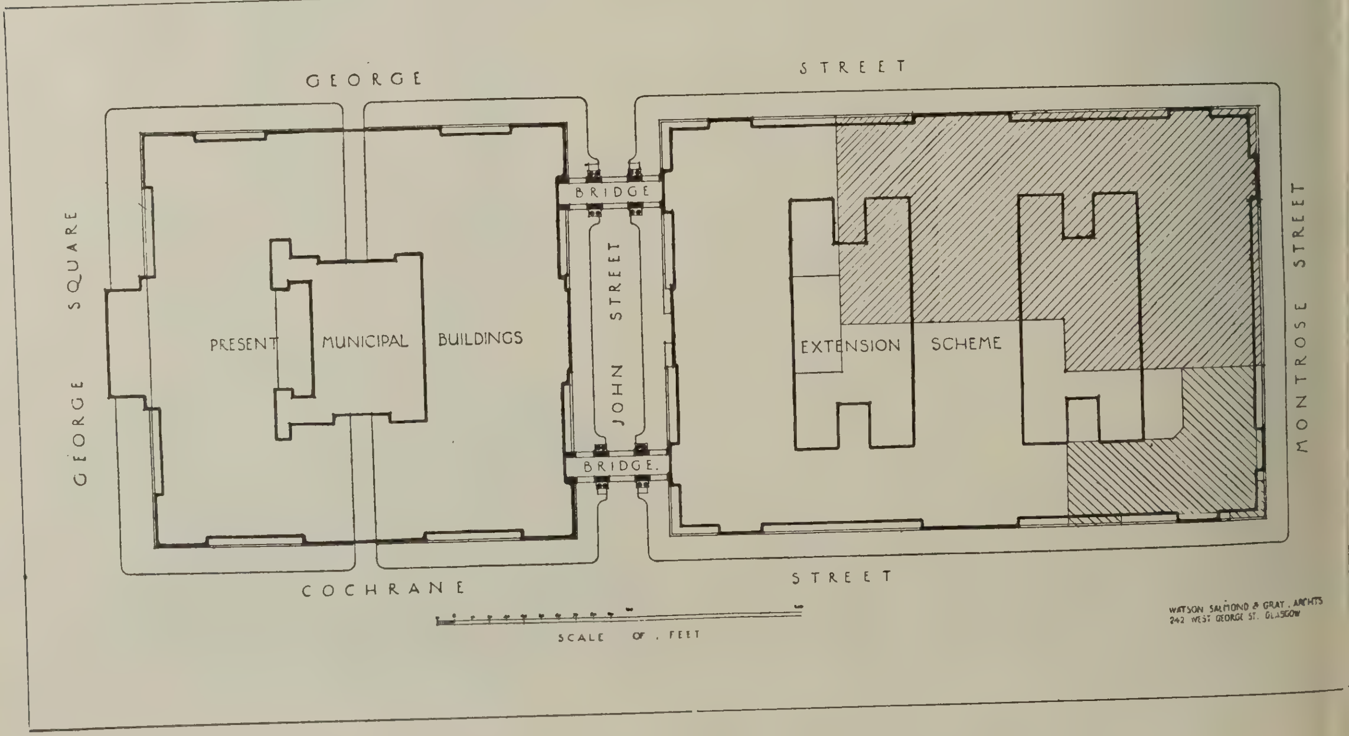
THE extension of the Municipal Buildings, Glasgow, which has been under construction for several years, is now, so far as the first portion of the scheme is concerned, completed. The extension was promoted by the Corporation in order to meet the growing needs of the administrative departments and to provide also a larger council chamber. The enlargement of the city by the absorption of the burghs of Partick, Govan, and Pollokshaws increased substantially the requirements of local government in respect of both the accommodation for administration and for the meetings of the Corporation. The reinforcement in the personnel of the Council which came with the annexation of these areas brought the total membership of the Corporation to 113, while the same development produced overcrowding in the administrative departments within the municipal buildings. It became necessary to find office accommodation elsewhere for sections of the staff, the city assessor's department especially suffering from limitation in space.

The staffs to whom the new accommodation has been allotted are those of the assessor, the registrar, the gas, water, and sewage departments, and also certain sections of the public health department. The work carried out so far is that of the erection of a new block immediately to the east of the present buildings. This block forms a handsome pile in keeping with the design of the older buildings to which it is connected by corridors bridging John Street.

When the Corporation decided in 1913 to proceed with extensions of the municipal buildings they instituted a competition for designs, and some of the foremost architects in Britain took part in it. From a hundred sets of plans six were selected, and the architects submitting these were invited as a short leet to take part in a final competition. The ultimate choice of the assessor was a tribute to Glasgow practice in the profession of architecture, a local firm—Messrs. Watson, Salmond, and Gray—being the successful competitors. In response to the request to provide for an enlarged council chamber the architects conceived the bold scheme of projecting the central feature of the municipal building façade to the line of the pavement in George Square in order to secure the necessary space for this extension. This alteration, which will be undertaken at a more convenient season along with the internal rearrangement of the existing buildings, will effect a striking improvement in the façade fronting George Square, introducing as it will a larger architectural order similar to the George Street façade.

Architecturally the building well upholds the reputation of modern Scottish architecture. The external elevations are boldly composed on monumental lines, a free-standing order being effectively employed in conjunction with a horizontally rusticated basement story. The entrance to Cochrane Street projects slightly beyond the main building line and is made a very dignified feature, containing a well-proportioned doorway, coupled columns being used in contradistinction to the single columns of the wing elevations. Internally the building fully maintains the dignified scale of the exterior, with its fine entrance hall and counci chamber, spacious corridors and staircases and publi spaces. The building is one that adequately represents th civic dignity of the great city in whose service it has bee reared.

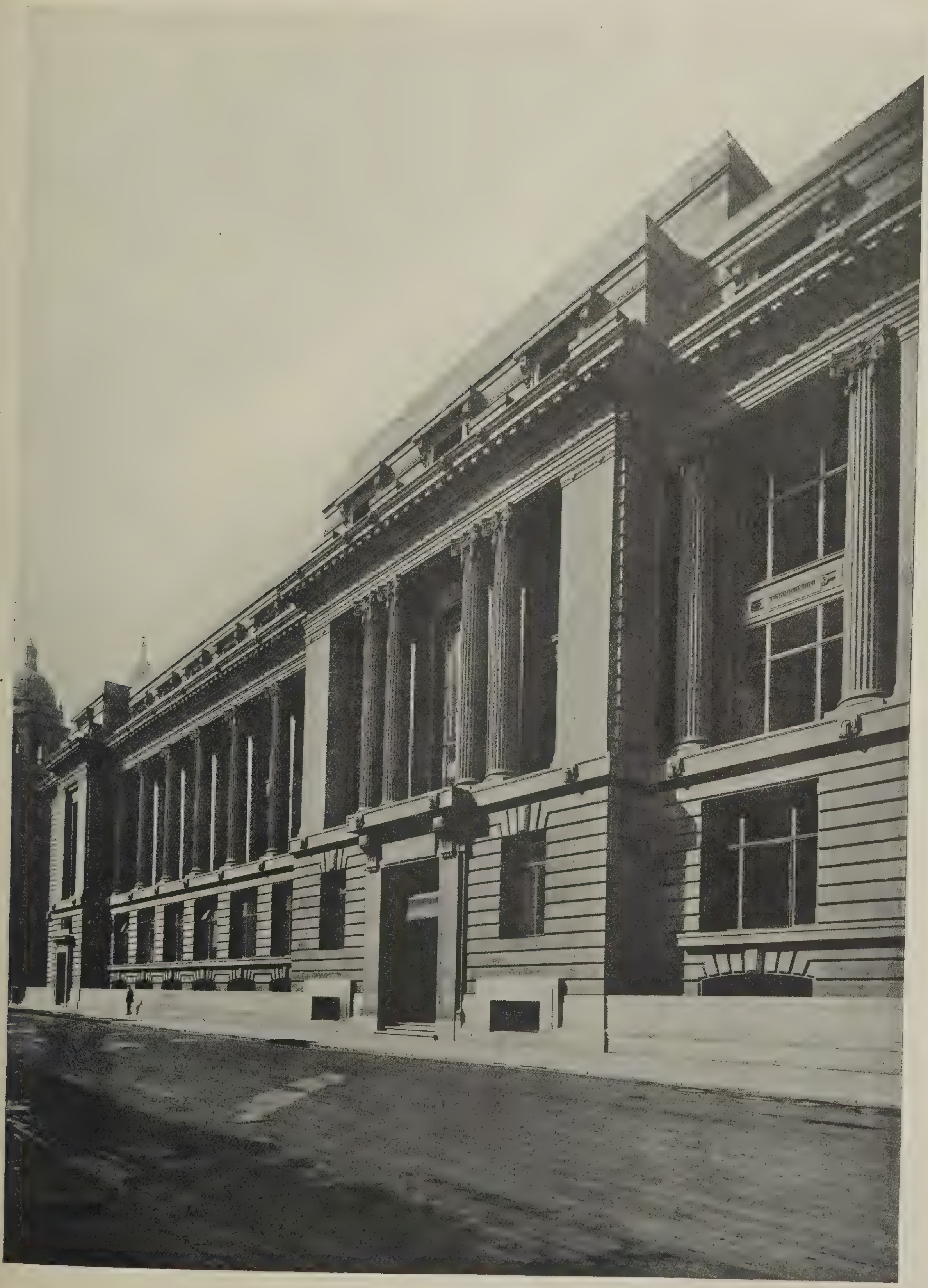
The new extension, occupying the site in John Stree immediately to the east of the present buildings, has frontage to George Street of 95 ft., to John Street of 237 ft. and to Cochrane Street of 226 ft. It is a part of a schem which will ultimately cover the whole area bounded b George Square on the north, Cochrane Street on the sout Montrose Street on the east, and John Street on the wes With the portion of John Street which intervenes betwee the new and the older building as their own property th Corporation were able to span the street with connectio between the two blocks. These connections have bee



SITE PLAN.

Current Architecture. 197.—Glasgow Municipal Buildings Extension: Elevation to Cochrane Street

Watson, Salmond, and Gray, FF.R.I.B.A., Architects

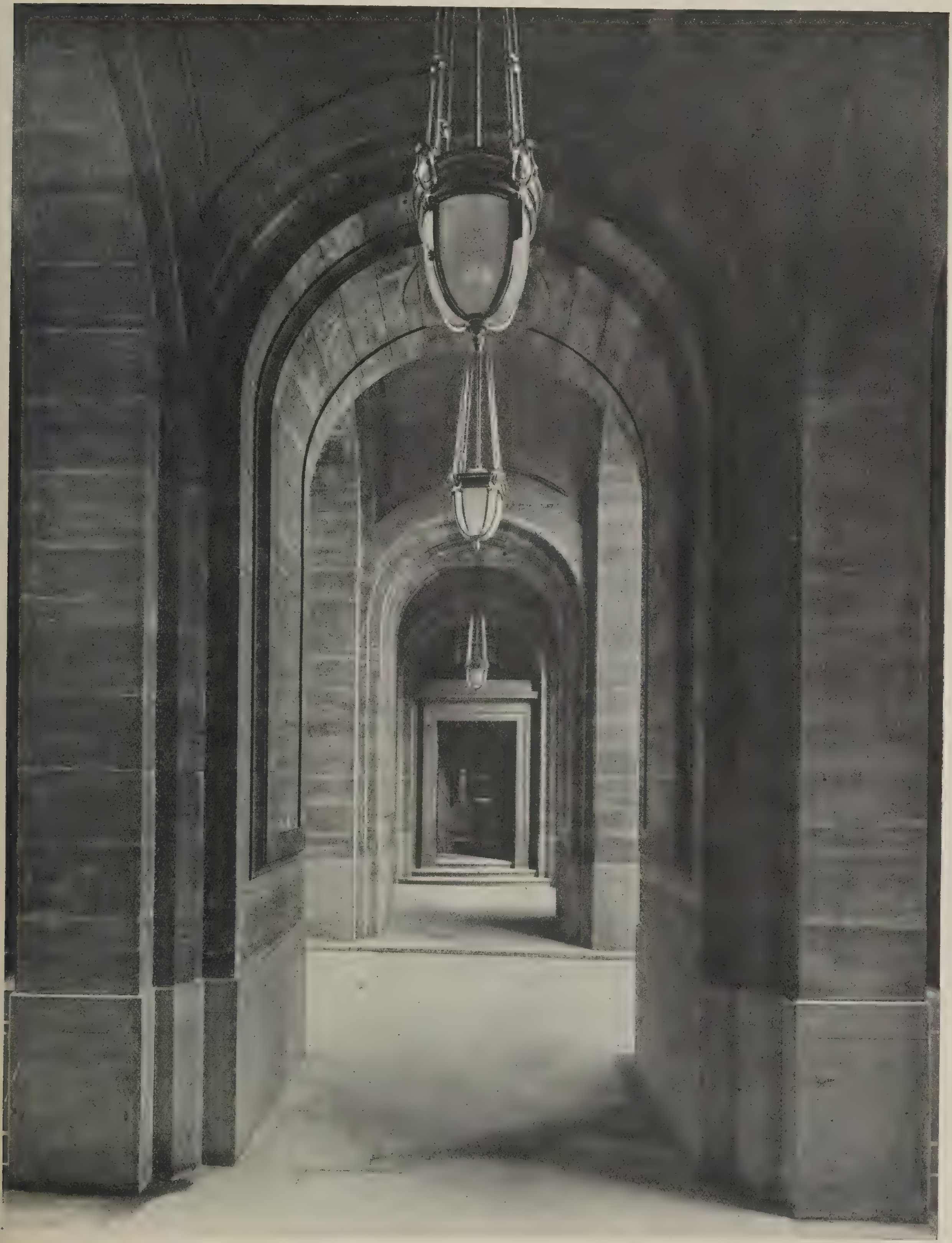


The first part of the large extension scheme which was decided upon in 1913 (Messrs. Watson, Salmond, and Gray winning the limited competition which was then held), has just been brought to completion. As shown on the site plan reproduced opposite, it comprises the greater part of the elevation to Cochrane Street, the whole front towards the old buildings, with which it is connected by bridges, and a short length of façade towards George Street.

THE LIBRARY
OF THE
UNIVERSITY OF ILLINOIS

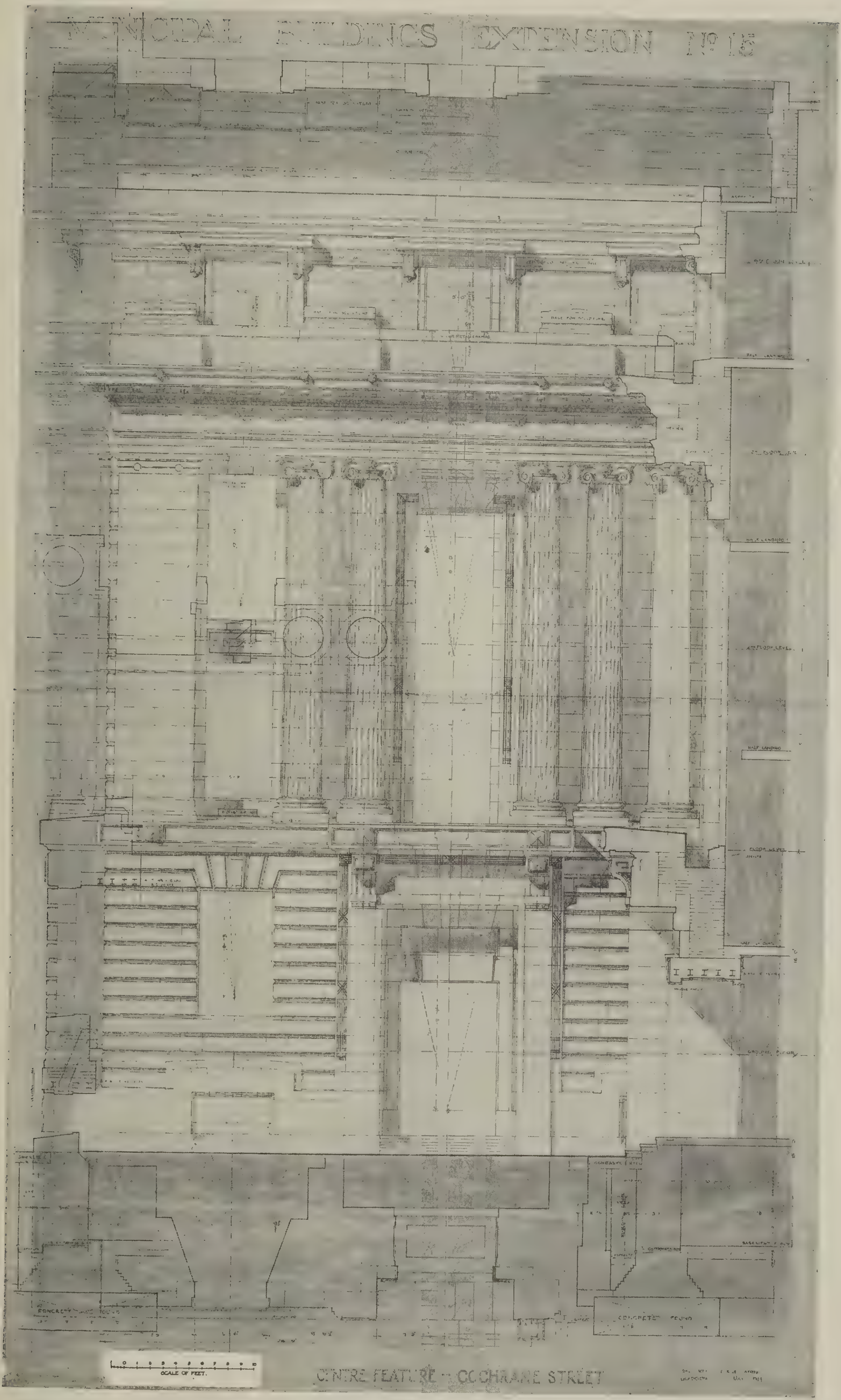
Current Architecture. 198.—Glasgow Municipal Buildings Extension: A View under one of the Connecting Arches

Watson, Salmond, and Gray, FF.R.I.B.A., Architects



The new extension of Glasgow Municipal Buildings is connected up with the old block by some finely designed arches carrying overhead passageways. A view under one of these is shown above.

THE LIBRARY
OF THE
UNIVERSITY OF ILLINOIS



GLASGOW MUNICIPAL BUILDINGS EXTENSION: DETAIL OF CENTRE FEATURE TO COCHRANE STREET.

WATSON, SALMOND, AND GRAY, FF.R.I.B.A., ARCHITECTS.

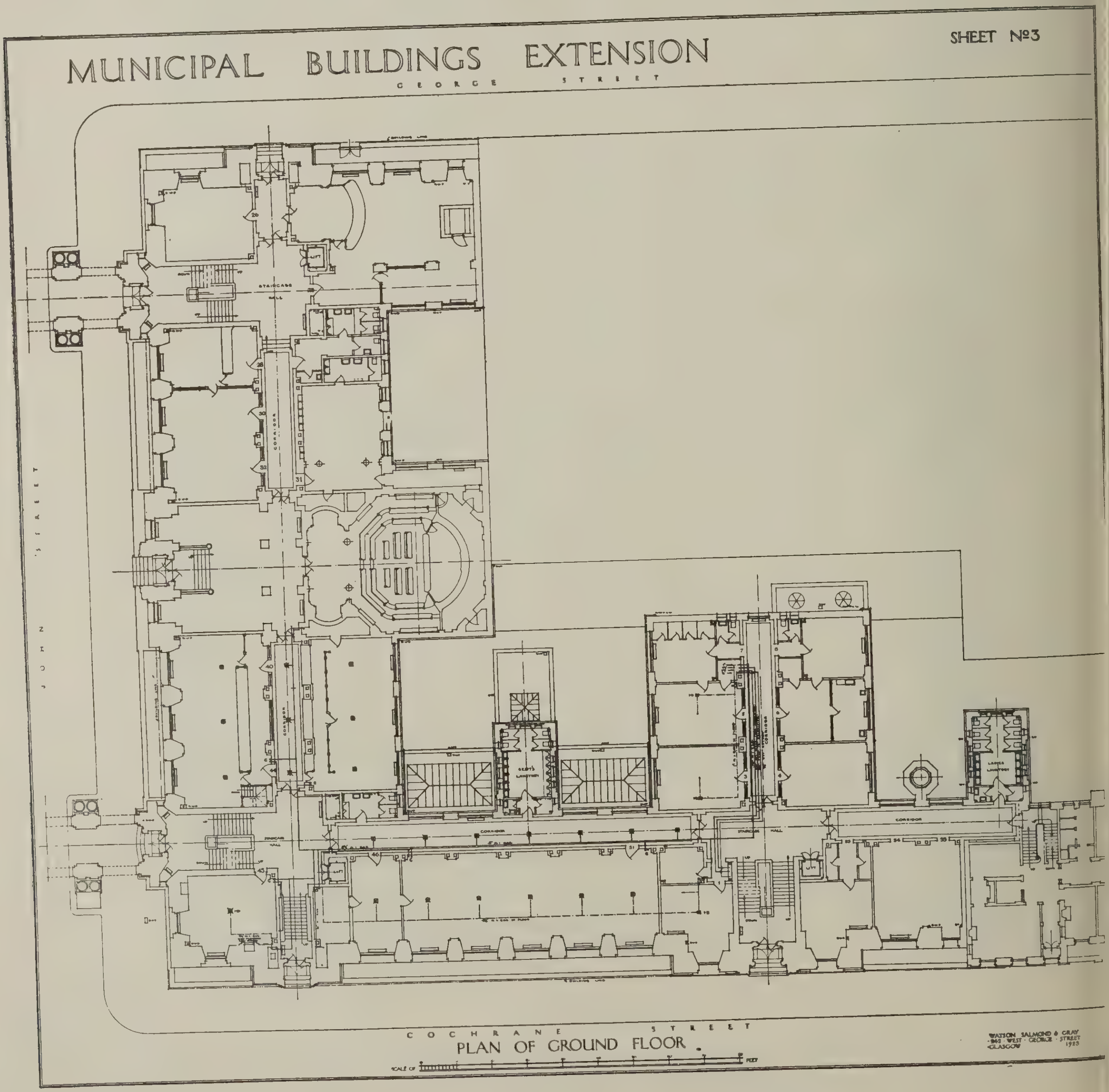
formed by the building of two bridges or archways of fine architectural design which in their upper portion carry corridors between the two buildings.

The extension, which is of steel frame construction, is five stories high, including the basement, with an extra story over what will ultimately form the central feature in Cochrane Street. The centre of the building facing Cochrane Street has been designed for the accommodation of the public health department, which has long been in cramped space in the present sanitary chambers. A temporary connecting passage has been provided between the new and old quarters, which, of course, will continue to be utilized by the medical officer and his staff.

Particular care has been taken to provide adequate light throughout the new building. All the rooms have sufficient window space to permit of clerical work being carried out in the most remote corners without recourse to artificial lighting on any normally clear day.

The Burgh Court Hall is placed in the rear of the central feature facing John Street and is reached by the main entrance in that street. The hall is octagonal in shape and has a dome roof. The walls are panelled in mahogany. Adjoining the Burgh Court Hall there is the magistrates' room with a corridor connection to the magistrates' bench at the back of the hall. This portion of the building is the only part in which there is any pretension to the sumptuousness of interior which distinguishes the old city chambers. Elsewhere the building internally is of the utilitarian type—bright, airy, pleasant suites of rooms without any elaborate frills.

Ample means to ensure the adequate heating and ventilation of the entire building are provided by a plant designed so as to combine simplicity and ease of control with the greatest efficiency and economy in running cost. The heating system is low pressure hot water, generated in a large steel boiler of the Lancashire type, fixed in the basement. Flow and return pipes convey this water throughout the building to radiators fixed in the rooms. Individual control of all radiators by the occupants of the rooms is provided. A positive and rapid circulation of the heating water is obtained by means of an electrically driven centrifugal pump. The general ventilation system consists of two large electrically driven centrifugal fans fixed on the roof, which exhaust the vitiated air from the various rooms by means of a system of ducts and flues, connected to extraction openings formed in the walls, fresh air from out-



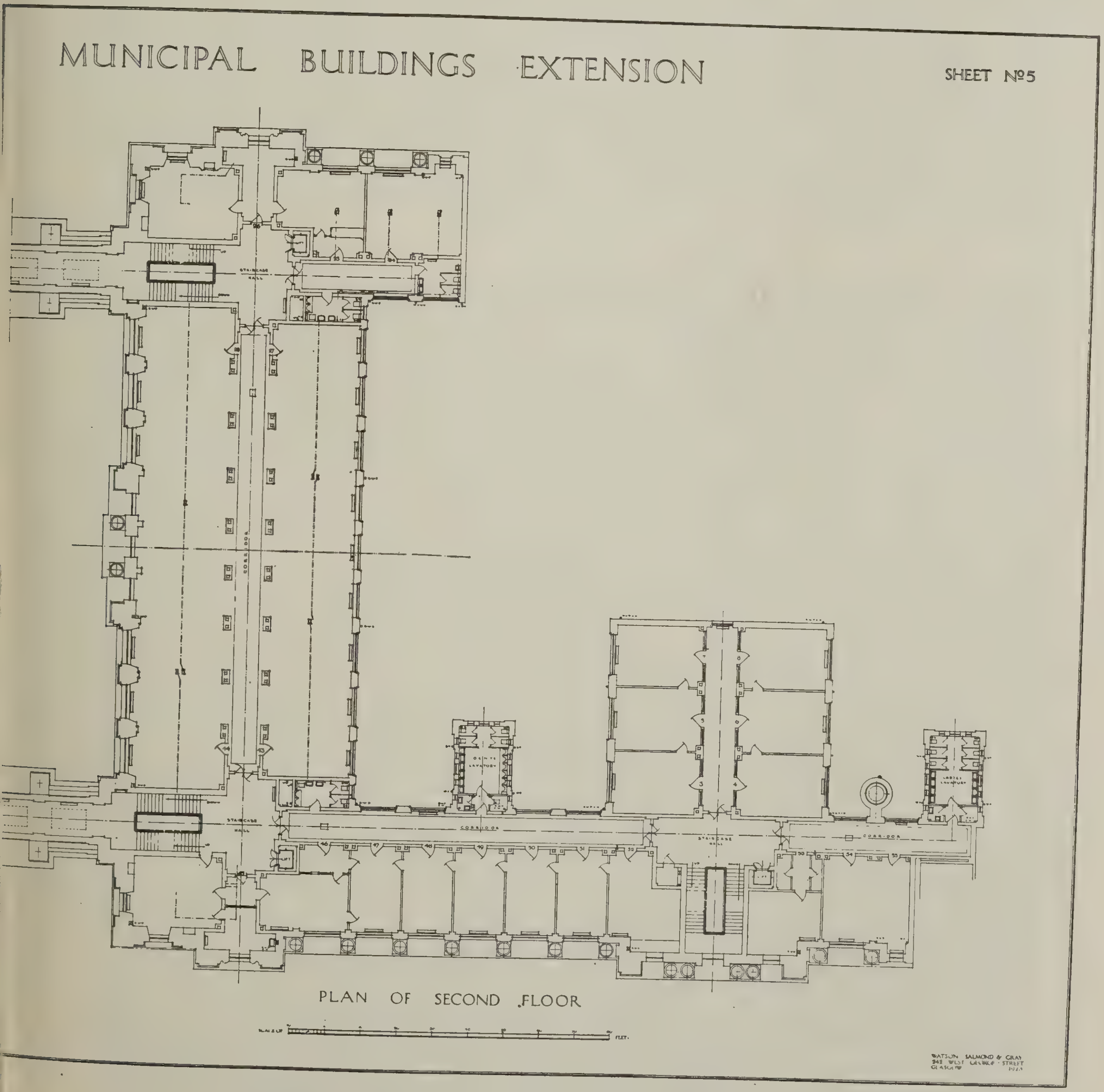
WATSON, SALMOND, AND GRAY, FF.R.I.B.A., ARCHITECTS.

side flowing in over radiators. A special independent plant s provided for the heating and ventilation of the Burgh Court, designed on the balanced plenum system.

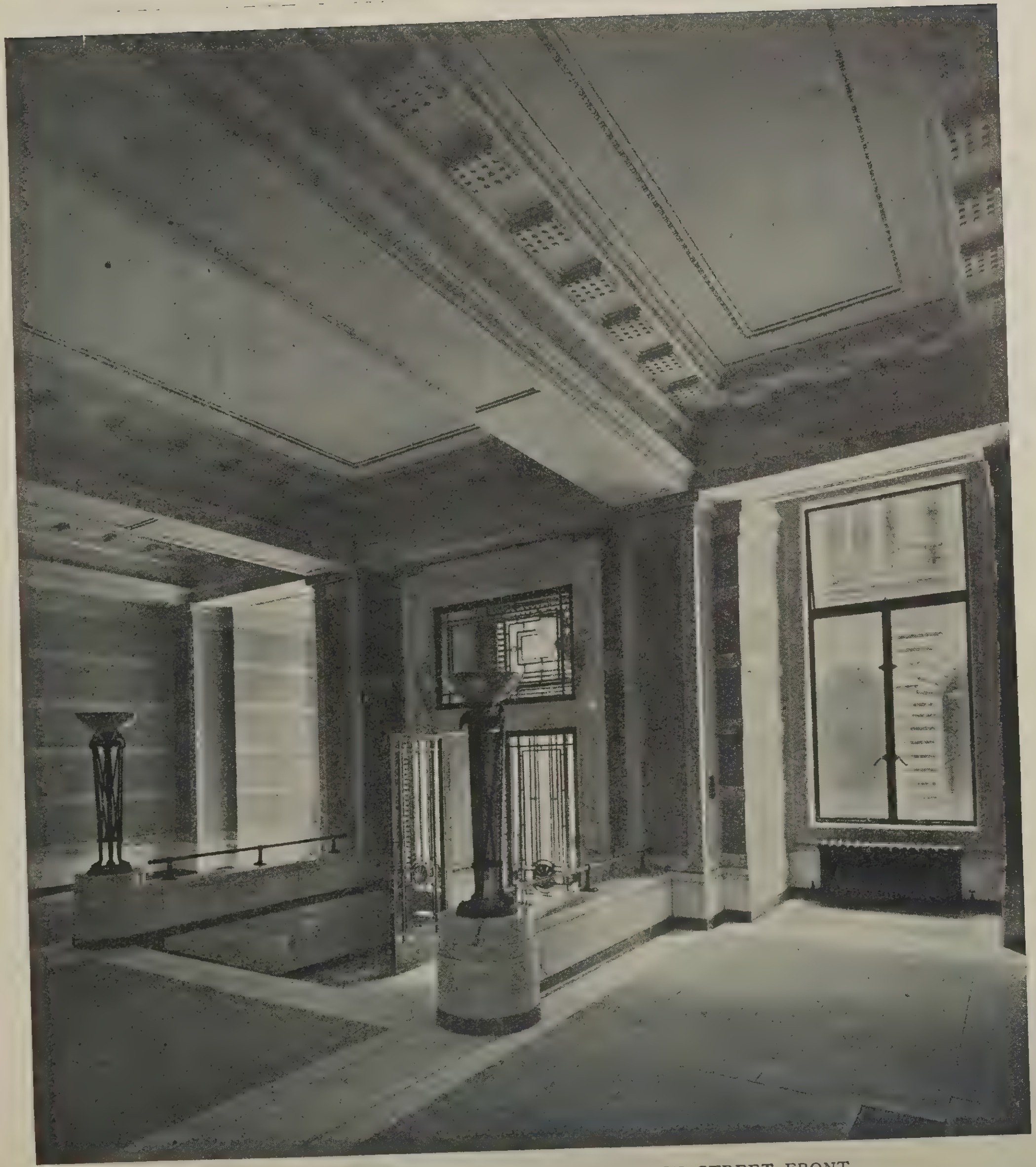
The corridors are laid with rubber flooring.

The original estimate of cost was £293,000—£166,100 or the new buildings, £21,500 for furnishings, £38,150 or alterations on the existing city chambers, and £67,259 or the site of the extension. The estimates as revised in he light of the increase in cost of labour and material uring the war period anticipate a full expenditure of lmost £600,000 upon the scheme. The salient details in he revised estimates are : Cost of new buildings, £390,000 ; urnishings, £50,000 ; alterations to existing buildings, 90,000 ; and cost of site, £67,259—a total of £597,259, or 304,250 in excess of the original estimate. The Corporaon obtained borrowing powers to the extent of £200,000 nder the Act of 1912, and for a further £300,000 under e Act of last year. That still leaves them short by £100,000 f the requisite amount for the extensions, but they have e necessary authority for the borrowing of that sum nder unexhausted powers obtained previous to 1912.

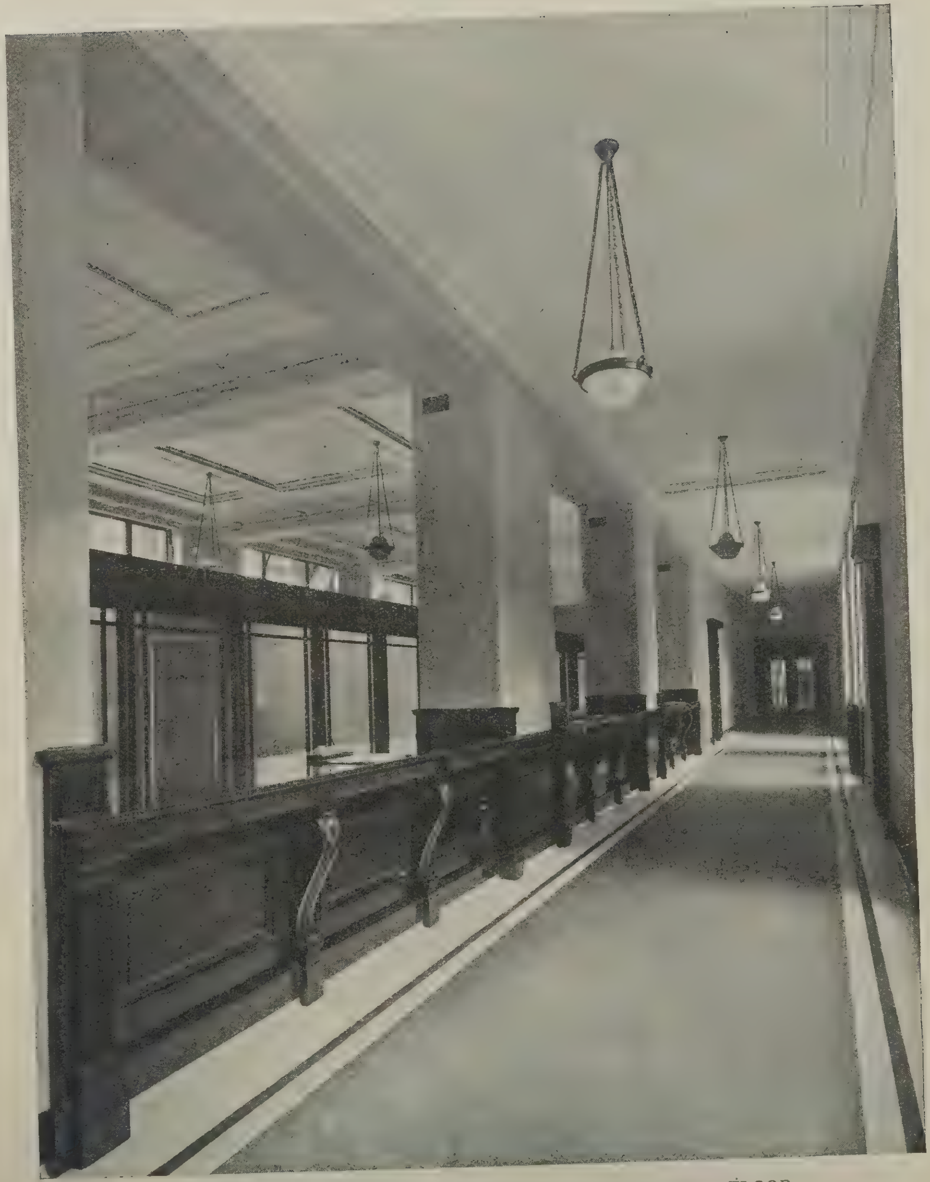
The contractors were as follows : John Emery and Sons mason, digger, and brick, mason work on north and south bridges, and cleaning down of stonework) ;Redpath, Brown & Co., Ltd. (structural steel); Melville, Dundas and Whitson, Ltd. (reinforced concrete, concrete of south bridge and tank); Hugh Twaddle and Son (plumber work); Henry Hope & Son, Ltd. (roof lights); Johnston, Park & Co. (electric light); Express Lift Co., Ltd. (electric hoists); Galbraith and Winton (marble work); Jas. Allan, Senr., and Son (steel stairs, etc.); Leyland and Birmingham Rubber Co., Ltd. (rubber floors); P. and W. McLellan, Ltd. (steel beams, etc.); John Crawford & Co., Glasgow (the whole of the wood carving, including the carving on seats, and carved decoration in Burgh Hall); Ashwell and Nesbit (heating and ventilating); The Limmer Asphalte Paving Co., Ltd. (asphalting roof, etc.); Walter Guthrie & Co. (carpenter, joiner, and ironmonger works, Burgh Court Hall joiner work); Wm. Tonner and Sons, (plaster work and Burgh Court Hall plaster work); The Crittall Manufacturing Co. (steel windows, gates, and railings); Wm. Meikle and Sons (glazier work); Toffolo, Jackson & Co. (terrazzo work); Kean and Wardrop (tile work); Milner Safe Co., Ltd. (safes); Alex Stevens & Sons (hydraulic lift); George Sellars and Sons (painter work); Thos. Tannahill (desks). Stair treads are of Hoptonwood stone.



WATSON, SALMOND, AND GRAY, FF.R.I.B.A., ARCHITECTS.



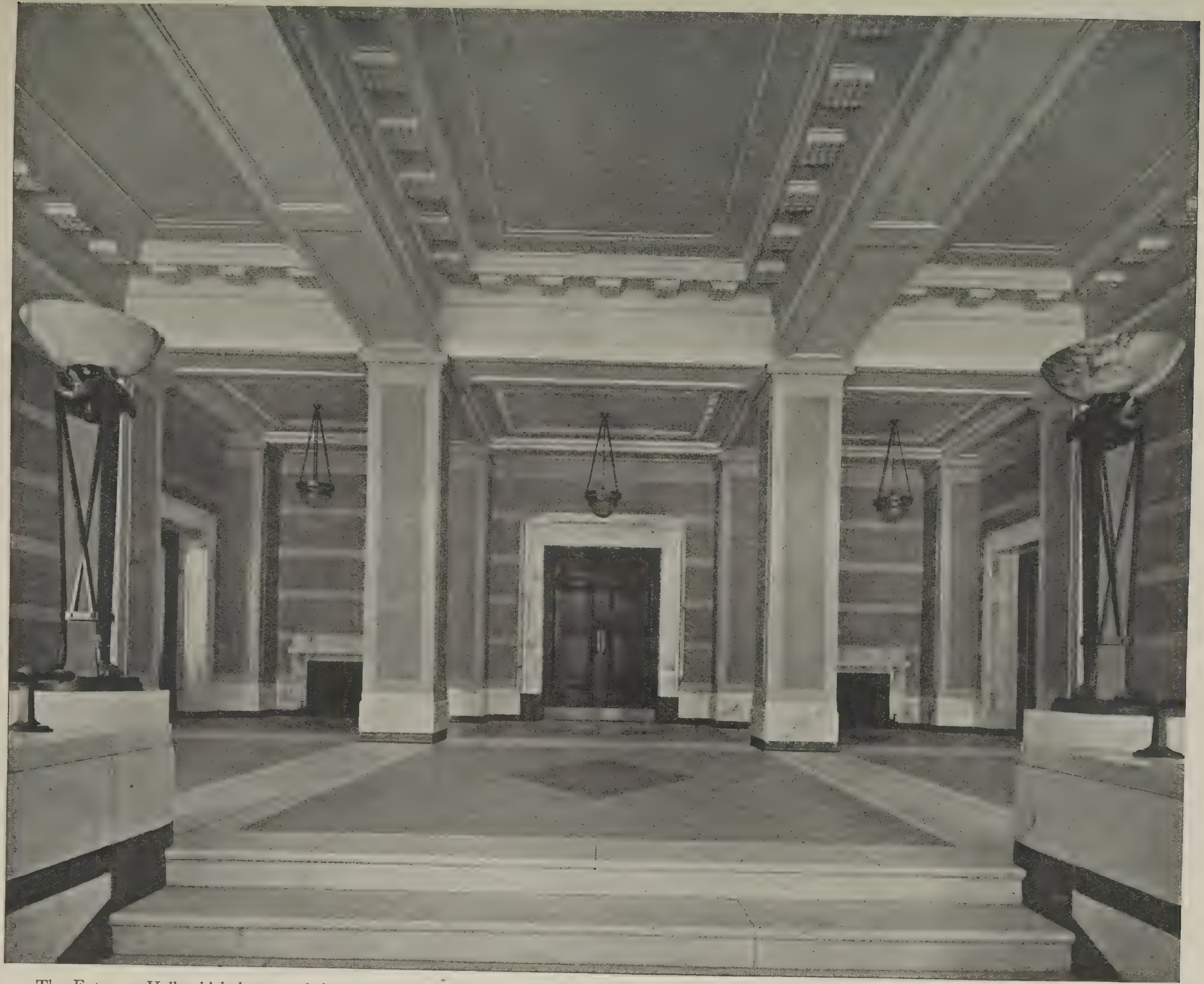
A DETAIL OF THE ENTRANCE HALL, JOHN STREET FRONT.



A VIEW IN THE PUBLIC OFFICES ON THE GROUND FLOOR.

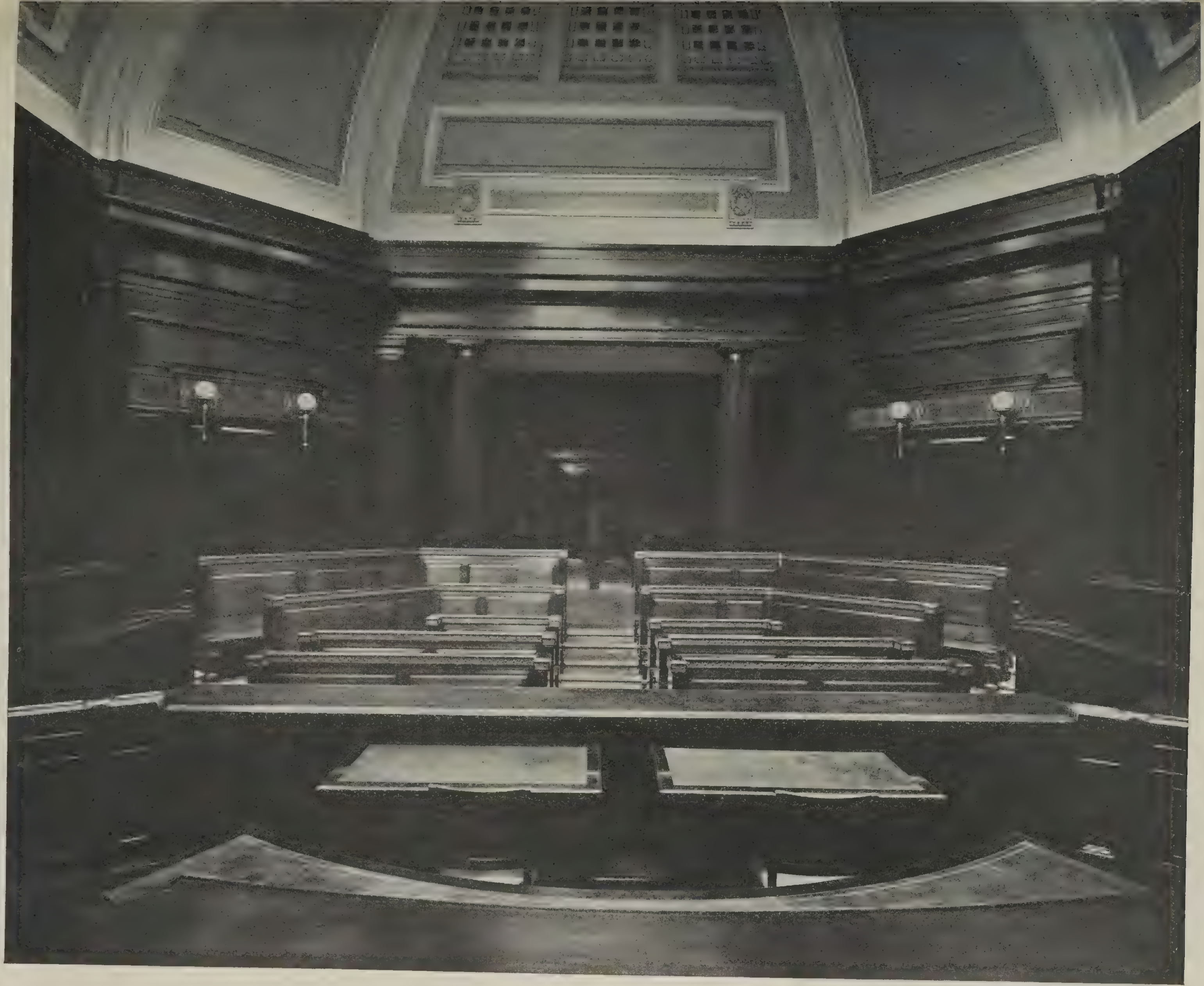
GLASGOW MUNICIPAL BUILDINGS EXTENSION. WATSON, SALMOND, AND GRAY, [FF.R.I.B.A.,] ARCHITECTS

Watson, Salmond, and Gray, FF.R.I.B.A., Architects

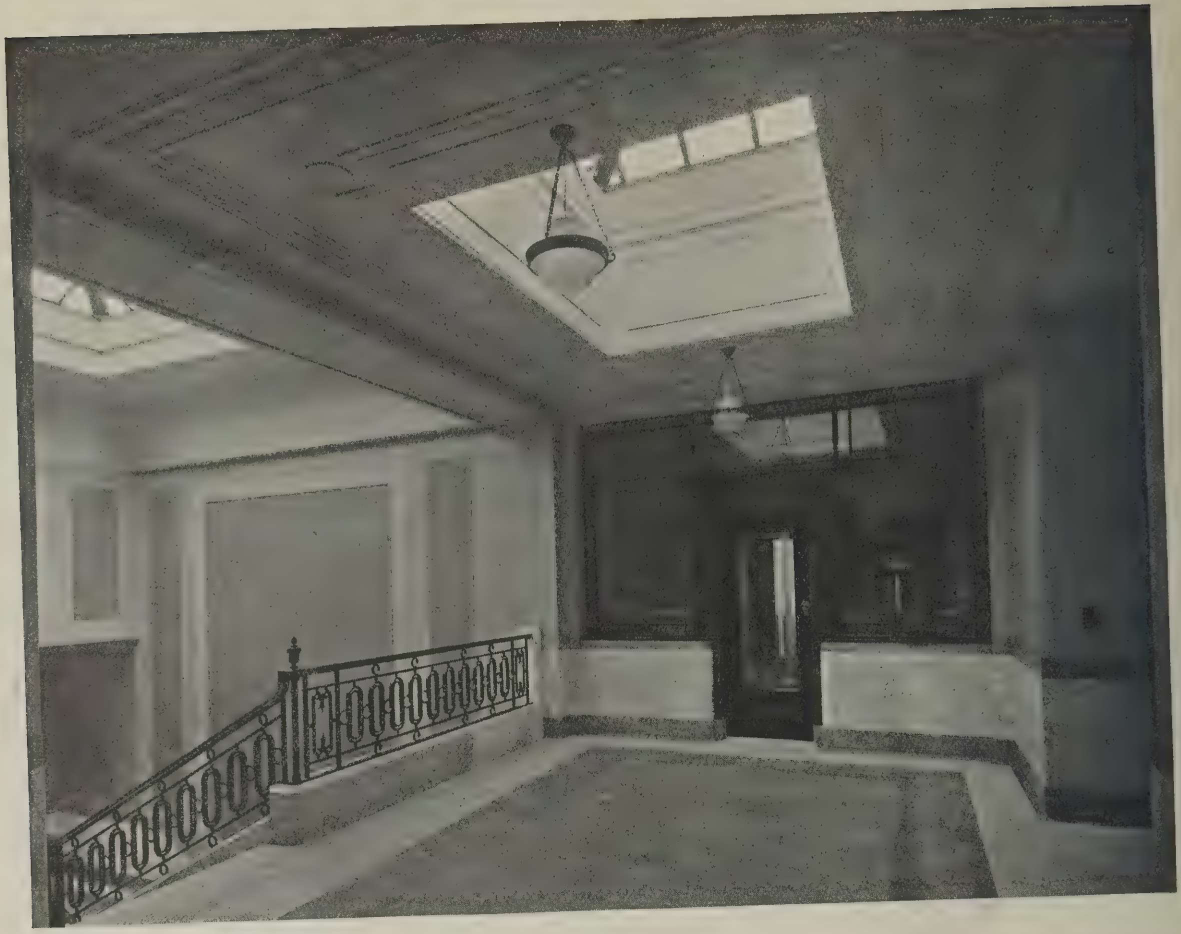


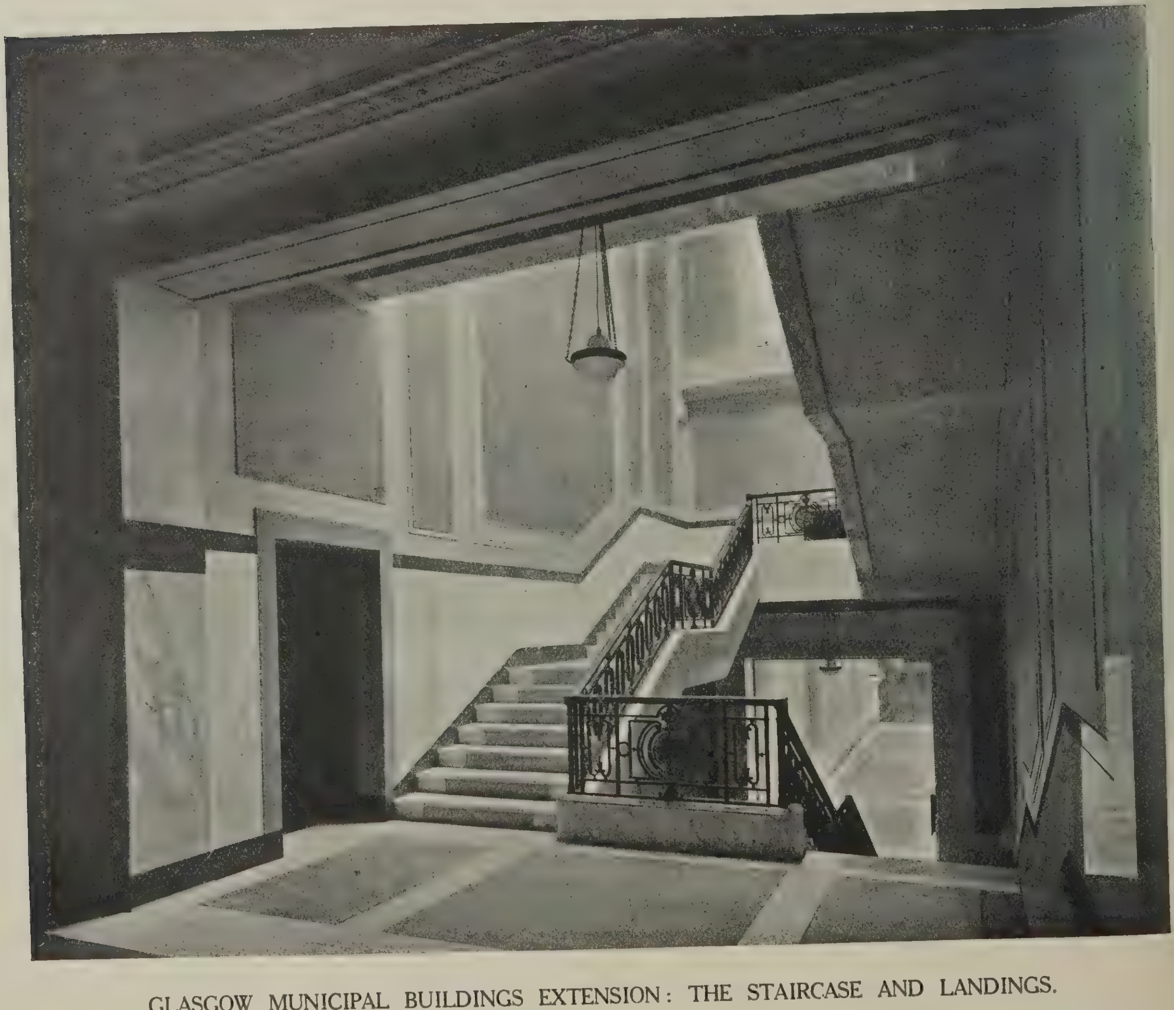
The Entrance Hall, which is entered from John Street, gives direct access to the Burgh Court Hall, whilst to right and left are the public offices.

THE LIBRARY
OF THE
UNIVERSITY OF ILLINOIS



GLASGOW MUNICIPAL BUILDINGS EXTENSION: THE BURGH COURT HALL. WATSON, SALMOND, AND GRAY, FF.R.I.B.A., ARCHITECTS.





GLASGOW MUNICIPAL BUILDINGS EXTENSION: THE STAIRCASE AND LANDINGS.

CORRIDOR OVER CONNECTING BRIDGE.

A VIEW IN ONE OF THE CORRIDORS.

GLASGOW MUNICIPAL BUILDINGS EXTENSION

Contemporary Art

The British Institute of Industrial Art

THE present exhibition of arts and crafts has features in its organization which seem to point to a certain soundness in an admirable movement. It is semi-officially recognized by the ırd of Trade and the Board of Education, and by Victoria and Albert Museum, which affords it house m in the North Court; while it represents not only the titute, but the Design and Industries Association and Civic Arts Association. All this makes for strength, and ngth in the character of the display is required to match h organization. In certain directions the work shown trong, in others it is weak, as could only be expected in young an agency, but for promise, the exhibition is very ng indeed.

he great British craftsmen are not largely represented, there are many admirable workers showing their wares, ch almost make up for the loss. The exhibition is of cial interest to architects, not because it contains archi- ural work or designs as such, but because it shows an nest desire to aid and abet the efforts of architectural gners by supplying them with craft details, and be- se it brings to the front talent in this direction which more or less lain unknown except to the few. There is nstance, the textile designing of the well-known painter, . Dugdale, and his examples, and many others, suggest only the application of woven and printed patterned ics as coverings for furniture, curtains, and hangings, as wall-coverings in panels or otherwise on a larger e than has been usual hitherto. Henry Wilson's designs rooms, fittings, and furniture; the several examples of ured glass for windows and screens; and a hundred r suggestions and aids to the domestic architect will be d crowded together in the Court.

here is a good deal of metalwork of special interest: a f metal fittings for windows and doors, designed and uted by the Birmingham Guild (Hart, Son, Peard & ; wrought-iron candlesticks and grate furniture by Russell and Sons; garden cisterns and other pieces in lead. In the church and monumental section there are a number of good things and some unexpected ones, as the case of examples of various types of marbles and other stones of A. J. and A. T. Bradford, and a set of different kinds of glass by Pilkingtons. Interesting, too, to the architect of domestic interiors is the table glass, including coloured Lygon glass and plain, designed by Russell and Sons, while of table pottery there are excellent exhibits. A distinct feature is the ceramic production of statuettes, animals, and other objects, by those admirable young artists Stella Crofts, Charles Vyse, Harry Parr, and Gwendolen Parnell, which suggest the possibilities of an extension of this craft in England on a scale comparable with Vienna or Copenhagen.

The applied sculpture is interesting architecturally: overmantels in plaster, statuettes of a decorative character, and garden ornaments are some of the forms used by Phœbe Stabler, Charles Wheeler, Herbert Palliser, Anne Acheson, Alan Wyon, and Arthur Glover, while the small modellings for medals, coins, and plaquettes by Carter Preston, Kruger Gray, and Herbert Maryon are admirable, and the reproductions of them in copper and brass point to an excellence in die-cutting by John Pinches, the Royal Mint, and the Goldsmiths Company, proving that this craft, like many others, is still in a flourishing condition in England.

The whole character of the exhibition is a mixed one, and it is catholic, for all kinds of people—designers, craftsmen, workmen, large business firms like Heals, Harrods, Warners, Tootals, and the numerous arts and crafts associations—are included, and give an exceptionally interesting view of the state of things in Great Britain to-day in the more popular directions of production and sale; the higher forms of the crafts, and the arts in their fullness, being reserved for other occasions and places.

KINETON PARKES.

Sir Edwin Lutyens's Design for the Mancheste War Memorial

ON the opposite page is a drawing of the design prepared by Sir Edwin Lutyens for the cenotaph to be erected in St. Peter's Square. The memorial is viewed from a point on the south side of the Square looking across to the Midland Hotel. The cenotaph will be placed over the foundations of the old church tower, and on the axial line of Mosley Street, Oxford Street, Peter Street, and Lower Mosley Street. It will stand on a low base wall, which will be flanked by two obelisks, and built so as to embrace the great War Stone to be placed at its base. The cenotaph will be 36 ft. high, and will carry no ornamentation save the arms of the city encircled in wreaths. The apex will bear the effigy of a dead warrior.

Albert Memorial. The proposal to remove the monument
from the Square, however, aroused great opposition fron
art societies and other bodies, and at a meeting of the Cit
Council in April, the proposals of the Memorial Committe
were rejected. A recommendation that the memorial shoul
be placed in Piccadilly was carried by seventy-one votes t
thirty, and then the matter was referred back for furthe
consideration. At the next meeting of the Council a propos
to erect the memorial in St. Peter's Square was adopted.

The Committee was further authorized to obtain desig
by competition or otherwise, and then a new controvers
was opened. At the next meeting of the War Memori
Committee, Mr. Percy Worthington was appointed

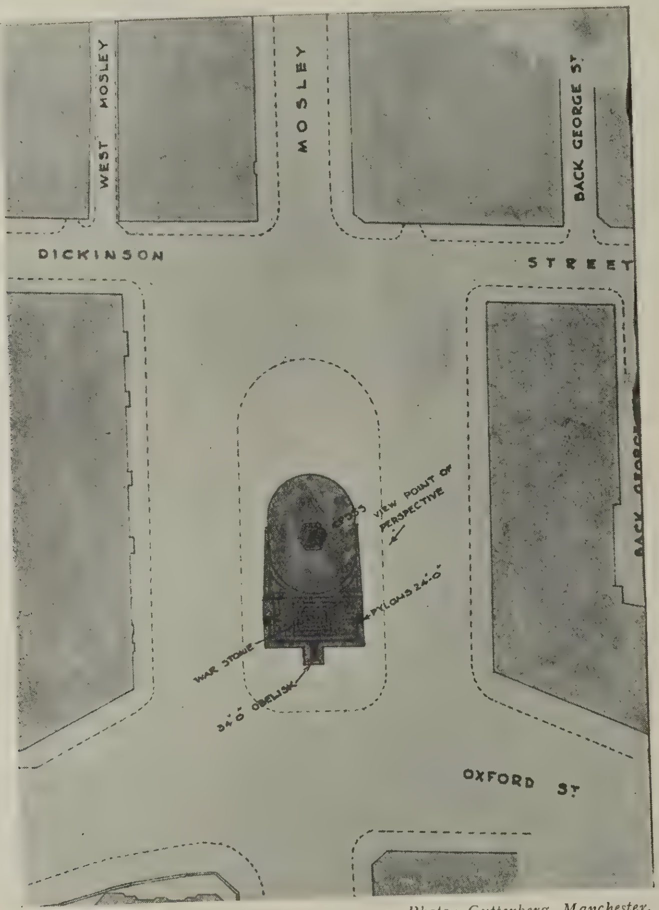


Photo: Guttenberg, Manchester.

PLAN OF SITE, PREPARED BY THE CITY ARCHITECT.

The work is to be carried out in Portland stone, and it is hoped that a beginning will be made next month.

Both the question of site and the question of design have caused much controversy. The first steps by the City Council towards providing a city memorial to the Manchester men who were killed in the war were taken in August of last year, when a committee was appointed to advise the Lord Mayor (Councillor Simon) in the matter. This Committee consisted of members of the City Council, with representatives of different aspects of Manchester life, and it reported in favour of a suitable monument being erected on the best available site in the city, but at a maximum cost of £10,000. The money was subscribed. The War Memorial Committee held two further meetings in February and March, and decided to erect a cenotaph in Albert Square, and to take the necessary steps for the removal of the Albert Memorial and all other monuments from the Square. The King gave permission for the removal of the

assessor to judge the competitive designs which
invited. But in July, the Committee abandoned the
of choosing a design from among competitive entries
Lord Mayor (Councillor Cundiff) explaining that this
due to "certain insuperable difficulties." These diffic
arose, it turned out, from the conditions framed fo
competition by members of the Society of Architects.
Society maintained that the award of Mr. Worthin
the assessor, should be regarded as final, but the Com
claimed the right of a limited freedom of choice. The
Memorial Committee then appointed a sub-committee
among its members to arrange for the preparation
design, and this sub-committee were instructed to ap
a particular artist "who can be trusted to prepare a s
design." Last month it was announced that the ar
who had been invited to submit designs had accept
War Memorial Committee's commission, and later
architect in question proved to be Sir Edwin Lutyen

War Memorials. 38.—The Manchester War Memorial, St. Peter's Square

Sir Edwin L. Lutyens, R.A., F.R.I.B.A., Architect

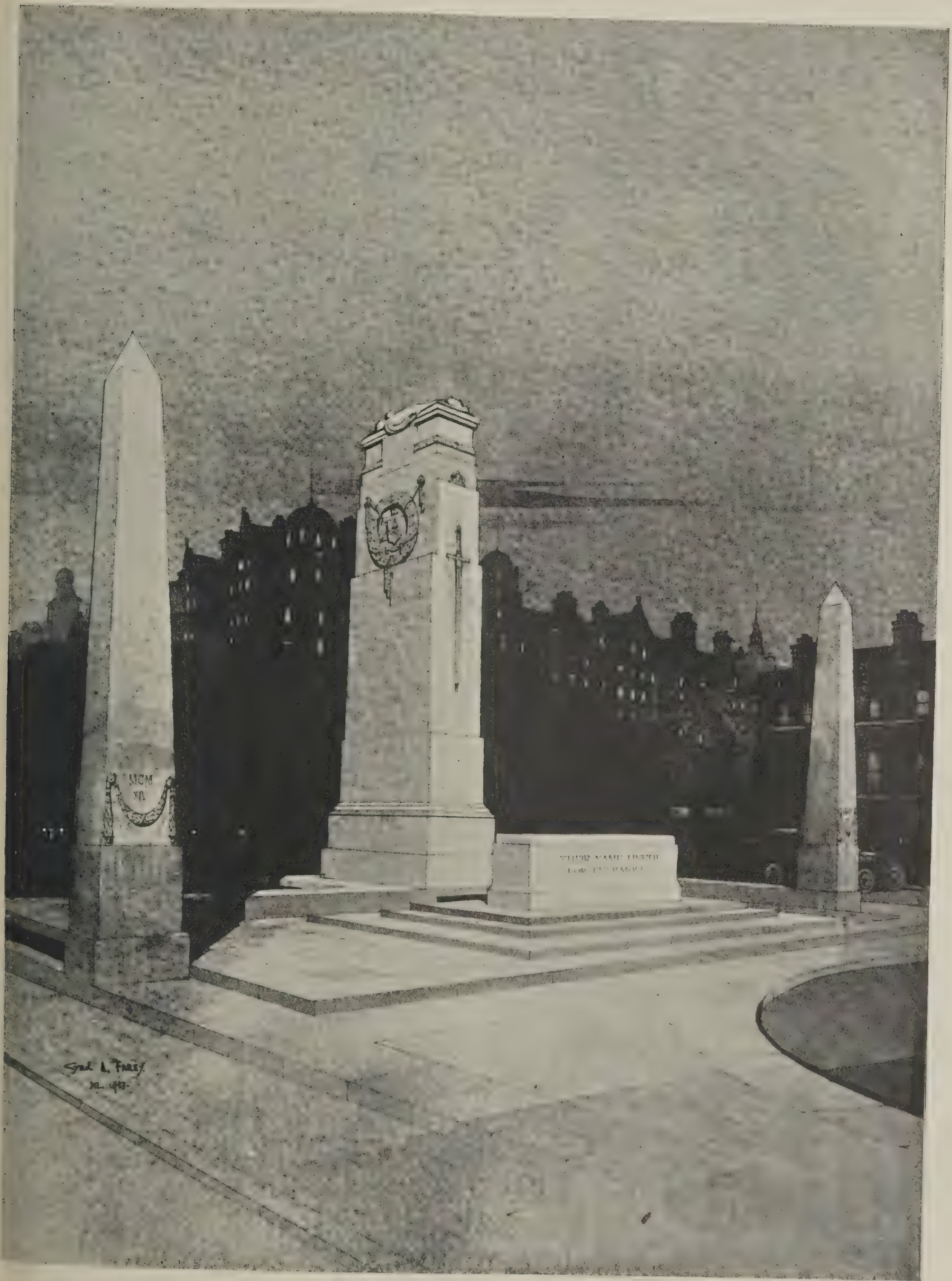


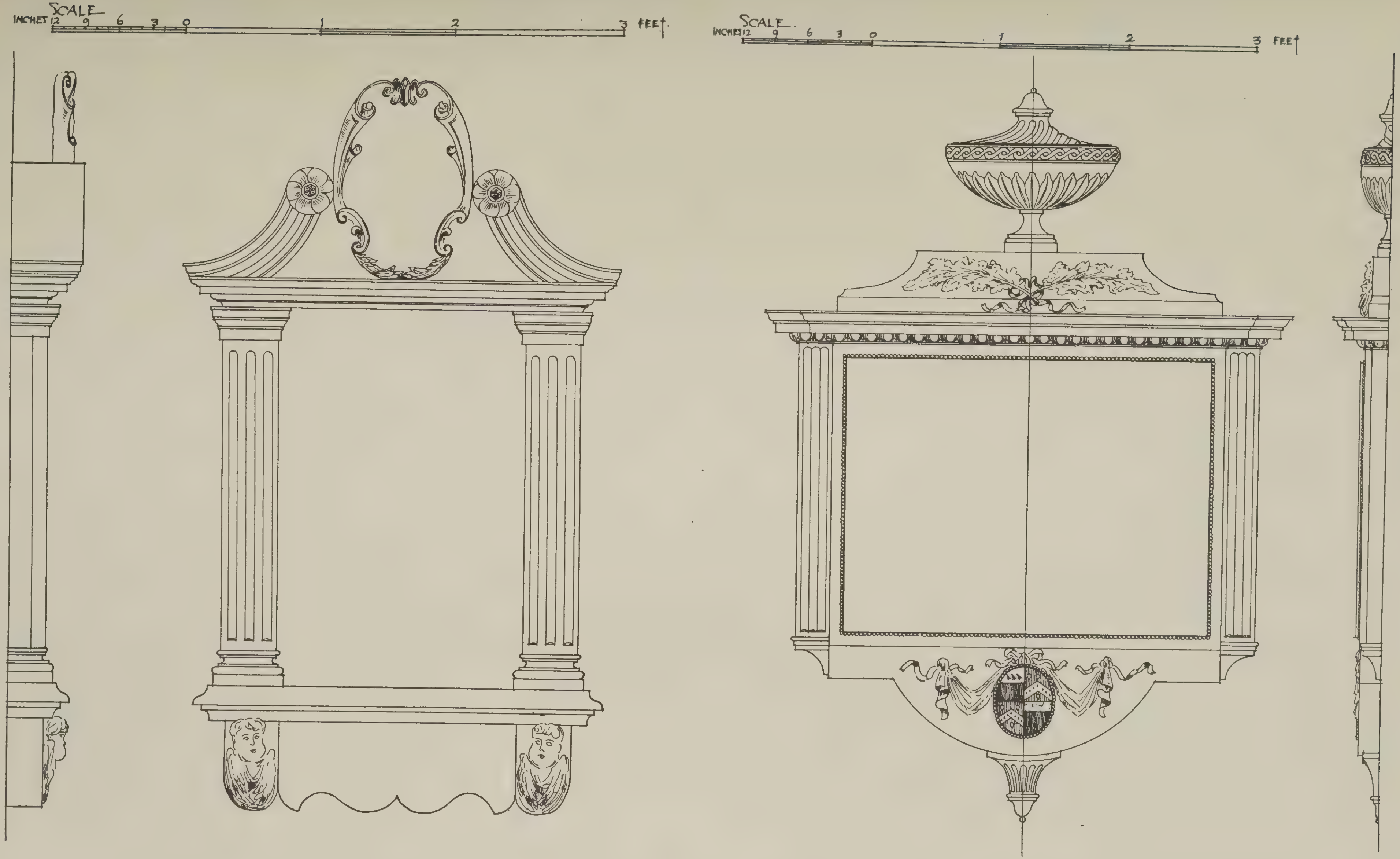
Photo : Guttenberg, Manchester.

The recent competition for Manchester's War Memorial having proved abortive, Sir Edwin Lutyens was invited by the War Memorial Committee to prepare a design. Sir Edwin's scheme, which includes a cenotaph and the great War Stone, flanked by obelisks, is illustrated above.

THE LIBRARY
OF THE
UNIVERSITY OF ILLINOIS

Aldersgate, 1783

Measured and Drawn by E. Leslie Gunston



The mural tablet from St. Botolph's (right), plainly shows in the slender proportions and refined details the influence of the brothers Adam, which was at that time at its height. The tablet from St. Mary Abbotts, Kensington, is also worthy of note.

The Construction of Cow-houses

The Ministry of Agriculture Report

UNDER the above title a very useful pamphlet has just been issued by the Ministry of Agriculture and Fisheries (price 6d. net, of H.M. Stationery Office) dealing with the design, construction, and equipment of cow-houses. Every aspect of the subject is carefully considered, and the methods set forth may be regarded as the best that could be adopted in the light of modern experience. The text, though brief (it runs to no more than sixteen pages) is very informative, its value being enhanced by the inclusion of a number of excellent plans, two of which are reproduced herewith.

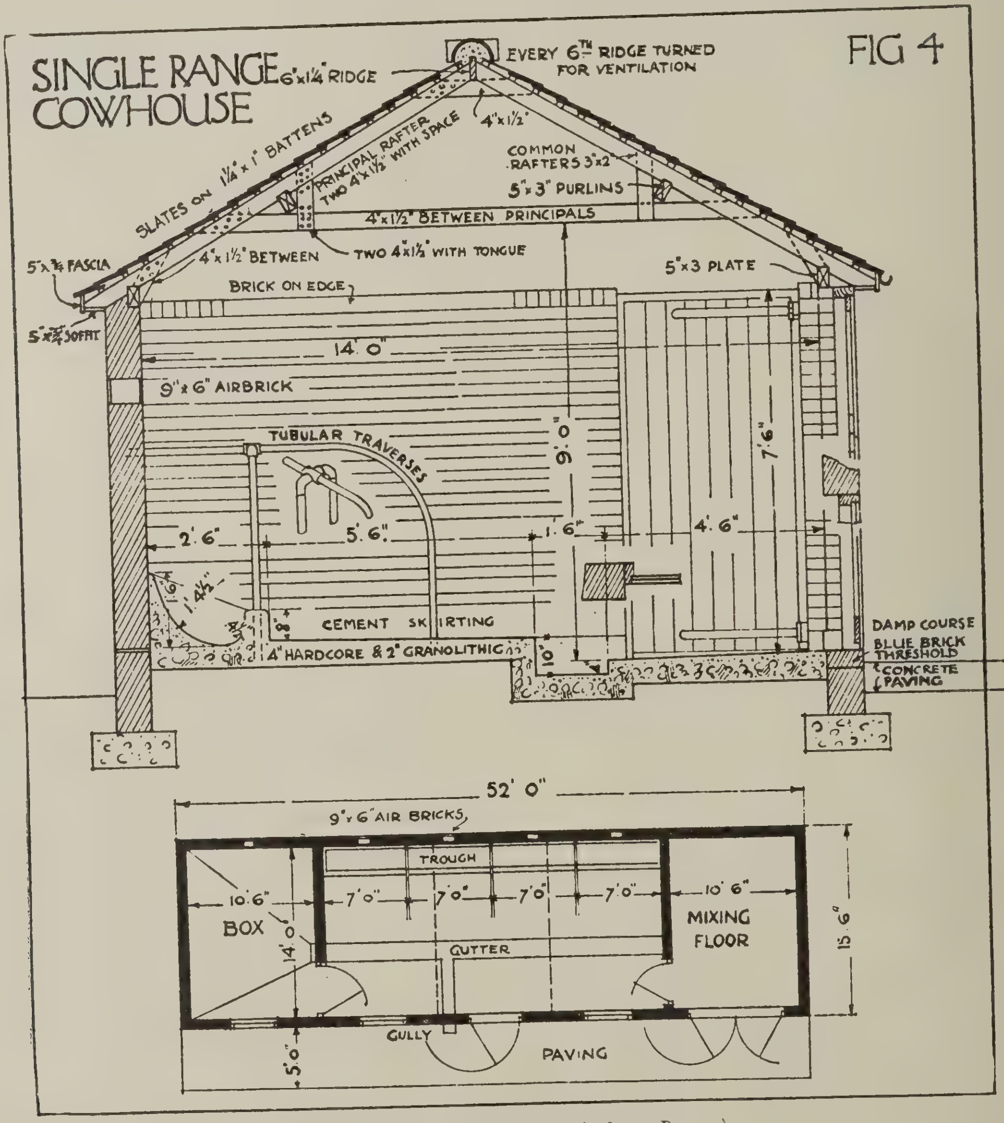


FIG 4

(*From the Ministry of Agriculture Report.*)

The subject is dealt with under five heads, as follows: Introduction; Site and Situation; Planning and Construction; Internal Finish and Fittings; Water Supply and Miscellaneous.

The first requirement in the production of milk for human consumption (it is remarked) is cleanliness. A cow-house which facilitates the practice of the best methods is a considerable aid to clean milk production.

It is comparatively easy to provide a new building which will meet all requirements, but it is more difficult to alter an existing building so that it can be made as suitable as a new one. This fact, however, should not deter owners and occupiers from making alterations on the lines suggested, as even the most unsatisfactory buildings can often be much improved without great expense.

Following are some useful extracts from the pamphlet :—

Cubic Space.—Opinions as to the suitability or unsuit ability of a cow-house from a sanitary point of view ar frequently based on the amount of cubic space provided This is due to the idea that in a building with a large cubi space the air remains approximately pure much longer tha where the cubic space is smaller. Where buildings ar occupied for a comparatively limited time, this inferenc is reasonably sound, but when applied to the case of a c house in which the animals are constantly stalled for the year, it is open to criticism. In the one case the bu ing is frequently flushed with fresh air, whilst in the o this is only possible on rare occasions. Even in relati large cow-houses, the air reaches a high degree of impu shortly after the building becomes occupied, unless vision is made for ample ventilation.

Construction.—Floors : The main flooring material sh be cement concrete, either a layer (not less than 4 in. t of coarse concrete finished with 1 in. of crushed gr (two parts) and cement (one part) or a layer of 4 in. h core, well rammed, with 2 to 3 in. of granite and ce above, laid on top. The surface, while it is still soft, ould be slightly roughened with a stiff broom; this is tter than grooving the surface as it is more easily swept an.

Care must be taken that the ground is quite even through- t, well rammed and uniformly firm before laying the ncrete. Properly finished concrete is scarcely ever ppery if clean, but may be more or less so if dirty. It is cheap as any other flooring material laid equally sub- ntially, is less absorbent than most, and probably more rable than any other.

Care must be taken not to round off the edges of channels l standings. A special material is sometimes used for a ce of 3 ft. in front of the manger to enable the cows to eel with greater comfort and to prevent enlarged knees. mmed clay and chalk rubble are good, but are liable to foul; perhaps the best material is cork asphalte which nade in bricks 2 in. thick laid on concrete and jointed h bitumen. Where cork asphalte is not available, how- r, and the cows are kept well littered there is no objec- n to concrete being used throughout.

Walls.—The walls may be of any suitable material which lentiful and cheap in the district, and, with the neces- y precautions, good buildings may be erected of stone, k, concrete, wood, or wood and iron. If of stone or k, all the walls should be neatly pointed. The surface he walls should be of such a nature that they can be ly cleaned and disinfected or lime-washed. If the build- is of wood, or wood and iron, all uprights, sills, and outer boarding should be of timber which has been creosoted under pressure. The extra expense of creosoting will not be great, while the life of the building will be considerably increased.

Roof.—The essential requirements of roofing material are that it should be permanent and non-conducting. Plain or pan tiles and slates are excellent materials and should be generally adopted. Corrugated iron is a useful material particularly for wide span buildings where the flat angle at which it can be laid is of great advantage. It gives extremes of temperature, however, and is far from being permanent, as the galvanizing slowly perishes, especially near towns, and much expense in painting and tarring may be incurred. It should never be used without lining the roof underneath. Asbestos sheets are extremely useful; several varieties are on the market with corrugations or rolls. In either case the roof timbers should be set out to accommodate the particular size of sheet selected. If asbestos sheets be used, full advantage should be taken of their lightness in the design and economy of the roof construction. As regards roof principals, the form of heavy timbers hitherto adopted is seldom necessary. Details are shown of trusses built up of light scantlings simply spiked together at the joints; such construction is extremely rigid when in position, but care must be taken so to fix the purlins as to avoid any tendency to buckling.

As a preventative against fire it is an extremely useful plan to avoid external woodwork at the eaves of brick or stone buildings.

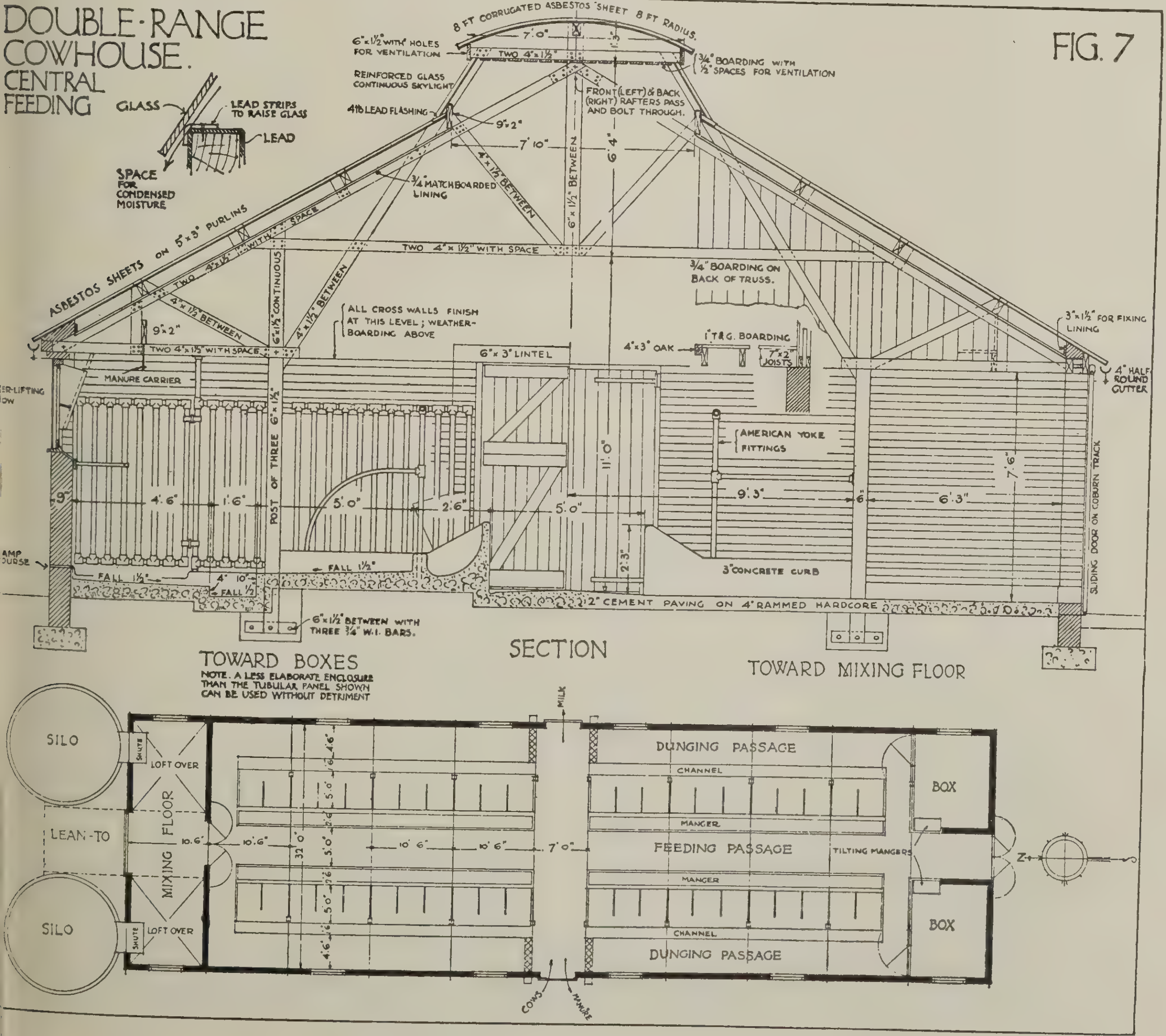


FIG. 7

(*From the Ministry of Agriculture Report.*)

Book Reviews

Practical Data on House Building

Probably every architect during the course of his career has come up against that very difficult proposition, the ignorant client—ignorance in this case meaning a total lack of information concerning architecture and building, and the character and extent of an architect's professional responsibilities. Every architect, when cross-examined as to why his fee of 6 per cent. should not include the survey of the site, permanent residence on or near the scene of operations, and a periodical inspection of the drains, must have wished for some small, compact volume that he could thrust into his client's hand and say; "There, my dear sir, you will find all about it. Go home and read it carefully; and if after reading it you still desire to build a house, I am entirely at your service."

Such a book is the excellent little volume under notice. Brightly written in dialogue form, it deals clearly and concisely not only with the position of the architect, but with the building, equipment, and furnishing of a house. A multitude of knotty little points are discussed in a practical way, and a good deal of eminently useful advice is given.

If the book leaves one with the impression that house-building is a rather hazardous and expensive business, that is because the subject is so frankly and thoroughly discussed. But to know the truth at the outset is far better than finding it out half-way through. It saves much heart-burning and recrimination.

"The House You Want," by R. Randal Phillips, Hon. A.R.I.B.A. 2s. 6d. net. "Country Life," 20 Tavistock Street, Covent Garden, London, W.C. 2.

Kensington Palace

Mr. Ernest Law's little book on Kensington Palace—originally published in 1899—now appears in a new edition, and visitors to the Palace may be assured that there is no other equally authentic guide available, for "this book together with the guide and catalogue are copyright, and immediate proceedings in Chancery will be taken against any infringement thereof"!

The author has had recourse not only to such well-known standard authorities on his subject as Pyne's "History of Royal Residences," 1819; Faulkner's "History of Kensington," 1820; Leigh Hunt's "Old Court Suburb," 1853; and Mr. Loftie's "Kensington—Picturesque and Historical," 1887; but also to a large number of earlier and less-known historical and topographical works, which have served to illustrate many things connected with the history of this interesting old building.

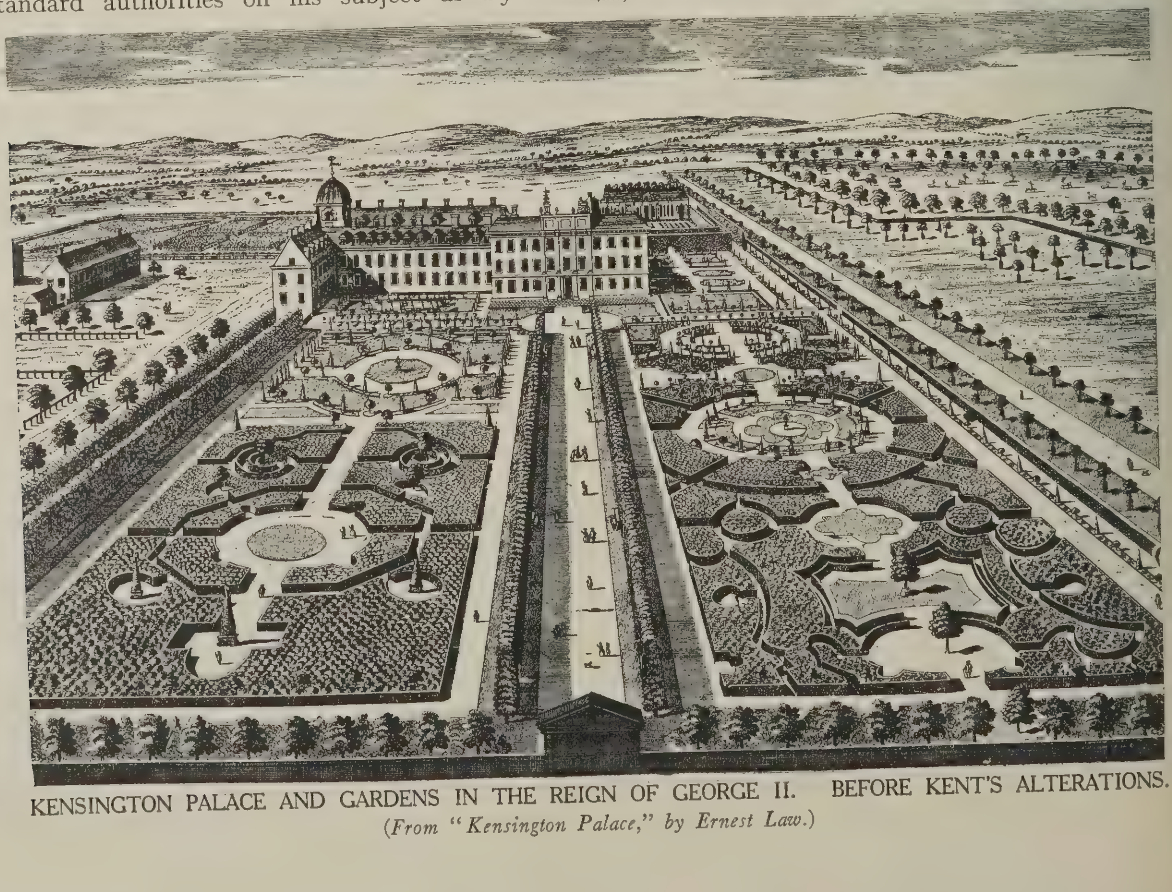
His main sources of information, however, have been the old manuscripts, parchment rolls, and State papers, preserved in the British Museum and Record Office—especiall the "Declared Accounts" and "Treasury Papers," containing the original estimates, accounts, and reports of Si Christopher Wren and his successors, relating to the work and buildings at Kensington. None of these has ever befor been examined or published; and they throw much ligh on the art and decoration of this palace, while also, for th first time, setting at rest many hitherto debatable point The author emphasizes that Kensington Palace, as a publi resort, is not to be considered in the light of an art galler but as a palace with historical pictures in it.

Mr. Law traces the early history of the palace from i building by William and Mary in 1689, to its "Restoration of the present day.

The principles on which the restorations have bee carried out have been of the most studied care nev to renew any decoration where it was possible to preser it—least of all, ever to "improve" old work into new. the contrary, repaving, patching, mending, piecing, clea ing, have been the main occupation of the decorator to extent that would render some impatient slap-dash build and surveyors frantic. Yet it has been all this minute though no doubt costly—attention to details, this laboric piecing together of old fragments, which has produc a result and effect likely to arouse the admiration of all w relish the inimitable charm of antique time-mellowed wo

Never before, the author assures us, has the restorat of any historic public building been carried out with q the same amount of care as has been lavished on Kensi ton Palace.

"Kensington Palace, Historically and Critically Described and Illustrated, w Guide to the State Rooms and Gardens and a Catalogue of the Pictures." By E Law, C.B. New Edition. London: George Bell and Son.



KENSINGTON PALACE AND GARDENS IN THE REIGN OF GEORGE II. BEFORE KENT'S ALTERATIONS.

(From "Kensington Palace," by Ernest Law.)

British Schools of Architecture

The Exhibition of Drawings at University College and the Architectural Association

T is not often that the opportunity occurs of seeing side by side the work of all the foremost architectural schools in the kingdom. When this does happen the occasion certainly merits the interest both of the dent and of the profession generally. Not only is the cinating opportunity provided of observing and com- ing the results produced under the guidance of the several titutions, but students and their instructors are able to preciate all that is good in the aims of others working on s often widely at variance. As a result of these ex- itions, it should be possible to judge which road most ectly leads in a direction sympathetic to the innate ign tendencies of the average British student, and thus oresee to some extent the field of our art to which we can k with most hope for the future.

rather disappointing impression received after an ection of all the work shown is the lack of any ten- cy towards evolving a style which is a British develop- nt. With some few exceptions little of the work shown ns all "home-grown," and that, unfortunately, is some he worst in the exhibition. The rest varies between an ympathetic emulation of the "Beaux Arts" and a d adherence to American office design of the "McKim" "John Russell Pope" type—admittedly the best erican, but why American at all? It is all very well to about designing simply from facts and logic, but these nents have been used pretty successfully in every typical onal fashion from the florid rococco to the ultra- dern Teutonic. Under proper conditions the national perament should influence design. Let us try to do ething that is of ourselves. As "the boy is father to man," so is the student the moulder of our architec- l future. It is therefore important that no one whose it is to be interested and constructionally critical ld pass these exhibitions by with the thought, perhaps, these are only students' exhibitions. "Those schools, know; why don't they send the boy into my office? al practical training." It is only in schools such as e that the unformed ideas have freedom enough to elop individually and are at the same time brought into act with a score or two of other equally individual ideas e same programme—an invaluable kneading and inter- ging only possible with one's fellow strugglers.

turn in more detail to the exhibition itself, the ter number of the drawings are hung in the halls of the don University School of Architecture, the remainder g at the Architectural Association. With all due defer- to the London University and to the Architectural ciation, and realization of the space factor, it seems er unfortunate to have to split the exhibition thus, ly for the reason that it is only those "in the know," were, who are likely to be cognisant of the arrange- ; also, to visit two rather separated localities, requires le time and a sustained interest not to be relied upon ng the busier members of the profession, still less ng the public.

e drawings on exhibition at London University com- advanced work from the Architectural Association, rpool University, Glasgow University, and the Robert on Technical College, Aberdeen. The 5th Year ns in the Architectural Association room give evidence teresting programmes, and some interesting solutions ffered. Notable among these is a lay-out plan by I. Chambers for a proposed "British Empire Exhibi- ," situate in Hyde Park. The grouping of the exhibition ings seems both logical and simple, while the general shoe outline should make for good and easy circula- Happily, too, a fetish is not made of axes criss- ing here, there and everywhere. Unfortunately, ver, the scale of the Grand Avenue leading up to the group of buildings makes all the entrances to the park itself look mean and insufficient. One feels that an avenue such as this would make a noise like a vacuum cleaner in its efforts to draw sufficient people through the park gates —if one may use a vulgar simile. Mr. Crickmay's scheme for this subject seems to lack cohesiveness. Although the units are collected, they still seem to retain a certain aggressive individuality. In Mr. Jellicoe's design one fears that the placing of the entrance would do much to spoil Park Lane, and would rather seriously interfere with the fast north traffic of the Ring.

The designs submitted for "A Seaside Pleasure Resort" indicate sound instruction in town-planning principles. It seems possible that Mr. Hyslop might have made more use of his sea-front aspect, instead of running at right angles to it. Mr. Jellicoe's drawing would be more explanatory with a north point indicated. Mr. Crickmay shows a pleasing little design for a "Repertory Theatre." His elevation strikes a fresh note and might suit very well a production of Mr. Shaw's "Back to Methuselah." It is, however, perhaps a little cold and unsympathetic. There are also some fairly complete ½ in. detail working drawings here, but one wonders why we need persist in insulting our colour-sense by showing liver-coloured brickwork and green cement, etc., on our details in the approved Victorian manner. American practice can at least teach us how to make our working detail a thing of art and a pleasure to the eye, without losing one whit of its legibility. Proper methods of hatching, etc., and a table of materials give all that is required, and incidentally relieve the junior members of an office staff from the soul-destroying and time-wasting procedure of colouring scores of prints. Already in the more up-to-date offices in this country the coloured print is a thing of the dead past.

There is apparent a versatility about the work of the Architectural Association, and programmes seems to cover a wide range of subjects, although more study might be given to those that are likely to be met with in actual practice. The drawings as a whole have the sad defect of careless and inaccurate draughtsmanship, a great drawback to those who must one day seek employment. Also the rendering seems hasty and is altogether far below the acknowledged standard of the Architectural Association.

The Liverpool University section of the exhibition is well worthy of careful inspection. The first and most obvious thing that strikes one is the definiteness with which this school has deserted the rather flamboyant presentation and rendering so characteristic of its work of one or two years ago. They have instead embraced with open arms the ideals of American draughtsmanship—not the draughtsmanship of the American student atelier, but of the American office. On the whole the change is vastly for the better. Not only does the all-powerful but scarcely all-pleasing colour disappear, but also much that is redundant and cheap in the way of detail. One feels that these drawings as a whole mean something. They would certainly mean something to the builder, even as they stand, which is more than could be said of some of the work produced in other schools. Every student realizes the value of design; his training hangs on that, but, after all, to build is our eventual aim. The criticism which might be made here is that a sense is produced of some lack of imagination in the work—a desire to play safe. We do not wish to see the Liverpool student lose his fire.

The Liverpool room presents a rare display of blue print drawings which, both in number and quality, are the best part of their show. Mr. Hutton is perhaps foremost with a most excellent set of blue print working drawings for a "Repertory Theatre." These drawings are complete and thorough in every respect, and on a level with the best

American office practice. Fully dimensioned and efficient they indicate a man to whom "getting a job" should be merely a matter of asking for it. These remarks apply also in a somewhat lesser degree to Mr. Brooke in his working drawings for a "Cinema," and to Mr. Vallis in his drawings for a "National Museum for Scotland." A very pleasing point also is the high standard of design in the above sets—apart from other considerations. This is especially the case with Mr. Vallis who knows the value of plain surface and how to avoid the use of extraneous detail. His design is severe and classic. We trust that these designs are not based on too close a prototype.

Mr. Raafat shows promise with his Mosque, a subject with which he is no doubt in sympathy. We would suggest that his Minaret should either bind in more with his building or stand further free; the side elevation is a little unhappy in this respect. Messrs. Knight and Fry each produce designs for a commercial building. These are good pencil drawings with just sufficient rendering. Mr. Knight's plan is the better. Mr. Fry would do well to study the grouping of lavatory towers, stair and lift wells, which are over large and scattered.

The remaining drawings in the Liverpool room are rather handicapped by the proximity of some of those mentioned above, which one must willingly admit are the most advanced and proficient in the whole exhibition. Liverpool has scored well. The third room at London University is occupied by drawings from the Glasgow School of Architecture and the Robert Gordon Technical College, Aberdeen. Although very recognizably British, these drawings are also unfortunately some of the poorest in the exhibition. These people seem to be still labouring along the lines of the notorious "English Competition Renaissance" of a few years pre-war. Mr. Cora is most ambitious with a large Municipal Buildings scheme, crowned by a square tower, very reminiscent of the Port of London Authority.

The drawings at the Architectural Association represent in most cases the work of more junior years at the various schools, although one finds here degree drawings from the London University. The subject is "A University Athletic Centre," and three sets are submitted. To be frank, their chief claim to notice is that the drawings are about 6 ft. long. Both elevations and plans are thin and weak, and do not provide an adequate reason for using such large sheets of paper. One cannot produce a busy plan by simply magnifying the same, and the scale here has the effect of being magnified, not increased.

Manchester University is chiefly represented by several sets of drawings for "A Swimming and Boating Club." The most promising student here would seem to be a lady—Miss Elsie Rogers, who shows a very refined design, perhaps too refined and delicate for the subject, and a ½ in. detail almost worthy of Charles Platt. Mr. Fairhurst is too coldly monumental. Mr. Norbury's design, with a pleasant use of brickwork, should be "comfortable." The plans generally show a lack of ingenuity. A Theological College with a "fire and brimstone" rendering, would urge those about to "answer the call" to do so in the negative.

Some Architectural Association Third Year drawings give evidence of interesting subjects which have failed to inspire. To judge Second Year work at the Architectural Association, Third Year students should do better. There are some rather old-fashioned designs for a modern church. They are not Christian Science or kindred churches, so in this case, perhaps, the logic is on the side of the students. Mr. F. E. Green has done better in some interesting little drawings for a Concert Hall.

The Robert Gordon Technical College, Aberdeen, has not produced much of interest except a rather effective design in the Neo-Grec, by James Dawson, for a Naval College Drill Hall. The simplicity here is very pleasing, but is approaching the limit of safety. A lay-out for a Naval Cadet School looks effective as are some pencil drawings for a Gothic Chapel.

Liverpool University show some schemes for Oxford Circus. One does not blame them, but the improvement is doubtful. That by F. T. Silcock is the best both as to proportion and draughtsmanship. His arched entrance has a familiar look in this neighbourhood, but his overhanging cornice and tiled roofs would lose their value in our climate. The famous "monumental staircase" subject is again essayed, but the value of having a shorter flight at the bottom, thus keeping the silhouette of the stair slightly concave, does not seem to be appreciated.

Edinburgh College of Art produces several designs for a large Town Church which are rather dull. Mr. A. Craig is foremost with a scheme somewhat reminiscent in mai lines of one of the Rome final designs of two or three years ago. The projecting porch would be better omitted. Tw other schools, very much in their infancy, are represented—Cardiff Technical College and Cambridge University. W appreciate the courage of these Institutions. It is a virtu which should lead to others.

In the retrospect one realizes more than ever that th outstanding lesson afforded by these exhibitions is the ver great necessity for a regular interchange of ideas betwee all the schools. The only pity is that those most in need inspiration from others are those least in a position attend an exhibition necessarily held in a big centre.

EDWARD ARMSTRONG.

SCHOOLS REPRESENTED.

Following is a list of the schools and students repr sented :—

Aberdeen.

Sutherland	18 sheets.

Glasgow.

Cora	15 sheets.
Fergusson	15 sheets.

Architectural Association.

Chambers	12 sheets.
Hyslop	9 sheets.
Jellicoe	9 sheets.
Crickmay	11 sheets.

Liverpool.

Brooke	20 sheets.
Fry	18 sheets.
Higham	12 sheets.
Hirst	13 sheets.
Knight	16 sheets.
Hutton	26 sheets.
Musker	11 sheets.
Raafat	13 sheets.
Vallis	14 sheets.

The Bank Rebuilding Scheme

The remarks of the Governor of the Bank of Eng made at the half-yearly Court included an intere reference to the scheme for the rebuilding of the F Mr. Norman said that the plan under consideration vided for retaining the outside walls for two, or pe three, reasons. One was that the outside walls wer part of the Bank which, if any part had, had becom torical; they were a familiar sight to all who passe Another reason, perhaps, was that by retaining those as they were the Bank did not interfere with the ligh air and amenities of any of their neighbours; and an reason was that they would thereby perhaps avoid r any awkward questions with regard to street widenin so forth. Mr. Norman added that the most imp reason, from the Bank's own point of view, was that out touching the old walls they could get all the spac needed. We venture to think that this decision of the of England to preserve what to the general public most distinctive characteristic of the old building warmly approved.

Correspondence

The Earthquake in Japan

To the Editor of THE ARCHITECTS' JOURNAL.

IR,—In your leading article on "The Earthquake in an," in the issue of your JOURNAL, dated September 12, close with the words: "The Lord Mayor of London followed an honourable tradition of his office in starting nce a fund for the relief of the many thousands of people are homeless and starving in Japan. Is it not worth sidering whether we might not also, if the Japanese ernment will accept it, lend her some part of our stock rofessional skill in rebuilding the ruins? Of course, ay well be that the Japanese Government will prefer services of native officials who are more versed in the ng of such problems and have more knowledge of the l conditions of Japan. But at any rate, we could offer h skill, which, used in conjunction with Japanese erience, might stand Japan in good stead."

am quite unaware how your leader writer's proposal be regarded by the R.I.B.A.—but I can imagine how ight be regarded by Japanese architects—as a very good ise on our part to go out to there and find good jobs. ll the Japanese architects and engineers had been ned with their buildings, there might be some reason end men to the Japanese Government, but it is in my d that if English architects journey to Japan without ft of money as well with which to back their "skill," will find they are of but little use. And the money ired would be a sum such as only a Government could e. However, your leader writer is probably well-ntioned, and a harmless fellow enough, and perhaps he nt no more than to provide such help as is often proffered ome people in the words: "Have you hurt yourself?" r witnessing an unfortunate man fall from a ten-story low.

"READER."

The Preservation of Bricks

To the Editor of THE ARCHITECTS' JOURNAL.

r,—I was interested to read Mr. H. Adams's letter our issue for August 22, but I noticed that the name of well-known firm was omitted from his list of manufacrs of stone-preservatives. I refer to Messrs. George ngton & Co., Ltd., of 69 High Holborn, W.C.1, whose llic liquid is one of the most efficient stone-preservawith which I have been brought into contact. This d imparts an intense hardness to stone and bricks and ents decay and the "flaking away" of which your espondent complained, and I have found that it adds iderably to the "life" of the material treated, and is an llent preparation for stone-restoration work.

G. C. GARDNER.

The Hygiene of Heating

By Leonard E. Hill, M.B., F.R.S.

diation according to modern theory is regarded he trigger which starts off every action in the d, physical, chemical, or biological, and the sun e main source of that radiation. The visible of the sun which are split by a prism into olours of the rainbow have wave-lengths from red to t varying from 800 to 400 millionths of a millimetre; d the red extend the invisible heat rays or infra-red, beyond the violet the ultra-violet rays, also invisible, very active chemically and biologically. These last extend to a wave-length as short as about 290 millionths millimetre in the high summer sun, and some 310 nths in the winter sun. Potent in preventing and g rickets and surgical tuberculosis, the ultra-violet are very greatly reduced by heavy clouds, and cut out oke fogs. The blue sky is due to the scattering of the er rays of the sun by air and water vapour particles, s rich in ultra-violet rays. Bright clouds reflect and r these rays to earth. The shortest rays of the sun t reach the earth, but are absorbed by the highest s of the atmosphere.

Artificial lights, such as the arc and incandescent gas burners, give off infra-red and ultra-violet as well as visible rays. In the case of the mercury vapour lamp, or metallic arcs, there are rays as short as 200 millionths of a millimetre. The X-rays and the Beta rays given off by radium are much shorter still; there appears to be a merging of the shortest known ultra-violet rays with the longest of these. The short rays when absorbed are active in producing chemical change. The dark infra-red rays on absorption turn into heat. The visible rays likewise, but these longer rays may also excite some chemical change. Beyond the dark heat rays there are longer and longer waves, till finally we come to the Hertzian wave used in wireless telegraphy, with wave-length extending to hundreds of yards. These very long waves, as far as we know, have naturally no effect on us. They have to be transformed into electrical energy and made to move visual or auditory signals before we become aware of their existence.

Healthy outdoor conditions give us cool air to breathe and the radiant energy of the sun, the visible rays of which penetrate to the blood and warm that, while the ultra-violet rays act on the surface of the skin, and the two together help to keep the whole body resistant to disease. The heating of the surface of the skin by the dark heat is moderated by cool moving air, and the cooling power of this air stimulates body heat production, and so appetite. Adequate cooling of the body by cool moving air and evaporation of moisture from the skin and lungs has a beneficial effect on health, vigour, and happiness. Cool air has a high physiological saturation deficit—that is to say, when heated up to body temperature it can take up a large amount of water vapour. The warm air of crowded rooms on the skin, on the other hand, has a small physiological saturation deficit, and the breathing of such air lessens the daily amount of evaporation from the breathing tubes and skin. An ample passage of secretion through the breathing membrane keeps this membrane clean and free from invasion by microbes or dust.

Systems of heating by dark heat, with shut windows, steam coils, and heated air, are cheapest to run, but are falsely economical, because they deteriorate health and lessen working efficiency. Statistics collected in U.S.A. showed that there is more sickness in schools artificially ventilated than in those ventilated by open windows. What is wanted is radiant heat, cool air, and clean skies unpolluted by smoke. Fires with smokeless fuel—such as coke, for providing hot water; gas stoves for cooking; and gas fires for warming rooms—give us the right conditions, if properly controlled. The latest electric heaters are designed to give us radiant heat in a convenient form, but, unless electric energy is obtained from some cheap source of water power, it is too dear for most of us to pay for.—The above extracts are from "The Manchester Guardian"—"Gas Industries Number." Mr. Hill is Director of the Department of Applied Physiology at the National Institute of Medical Research.

An Exhibition of Glass

A remarkable collection of seventeenth and eighteenth century English and Irish glasses is on view in the Loan Court at the Victoria and Albert Museum, South Kensington. To the fine examples of the Rees Price collection, which have for some time been on loan to the Museum, is now added the splendid collection of Mr. Joseph Bles, of Manchester. It includes many unique specimens, including the famous royal oak goblet made in 1663 at the Duke of Buckingham's glass-house at Greenwich in honour of the marriage of Charles II and Catherine of Braganza. There are a number of rare early glasses of the seventeenth century showing traces of Venetian influence.

Among the early glasses of unusual shape is a large posset bowl with trailed and moulded decoration, and a syllabub cup with spout, and there were a large number of glasses with every variety of stem showing air twists and colour twists. Among the eighteenth-century glasses is one with an engraved portrait of Dean Swift. Of Irish glass, too, there are many beautiful specimens.

The Week's News

Camouflaging Cliffs.

Southend Council is considering a scheme to transform the uglier portions of the cliffs into terraces.

Bournemouth Suggested Improvements.

Bournemouth Council are considering a scheme for the improvement of their pleasure-gardens at Boscombe.

Beaconsfield Statue Unveiled.

The memorial statue to the Earl of Beaconsfield was unveiled in Aylesbury Market Square.

Flats at Somers Town.

St. Pancras Council is considering building seventy-two flats at Somers Town at a cost of £62,000.

Hendon Highway Improvements.

Hendon District Council have decided to carry out widenings and improvements in the vicinity of the new Tube station in Queen's Road.

Suggested New Bridge.

It is suggested that a bascule bridge should be built between Plymouth and Torpoint, so as to provide a better road communication with Cornwall.

War Memorial for St. Andrew's, Plymouth.

The Bishop of Bradford laid the foundation-stone of the Abbey buildings which are to constitute St. Andrew's parish war memorial.

Old Ford Bridge.

The contract for the building of the new bridge across the River Lea at Wick Lane, Old Ford, has been placed. The construction of the bridge is expected to take twelve months.

New Cathedral Chapel.

A new chapel is to be built in Brecon Cathedral in connection with the C.E.M.S. and Church Lads' Brigade, in honour of the Bishop (Dr. Bevan) being appointed chairman of the C.E.M.S.

Free House Sites.

Freehold building plots are to be given to Lever Brothers' work people for single or semi-detached houses built to the owner's designs approved by the company's architect.

City's Housing Deal.

The total amount expended by the Corporation on their housing scheme is £1,135,939. With the approval of the Ministry of Health they have sold 168 acres of the surplus land at Ilford to Mr. P. A. Bayman for £57,000.

Change of Address.

Messrs. Walker and Thompson, architects, Doncaster, beg to inform their clients and friends that they have removed to more commodious premises, namely, to Carbon Chambers, 7b Hall Gate, Doncaster, to where all communications should be addressed.

St. Bartholomew's Church.

The history and architecture of the Norman Priory Church of St. Bartholomew the Great, E.C., will be explained, and the recent excavations in the cloister will be shown, on Saturday, October 13, and Saturday, October 27, at 2.30 p.m. No charge will be made for admission.

Publicans and Structural Alterations.

Newington Licensing Justices have unanimously decided to take action against publicans who made structural alterations to their premises without first notifying the Bench or submitting plans. The regulations on the matter were clear and distinct.

A Housing "War."

Mr. J. J. Clarke, of Liverpool, addressing the British Association in Liverpool on the rehousing of slum-dwellers, urged that all men between eighteen and twenty-five, unemployed for twelve months and without prospect of early employment, should be recruited into the Royal Engineers to form housin battalions on the lines of the dockers' battalions organize during the war. They should be given training, and then se to work on slum-clearing and house-building, and the Govern ment should, where necessary, commandeer materials.

The New Section of the London County Hall.

The north-eastern section of the County Hall which necessary to complete the original design, is now about to b begun. When the entire building is completed, it will be easil the greatest municipal palace of any city in the world, and wi house the entire staffs of every department of the Council work.

Chesterfield Spire.

The safety of the Crooked Spire, Chesterfield, is now assure but the work of restoration is by no means complete. Exte sive repairs have been made in the outside leadwork and go progress has been made in strengthening the interior woo work. Old decayed beams have been taken out and new wo inserted.

A New Appointment.

Mr. Delissa Joseph, F.R.I.B.A., has been appointed a memb of the London Building Acts Committee of the Royal Institu of British Architects, and a member of its Practice Standi Committee, its Parliamentary Sub-Committee, and its Ancie Lights Sub-Committee. His recent paper on "Building Heig and Ancient Lights" has been reprinted from the "Journa of the Institute, and issued in pamphlet form.

Hinckley Housing Subsidy.

Large numbers of houses are to be erected in the popul villages of the Hinckley district following the acceptance the Rural Council's subsidy scheme by the Ministry of Hea The Ministry have intimated that the subsidy will be allov in respect of those houses the building of which was commen after the scheme was announced by the Council.

Swansea, New Public Hall.

In connection with the necessity for a new public hall Swansea, a scheme has been revived for the utilization of Brunswick Yard site. Constructional work is being car out, and the architect suggests that a large public hall car constructed on the flat roof of garages, and accommoda provided for 3,000 people.

A Difficult Act.

Commenting on the intricacies of the new Rent Res tions Act, Judge Sir Thomas Granger, at Southwark Co Court, recently remarked that the Minister who introdu the Bill was reported to have said that it was plain even to meanest intelligence. "Well, I am bound to say that du all the years I have sat on the Bench," remarked his Hon "I have never had before me an Act of Parliament upon a thorny subject which, apart altogether from the fo facts, was not only not plain to the meanest intelligence, presented difficulties to some who possess higher intelligen

Lectures on Industrial Management.

A series of lectures are to be given under the auspices o Industrial League and Council in co-operation with the Re Street Polytechnic concerning Industrial Management. lectures commence on October 12 with inspirational addr to the students by the Rt. Hon. G. N. Barnes and Mr. Hichens. After that the subjects will be confined to e lecturers, who include Mr. A. W. Kimberley on "The Fina Organization of Industry"; Mr. A. P. M. Fleming, M.Sc "Industrial Research"; Mr. A. R. Stelling, Dipl. Ing "Factory Management"; Mr. H. Atkinson on "The Re Rewards of Capital, Management, and Labour"; Mr Jan Butterworth on "Motion and Fatigue Study"; Dr. Edg Collis on "The Safeguarding of Health in Industry"; Mr. Allingham on "The Economic Aspect of Cost Accountan and Mr. F. S. Button, J.P., on "The Attitude of Labo Problems of Industrial Organization." The fee for the course is 5s.; single lectures 1s. Tickets can be obtained the General Secretary, Industrial League and Council, 8 toria Street, S.W.1.

The Week's News—*continued.*

Death of Lighthouse Builder.

\ lighthouse builder, Mr. D. M. Henderson, died at Hove, ›d eighty-three.

Nork Building Scheme.

'our times the size of Hyde Park, and the residence for ny years of the Earls of Egmont, Nork, in Surrey, is to be 'eloped for small detached houses on town-planning lines.

An Appointment.

Messrs. Helliwell & Co., Ltd., manufacturers of patent zing and steel casements, of Brighouse, Yorks, and 11 Victia Street, London, have appointed Mr. C. E. Winter to be ir London manager in succession to the late Mr. R. F. htfoot.

Eastbourne Town Council and The Downs.

\ scheme propounded by one of the members for the acquisi1 of certain portions of the Downs in the vicinity of Beachy ad has been before the Town Council. It was urged in pport of the proposal that unless the land is either purchased leased by the town there is a danger of it being laid out for lding.

Housing Schemes in the Colliery Districts.

'ifty thousand modern labour-saving houses are being built the rate of 250 a week for the mining communities of Yorkre, Nottinghamshire, Staffordshire, and other colliery areas the Midlands and in North Wales. They represent the nching of a great scheme for re-housing miners and their nilies. More than twenty millions is to be spent on the eme, which is being carried out by the Industrial Housing sociation.

tes Tiles, Firebricks, and Builders' Supplies for New Orleans, U.S.A.

'he Department of Overseas Trade has received an enquiry m a firm in New Orleans, who are desirous of receiving tations and samples of slates, ridging tiles, firebricks, and lders' supplies from United Kingdom manufacturers, with iew to purchasing on their own account or to acting as nts.

\pplications for further particulars should be addressed to Department of Overseas Trade, 35 Old Queen Street, stminster, S.W.1. (Reference 20143/F.W./M.C./(2).)

The L.C.C. and Unemployment.

'he schemes of the London County Council to assist in igating unemployment during the coming winter will inve an expenditure of more than £1,000,000. One of the chief ns of expenditure will be £550,000 for sewers and main inage at Lewisham and Woolwich. For roads and improvents on the new housing estates at Becontree and Grove k £220,000 has been set aside, while other works include rebuilding of Wandsworth Polytechnic, £7,500; a new ool at Hackney, £3,000; and schools at Battersea and ting.

Housing Progress in Scotland.

'he following figures show the progress that has been made State-aided housing schemes in Scotland to August 31, 3: permanent houses completed, 19,099; temporary houses ipleted, 665; reconstructed houses completed, 101; houses ipleted under the private subsidy scheme, 2,275; total, 140.

'here are 3,171 houses at present under construction in nection with housing schemes carried out by local authori- and public utility societies. The total amount paid by the ttish Board of Health in respect of the 2,275 houses comed under the private subsidy schemes is £545,050.

Free Freehold Building Sites.

'iscount Leverhulme, describing to a Press representative scheme for giving free freehold building sites to all who ited them on the Spital estate, near Port Sunlight, said it an experiment. When the house shortage was apparent advocated the municipality buying the surrounding fringe and and stimulating building by giving free sites. Smallders had to pay high prices for small sites. The municipality aid, would have little expense beyond lighting and policing, would in time get a high return on the transaction. It proposed to allow eight or ten houses to the acre, including ds, and at present there are nearly 500 plots. Forty-five 's are ready for immediate development.

Viscount Leverhulme and Hampstead Heath.

In exchange for a strip of heathland which divides the grounds of his Hampstead residence Viscount Leverhulme has offered to hand over to the public a fenced-in piece of land known generally as "The Paddock," Hampstead Heath. This offer was discussed at a meeting of Hampstead Borough Council, when it was finally decided that the question should be deferred for one month so as to enable the members better to acquaint themselves with the proposal.

Government Subsidy for Hemsworth Houses.

The Hemsworth Urban Council have accepted the tender of Messrs. Jennings and Sons, Hemsworth, for the erection of ten houses in blocks of two at Highfields, at a price of £3,521. The Ministry of Health has approved payment of the Government subsidy in respect of seventy-eight of the ninety houses being built by the South Kirkby, Featherstone, and Hemsworth Collieries, Ltd., at Fitzwilliam. Sanction has also been obtained to the payment of the Government subsidy on the 250 houses estimated to be erected within the next nine months in the urban district.

Proposed Swansea £50,000 Loan to University College.

Swansea Town Council has decided to apply for a provisional order to enable them to advance £50,000 to the University College of Swansea. The Town Council have already given to the college Singleton Abbey and a certain amount of land. The corporation bought the Singleton estate a few years ago from the late Lord Swansea for £100,000.

Newport Housing Grants.

Newport Corporation now announce that they will grant lump sums for the assistance of builders and those who desire to purchase their own houses. The Corporation will grant subsidies (to include Government and Corporation grants) as follows:—(a) Parlour type houses of the subsidy size and description, £110 per house; (b) non-parlour type houses of the subsidy size and description, £90 per house. In the first instance the decision is limited to apply to 300 houses.

Builders too Speedy.

When a plan of new houses to be erected at Harlech was submitted for the approval of Deudraeth Council, it was stated that one of the houses was already in course of construction. Complaints were made that the practice was becoming prevalent. It was decided not to approve the plan of the house, and to instruct the contractor to cease operations until the Council be furnished with a satisfactory explanation.

Hinckley Housing Boom.

Following the acceptance of the Rural Council's subsidy scheme by the Ministry of Health, large numbers of houses are to be erected in the villages of Hinckley district. It was stated at the meeting of the Council that many started building before the subsidy was announced on the understanding that it would be allowed. The Ministry is to be approached with a view to the subsidy in these cases being sanctioned.

The Duo-Slab Method of Building.

The Housing and Town Planning Committee of Edinburgh Town Council have had under consideration the report of the deputations which visited Newcastle and Leeds to inquire into the progress made in these cities with the duo-slab system in the erection of houses. The committee resolved to recommend the adoption of the report, and it was remitted to the Housing Director and members of the Housing Committee to draw up the necessary plans and estimates for the erection of houses under this duo-slab system.

Smoke Abatement.

Mr. J. B. Kershaw, of the British Association, addressed the Engineering Section on smoke abatement. He said that the existing law was unsatisfactory and not adequately enforced, and since the chances of passing the amending Bill during the present Parliament were remote, advocates of smoke abatement should concentrate their efforts on voluntary methods of attacking the evil. It was a case of education rather than legislation at the moment. Many towns in this country were doomed to be under smoke screens, which kept away the health-giving and valuable rays of the sun. That was why doctors and medical officers of health were behind the movement. Before the war nearly all the large towns in this country started educational classes on smoke abatement. The war put an end to them, and in the majority of towns they had not been restarted. They should be started again in every town without further delay, particularly in centres of manufacturing industry.

The Bartlett School of Architecture

Atelier and Evening Courses

An atelier in connection with the School of Architecture, for the study of advanced architectural design, has been instituted in Malet Street, within three minutes' walk of the college (Professor: A. E. Richardson, F.R.I.B.A.; assistant: James Burford, A.R.I.B.A.).

The atelier will be open to those who have obtained the degree of Bachelor of Arts (architecture) in the University of London, to those who have obtained the diploma or certificate of architecture of the school, and to others who have reached a standard of efficiency approved by the director. Applications for admission, accompanied by statements of qualifications should be sent to Walter W. Seton, M.A., D.Lit., F.S.A., Secretary, University College, London (Gower Street, W.C.1).

Subjects will be set once a month, and the finished schemes are judged at the end of each month. There will also be twelve hour subjects and other competitions.

Fees (alternative): (1) Session, £6 6s., term, £2 12s. 6d; (2) annual subscription for membership, £1 1s.; fee for each monthly subject, £1 11s. 6d.

Members of the atelier will be required to provide their own boards, T-squares, and drawing materials.

The evening school in architectural design will be open every evening during term time (except Saturday), from 6 p.m. to 8 p.m., beginning on Monday, October 1, 1923 (Professor: A. E. Richardson, F.R.I.B.A.; studio instructor, Ernest P. B. Musman, B.A., A.R.I.B.A.). The instructor attends on Monday, Wednesday and Friday evenings, when the school is open till 9 p.m.

These courses are arranged in order to encourage the study of design among students engaged in offices during the day. Periodical lectures will be given on the principles governing the design of all types of modern buildings, special attention being given to conception and planning. Professor Richardson will supervise the courses and will attend one evening a week to criticize the designs.

Students taking these courses will be given special facilities to study from the life; also the library of the school and its collections of historical drawings and architectural models will be available for their use.

Fees: session, £12 12s.; term, £4 14s. 6d. Intending students should apply for entry forms to the secretary, as above, and should attend on October 1 at 5.45 p.m. in the Bartlett School of Architecture.

Lectures on the History of Architecture

The University Extension Board of the University of London, South Kensington, have arranged for the coming session a fully-illustrated course on "The History of Architecture (Part I—Ancient)," to be given by Sir Banister Fletcher, F.R.I.B.A., at the Central School of Arts and Crafts, Southampton Row, on Wednesdays, at 6 p.m. The subject will be treated in a popular and non-technical way, and the course will be equally suitable for the professional as well as the non-professional student.

Competition News

Taunton School War Memorial.

A new competition for a war memorial at Taunton School is announced. Particulars are given in the "List of Competitions Open."

Co-operative Society Premises, Burgess Hill.

The design of Messrs. George Baines and Son, F.R.I.B.A., of 121 Victoria Street, Westminster, S.W.1, has been placed first in the above competition. The estimated cost of the structural work is £8,500.

Masonic Temple, Birmingham.

Mr. Rupert Savage, F.R.I.B.A., has gained first prize in the above competition, of which the full awards are announced on page 453. Sir Banister Fletcher, F.R.I.B.A., was the assessor.

The Holt Building, Liverpool.

Mr. Gilbert Scott, R.A., the assessor in the above limite competition, has awarded first prize to Mr. Herbert Rowse, A.R.I.B.A., of whose career some particulars a given on page 453.

Southsea Common Lay-out and Development.

The following notice has been issued by the R.I.B.A. "Members and Licentiates of the Royal Institute of Britis Architects must not take part in the above competition becau the conditions are not in accordance with the published Reg lations of the Royal Institute for Architectural Competitions

List of Competitions Open

Date of Delivery.	COMPETITION.
Sept. 29	Extensions to the Poor Law Institution, Premium £50. Apply Cle to the Wirral Board of Guardians.
Sept. 30	Designs for a series of plaquettes in bronze illustrative of London the capital city of the Empire, or of one or more of her main archit tural features. Designs should be submitted in the form of mod in plaster. The following prizes are offered: One prize of 100 guine two prizes of 50 guineas, three prizes of 25 guineas. Apply Dep Master of the Royal Mint, London, E.C.1.
Sept. 30	The best colouring of a design for the vestibule connecting 315– Oxford Street with 17–19–21 Dering Street, Messrs. Thomas Pars and Sons' new offices and showrooms. Prizes: 100 guineas, guineas, 25 guineas, and five consolation prizes of 10 guineas ea Assessors—Sir Edwin Lutyens, R.A., F.R.I.B.A., Sir David Murr R.A.,P.R.I., H.R.S.A., Sir John Lavery, R.A., Mr. Frank Brangw R.A., and Mr. E. Guy Dawber, F.R.I.B.A. Apply Competit Department, Messrs. Thomas Parsons and Sons, 315–317 Oxf Street, London, W.1.
Oct. 1	The Student Welfare Committee, University of Glasgow, in Competitive Designs (limited to architects having an office in practising within the Municipal Boundaries of the City of Glasg for a pavilion to be erected on the University Athletic Ground Westerlands, Anniesland, at a cost of £10,000. Assessor, Alexander N. Paterson, A.R.S.A. Apply Honorary Secret Student Welfare Committee, The University, Glasgow.
Oct. 1	Lay-out of the Bull Green Site and part of the centre of the Tow Halifax. Premium £50. Apply, with deposit of £1 1s., to Percy Saunders, Town Clerk, Town Hall, Halifax.
Oct 15.	Lay-out of a river embankment promenade, adjoining the R Thames below Barnes Bridge, for the Chiswick Urban Dis Council. Premiums: £105, £52 10s., and £26 5s. Apply Mr. E Collins, Clerk, Town Hall, Chiswick, W.4. Deposit £1 1s.
Nov. 5	Art Gallery for Hull. Assessor, Mr. John W Simpson, PP.R.I. Apply, with cheque for £2 2s., to Mr. H. A. Learoyd, Town Cl Guildhall, Hull.
Dec. 10	The War Memorial Committee of the Burgh of Coatbridge in designs for the erection of a War Memorial on a site in the End Park. The estimated cost of the work amounts to £3, and premiums of £75, £50, and £25 are offered for designs pl first, second, and third respectively. Assessor is Mr. James L head, F.R.I.B.A., Hamilton. Apply Town Clerk. Deposit £1
Jan. 1	The Imperial War Graves Commission invite architects who se during the war as members of the Military, Naval, or Air F raised in any part of the British Empire to send in their name admission to a competition for the designing of memorials t missing to be erected by the Imperial War Graves Commi at Bethune, Armentières, Cambrai, and Soissons. Applica for particulars of premiums and other regulations from desiring to compete are to be addressed to the Secretary (W Branch), Imperial War Graves Commission, 82 Baker S London, W.1, and must be received there not later than Janua 1924, and must be accompanied by a statement giving partic of the war service and professional career of the applicant clearly stating which of the memorials it is desired to con for. Deposit, two guineas for each set of plans. The Asses Sir Aston Webb, K.C.V.O., P.R.A.
Jan. 5	Memorial Building and Tower, Dudley. The Council of the Co Borough of Dudley invite Competitive Designs from duly qua Architects for the "Brooke Robinson Memorial" Building War Memorial Tower comprising a Public Hall, Coroner's C small museum, and a new sessions court. Premiums £300, and £100. Mr. W. Curtis Green, A.R.A., F.R.I.B.A., Ass Conditions of competition, together with a copy of the site can be obtained on application to E. W. Tame, Town Clerk, Clerk's Office, Dudley, with deposit of £2 2s., which wi returned on receipt of bona-fide designs, or if the Cond are returned within 14 days of the date of receiving answ questions. All designs must be sent by January 5 to the Town
No date *	The Eastleigh and Bishopstoke Urban District Council invite d for the extension of their existing Council buildings, an erection of an assembly hall, on the site adjacent. Prem 50, 30, and 20 guineas. Apply, with deposit of £1, to Lawrence, Clerk to the Council, Council Offices, Eastleigh.
No Date	Taunton School War Memorial. The Council of the Taunton invite designs for a War Memorial, consisting of an Art and S Block, the cost of the building to be approximately £10,000. Assessor is Mr. Robert Atkinson, F.R.I.B.A., who will hav power to nominate a second Assessor if desirable. Pre first, £100; second, £50. The first premium will merge in the tect's commission. Particulars, together with photograph present buildings, may be obtained from the Secretary School, H. J. Pollard, F.C.A., 3 Hammet Street, Taunt return for a cheque for £2 2s., which will be returned on of a bona-fide design.

* Indicates Competitions whose conditions are not in accor with those laid down by the R.I.B.A. and the Socie Architects.

A Physical Survey of New York

IN May, 1922, a project for a comprehensive regional Plan of New York and its Environs was announced, and since then an organization has been effected and studies carried forward in the four main fields of in- y—Physical, Economic and Industrial, Social, and Legal ith a view to determining the factors which are abso- ly essential to the city planner and the order in which may best be taken up. Each report is the work of a gnized authority in his field, and, taken together, the erial will serve to demonstrate the complexity of the lems to be faced and the vital need of region-wide co- ation if the Plan is to be made a reality."—Introduction ie Report of Progress issued by the Committee. Below inted an abstract of the report of Mr. Nelson P. Lewis.

*   *   *   *   *

o one thing is more forcibly impressed upon the people of district, day after day, than the desperately bad traffic itions, whether due to excessive crowding in public con- nces on, over, or under street surfaces, or by reason of estion in the streets due to their inadequate capacity to the extraordinary growth of vehicular traffic. This is as serious on the different roads serving as approaches exits to and from New York, Jersey City, Newark, and populous centres of the district as it is in some of the city streets of Manhattan Island. So great has been the ase of vehicular traffic during the past few years that s some heroic measures are taken for relief, the con- ns which will prevail in another five years will be quite erable. It is obvious that one of the most important res of a plan for this district will be the provision of ional traffic capacity. Ways and means to relieve onditions on Manhattan Island are the subject of care- tudy, but no specific recommendations can yet be ght forward for public consideration.

ditional roads to relieve or divert traffic from or id populous centres must be provided, and it would ry desirable if such ways were made in pairs so that in ny one of them is obstructed there would be an alterna- route without a long detour. Segregation of traffic also be studied, and special roadways for motor trucks robably have to be provided, this being accomplished by entirely new roads or by widening existing ughfares and providing separate spaces at different s for the two classes of traffic.

supply of park and forested areas or other recreation s is perhaps ample or generous in some portions of the but lamentably lacking in others. The inequality distribution is quite apparent from maps and statis- diagrams which have been prepared. Three of the ies of New Jersey, and one in New York, have created y Park Commissions and are establishing park ns. There are excellent opportunities for the pro- of more extensive park areas, desirable land for this se being readily available. There are tracts on Long adjacent to salt water, which would furnish admir- laygrounds and camping spaces. There are wooded on both sides of the Hudson River, and in the hills v Jersey, where land is still cheap and where excellent arks could be established, while an opportunity now by the recent acquisition by the state of New Jersey Morris Canal, to turn this property over to the use public in some effective way.

continued over-intensive development of land must cked if the evil results of such use, now apparent in incipal centres of population, are not to be repeated, he unspoiled places are to be saved. This over-use be discouraged if some intelligent supervision and ity were exercised over the sub-division and use of the areas outside the limits of and between existing or by an extension of zoning laws to cover the rural ts. This question of zoning areas outside the boundaries of New York, or of incorporated cities and towns, is being considered by the commissions created to frame charters for the counties of Westchester and Nassau, while the broad question of zoning for predominant use and for the purpose of preserving rings or zones of vacant land, which will serve as breaks in the continuous extension of the built-up areas, is being made the subject of special study by the Legal Survey. There are many extensive tracts which are at present in agricultural use or devoted to private recreational purposes or even in forest; some of these areas could be converted into parks, and some used for sites for public institutions which could as well or better be located outside the built-up portions of the district.

It is possible that less intensive use of the land in outlying districts, and even in those parts of the urban area are not yet built upon, may be encouraged through the adoption by officials charged with the assessment of real estate for the purposes of taxation of a policy which might be put in force without special legislation. Such officials are vested with wide discretion in the fixing of values for this purpose, and they could probably establish a unit of land value for each of many small sub-divisions, or for each city block similarly located, and as these plots are built upon they might assess the land at a percentage of this unit value proportioned to the part of the plot occupied by buildings. For example, if 60 per cent. of the area were covered they might assess the land as the full unit value already determined. If a larger proportion, as 75 per cent., were covered, this being 25 per cent. more than the 60 per cent. standard, the assessment could be 25 per cent. more than that unit value. Similarly, if but 40 per cent. of the area were covered, or one-third less than the 60 per cent. standard, the assessment on the land might be two-thirds of the unit value. Of course, this would in no way affect the assessment for the buildings. The adoption of such a policy would appear to be quite consistent with that now followed, where a plot of land upon which a twenty-story building may legally be erected is given a higher value for taxation than if such building were limited to ten stories.

The attention of anyone passing through the outlying portions of the present City of New York cannot but be arrested by the long rows of box-like houses, of the most flimsy construction, which are being offered for sale and which presumably find purchasers or at least are quickly rented. These will be eyesores for years to come. Owing to the present shortage of houses these boxes are probably bought by thrifty and fairly well-paid artisans and clerks, who will probably occupy them until they are able to do better, when they will be succeeded by less and less particular owners, or tenants, until they become slums. Perhaps such houses are more conspicuously ugly by reason of the fact that they are in continuous rows on straight streets forming part of a gridiron plan laid out years ago. But the best designed street plan could not redeem them; whether in straight or curved lines they are unspeakably ugly. There appears to be no way in which such development can be checked so long as the speculative builder conforms with the building laws and so long as he will find purchasers who will buy them, and tenants who, through indifference or necessity, will occupy them. While the street plan could have been greatly improved, and in many cases can still be improved, ugliness in the plans for and the placing of buildings cannot be cured except through the education of the people to the point where they will demand better things.

Further studies, in conjunction with those of the Economic Survey, will doubtless indicate where it may be practicable to establish garden cities, or new industrial centres, at which some of the industries now carried on in New York can be conducted more economically.

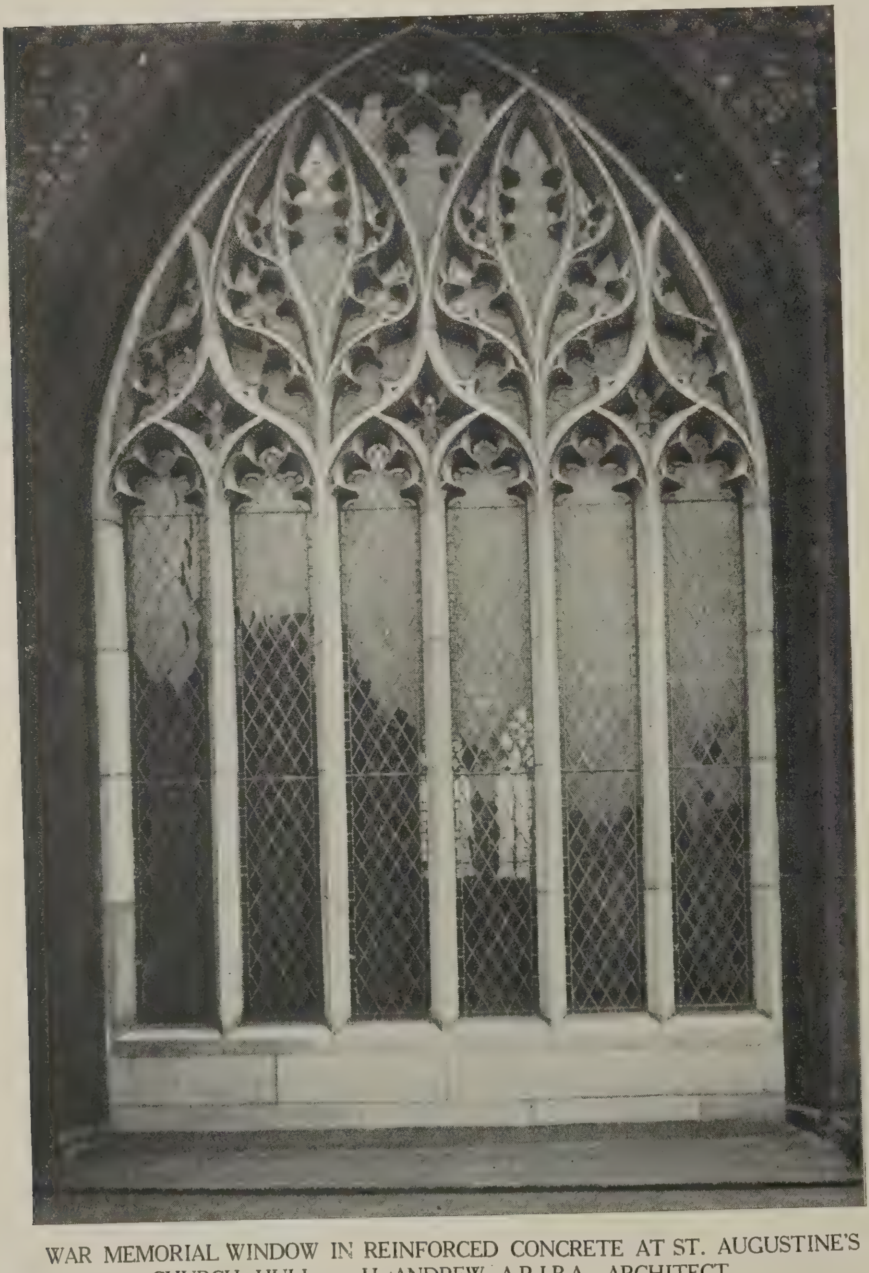
The above brief outline indicates the studies which have been undertaken and a few of the lines of investigation which may profitably be followed up.

Church Window in Reinforced Concrete

Perhaps no better example of the use of concrete for other than utilitarian purposes could be found than the war memorial window at St. Augustine's Church, Hull.

St. Augustine's Church was built about thirty years ago from designs of the late Temple Moore. At the west end a tower was intended to be erected, but as there was no probability of this being done it was decided to finish the exterior of this end of the church. The outer arch, of red Mansfield stone (seen in the illustration), was already in position, and accuracy was necessary in the setting-out and in making moulds. The window was fixed without any cutting being required.

The window is 20 ft. high by 13 ft. wide inside the original arch; the jambs are 14 in. by $4\frac{3}{4}$ in.; the main mullions 14 in. by 6 in.; and the tracery 11 in. by $3\frac{3}{4}$ in. and 9 in. by $3\frac{3}{4}$ in. The sills were reinforced with $\frac{1}{2}$ in. steel rods. It was not considered necessary to reinforce the jambs, mullions, and tracery. The concrete was formed of $2\frac{1}{2}$ parts fine crushed granite and sand, and one part Portland cement. The cement and aggregate were first thoroughly mixed by machinery, the wet mixings being hand made. The window was manufactured by the Hull Concrete Stone Co., from the design of Mr. H. Andrew, A.R.I.B.A., Hull, the cement throughout being supplied by G. and T. Earle, Ltd., Hull.



WAR MEMORIAL WINDOW IN REINFORCED CONCRETE AT ST. AUGUSTINE'S CHURCH, HULL. H. ANDREW, A.R.I.B.A., ARCHITECT.

Gas as a Cure for the Smoke Evil

The Chancellor of the Exchequer (Mr. Neville Chamber
lain), speaking at the opening of the National Gas Exhibi
tion at Birmingham, said he had wondered whether h
would not do well to disguise himself in a pair of spectacle
and thus escape attention, as he had observed that in th
opinion of certain organizations the present Cabin
Ministers had no business to be idling about exhibition
and would be better employed in resorting to Downin
Street and drafting trumpet calls to distinguished foreigner
He felt, however, that it would be futile to practise th
deception. Therefore he would brazen it out, and say h
was very glad to be there in the brief interval until he ha
to turn his attention to the interesting, but most unco
genial, task of picking the taxpayer's pocket.

It was a satisfaction to be able to see something of th
exhibition of one of our great national industries in wh
he thought he might fairly call its natural home. Not on
was it in Birmingham that Murdoch worked out and demo
strated the value of this great invention, but the Birmin
ham Corporation were to-day the owners of the greate
gas undertaking in the whole of the provinces. As
Birmingham citizen, as a past member of the Gas Comm
tee, and as a son of its first chairman, he was proud
that undertaking. He believed it to be a well-manag
efficient, and progressive organization.
also understood that in Birmingham to-d
something like one-third of the gas prod
tion was devoted to the purposes of mo
power and to manufacturing, to the v
great benefit of our industries.

Last session there was introduced i
the House of Lords by a representativ
the department for which he (Mr. Nev
Chamberlain) was then responsible, a
Smoke Abatement Bill. He had seen cri
ism of that Bill on the ground that it
not offer a prospect of worrying indu
sufficiently. Well, were they quite sure t
wanted to add more worries to those u
which industry was labouring to-day?
that were a desirable object, he though
could find opportunities in his present o
to lend a helping hand to the good wor

"But I have an idea," continued
Chamberlain, "that at a time when indu
is down and is fighting for its life, th
not a happy moment to impose up
new and costly expenditure. But if
the fact that there are in the area of
local gas supply something like 180,000
cookers at work, then we may reflect
satisfaction that that means that an
number of fires are no longer pouring
smoke into the atmosphere and contrib
towards that huge mass of carbon v
every year descends upon us in our
industrial centres." As Minister of H
he had occasion to remark how the most
diseases from which we suffered wer
diseases affecting the respiratory organs
those were just the organs which
affected chiefly by the smoke of our
cities. Therefore he said that th
industry, by the development whi
had been enabled to effect in that
tion, was conferring a double service
the community, because not only v
benefiting the individual consume
adding to his convenience daily, but a
was relieving the lungs of the general p

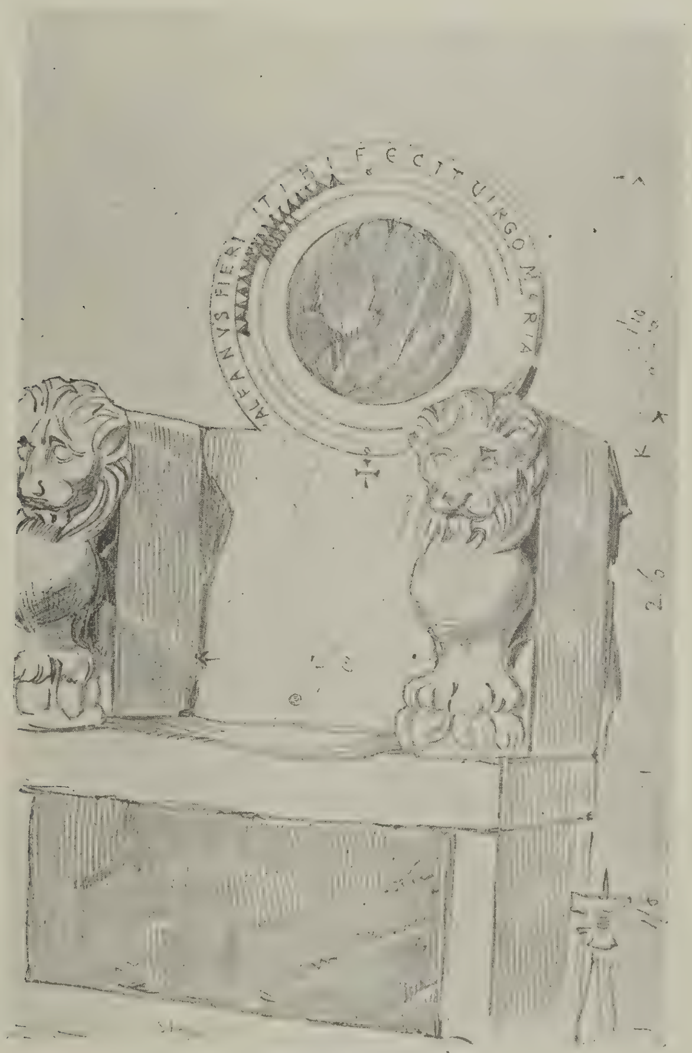
In conclusion, he wished the greates
sible success to the gas industry in g
and to that exhibition in particula

ednesday, October 3, 1923.

Vol. LVIII. No. 1500.

THE ARCHITECTS' JOURNAL & Architectural Engineer

With which is incorporated "The Builders' Journal."


ALFANVS FIERI IT HI FECIT VIRGO MARIA

A BISHOP'S THRONE.

(From the Sketch Book of the late Gerald Horsley.)

27-29 Tothill Street, Westminster, S.W.1.

Details of Craftsmanship. 23.—Pulpit in Kenton Church, Devon

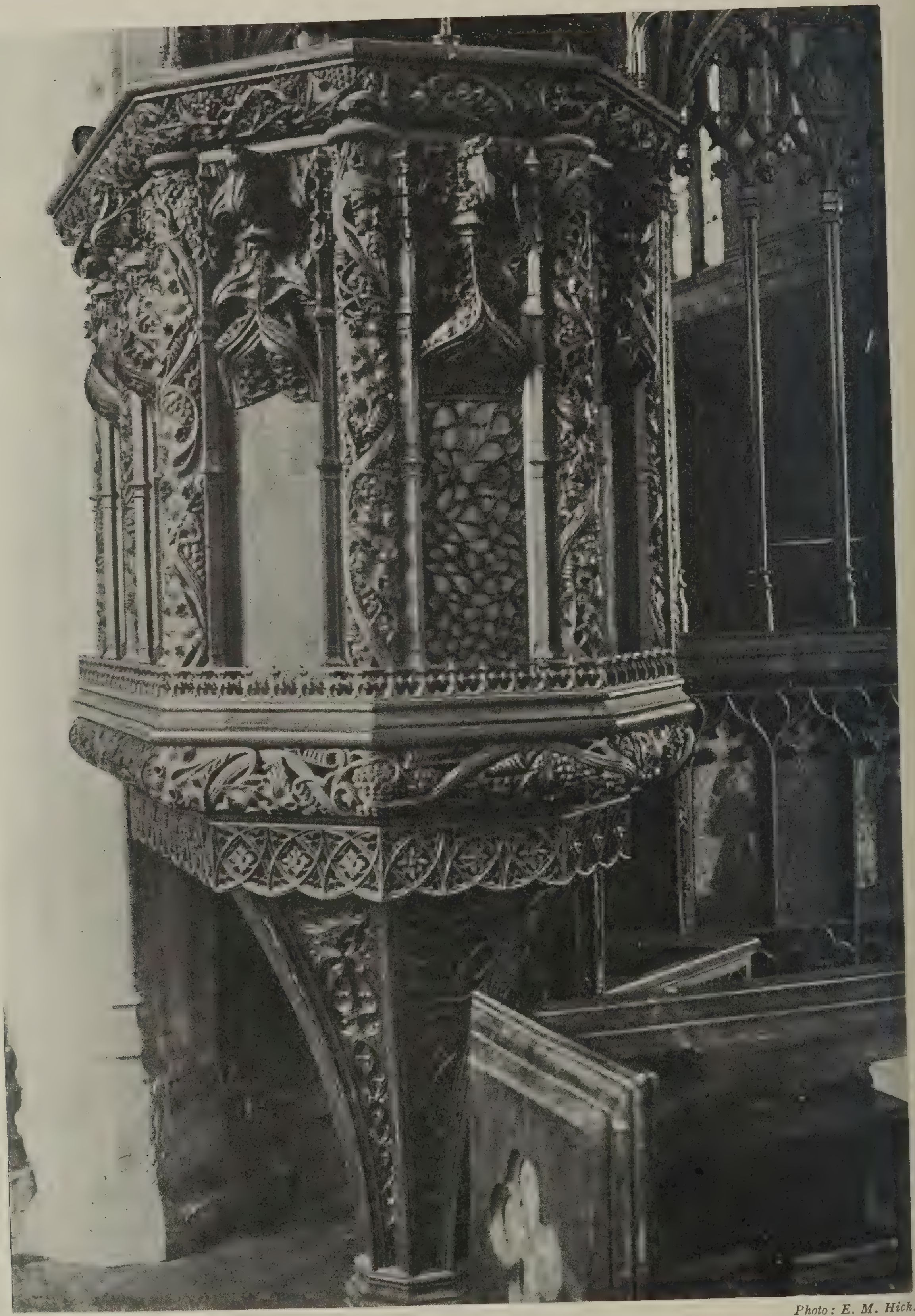


Photo: E. M. Hick.

Unlike the noble rood-screen in this church, the pulpit has a decidedly foreign flavour about some of its ornament, though the conventional vine "trayles" are of true Devonian character. In one of the panels on the left hand can just be seen a fine painted figure of a bishop vested in cope and mitre in the act of benediction.

THE

ARCHITECTS' JOURNAL

27-29 Tothill Street, Westminster, S.W.1.

dnesday, October 3, 1923

Volume LVIII. No. 1500

Indefinable Boundary Lines

THE insoluble problem of definitely declaring where one thing ends and another begins—of drawing the exact line at which they merge and mingle—of accurately determining where they erpenetrate, and lose their individual entity—is a y Proteus in the diversity of forms in which it is istantly eluding our grasp, and as constantly turning up iin on some new ground, reproducing itself under some v conditions, reasserting its immunity from capture in ne new guise.

n theology, in ethics, in natural philosophy, in physioy, in political science, in art—everywhere the *vexata estio* remains *vexanda*. Very small boys at school, just ;inning their Paley, can enter into the difficulty of iding, what doctors cannot do, the degree of difference worth of character between the worst (that is to say the st good) man that is saved, and the best (that is the st bad) man that is lost. And as with Paley's puzzle, so h cognate ones of indeterminable limits in every province speculative inquiry.

n English mediæval architecture alone, who can rightly where Norman architecture ends and where Early glish begins ?—and where, or precisely how, Early glish passes on into Decorated ?—and Decorated again omes Perpendicular ? We all know Norman work l Early English, but to tell where the period of nsition between the two begins and ends is no simple tter.

he late Mr. Temple Moore, in reporting upon the restora- ı of a Norman church in Yorkshire, wrote :—

I am afraid the fabric has been repaired and restored so n that what is genuine Norman work and what is not, ifficult to tell."

n the offices of many American architects, where comsions are so big that they could not possibly be carried by one man, the difficulty of saying where one man's k begins and another's ends is solved by letting the wings go forth ascribed not to "W. Russell Pope," but fice of W. Russell Pope."

ature, we are often reminded, has no straight lines ly made; and in the same way Art has no straight s ready made. It is not easy to draw the line where nement becomes false by overstrained conventiones, or where, on the other side, neglect of it melts vulgarity (albeit the distinction is as true as that veen the kindred manifestations of physical beauty ugliness). "A Hair perhaps divides the False and e," and there is no wide gulf, like that which rated Lazarus and Dives, to separate what is bad ı what is good. What constitutes a bad building what a good building is not certainly well known, but ll know a good building when we see it. Theoretically problem may be insoluble; practically, one may say of *olvitur ambulando*. It may be a Gordian knot—but ı a thing is recognized as cutting the Gordian knot.

"If black and white blend, soften, and unite
A thousand ways, is there no black and white ?"

Land and property surveyors must often be troubled to decide a boundary :—

"Where holy ground begins, unhallowed ends,
Is marked by no distinguishable line,"

says Wordsworth, in the opening lines of his sonnet on his "friend Jones's" Oxfordshire parsonage. Surveyors, practical men though they be, have often to call in the legal gentlemen to decide. And upon such questions, the Law is apt to be very downright, as witness an argument by learned counsel in a recent lawsuit as to which was the Inside and which the Outside of a house. The distance in space might be very small, he allowed, but the difference in feeling was vast. "Other differences are shaded off into each other, but it is a positive and striking fact that you are outside or inside."

Those who have analysed the rays of light tell us that brilliant red shades off by imperceptible gradations into orange, the orange into yellow, the yellow into green, the green into blue, the blue into a pure indigo, and the indigo into a violet; no lines are seen across the spectrum thus produced; and it is extremely difficult for the sharpest eye to point out the boundary of the different colours. Wise artists, to apply a figure of John Dryden's,

"——mix their colours so,
That by degrees they from each other go;
Black steals unheeded from the neighbouring white,"

and so the other colours respectively shade away: "Shade, unperceived, so softening into shade," as Thomson has it.

In looking at any building one is struck by its similarity to some other: there is no building that does not owe *something* to another. The frieze you recognize as being copied unhesitatingly from the Parthenon, or the fenestration from an Italian palace, and where the copying ends and the originality begins, it is well-nigh impossible to say. And in national styles it is the same.

Mr. Delissa Joseph has recently been assuring other London architects that buildings 200 ft. high would not be skyscrapers, but Mr. Joseph himself could not tell us the precise height at which tall buildings take on the name. During one of the debates on Strafford's trial, Lord Falkland said: "How many hair's breadths make a tall man, and how many a little man, no one can well say; yet we know a tall man, when we see him, from a low man." So 'tis in this.

Practically, and for practical purposes, men do draw a line, and must draw a line somewhere. But the lines are arbitrary after all. They may be the best and nearest we can manage to draw; but they are as imaginary as the Equator and Ecliptic on the face of our maps. That practical man the barber, in Dickens's story, found it indispensable to the dignity of his craft and the self-respect of his customers, to draw the line somewhere between those he would operate upon, and those he really could not; and he drew it at dustmen.

H. JOHNSON.

Notes and Comments

London Vistas

It seems to be rather widely assumed that because London is labyrinthine in its lay-out, it is therefore entirely—or almost entirely—lacking in vistas of the Continental type. A writer in "The Daily Mail" has lately subscribed to this misconception. He observes: ". . . one marvels that in London there are only two vistas, one along the Mall, with Buckingham Palace at the end, which is entirely ruined by the appalling excrescence in front of it, and the other looking down Kingsway to Bush House." Things are not really quite so bad as this. We are not disposed to match London against Paris, Petrograd, or Washington, but London can show you quite a number of respectable vistas if you care to look for them. To begin with, there is the one along Constitution Hill terminated by Decimus Burton's arch. ("The Daily Mail" critic ought not to have overlooked this when he was so near to it.) Then there is the fine vista of Pall Mall, closed in at its west end by the handsome building designed some years ago by Norman Shaw and Ernest Newton. To see another inspiring vista we have only to walk a few yards into St. James's Square and look along Charles Street towards the Haymarket Theatre. And how comes our critic to overlook lower Regent Street, with the Fire Office at the top and the Duke of York's Column at the bottom? Then there is the double vista of the dome of the National Gallery, from Pall Mall East and Duncannon Street—an uncommonly effective one, this—both roadways striking at an obtuse angle. And for a vista of minor importance what could be more satisfactory than the view of St. Anne's, Soho, from Cambridge Circus? The list of vistas is by no means exhausted, but enough has been said to show that London is not so poorly off as her critics make her out to be.

"Georgian" and "Colonial"

The use of generic terms to denote styles or periods of architecture is now so common that the pitfalls of the practice have become rather lost to view. The term "Georgian," for example, is one that is very loosely employed; for many people it is good enough to comprehend anything that happened, architecturally, between (say) 1650 and 1830. Such is the power of suggestion of pedimented doorways and sash windows! Mr. Harold D. Eberlein, the American critic, has, we note, taken exception to the indefinite use of the word "Colonial" in connection with the architecture of the United States. All American Colonial is not, of course, necessarily Georgian. There is the French Colonial along the St. Lawrence and in Louisiana, the Dutch Colonial in New York and New Jersey, the Swedish Colonial in some parts of Delaware, and the Spanish Colonial of Southern California. Commenting in a recent issue upon these racial distinctions "The American Architect" observes: "If we are to speak correctly, we must, in referring to our Colonial work, prefix the name of the country from which it drew its inspiration." To use the word "Colonial" when "Georgian" or "English influence" is all that is really meant, is to ignore the diverse character of America's architectural inheritance.

Sinking Buildings

In giving to a representative of "The Times" an extremely interesting account of the restoration and excavation works that have just been completed at the Church of St. Bartholomew the Great, Smithfield, Mr. E. A. Webb, the antiquary, and brother of Sir Aston Webb, with whom he has been engaged upon this work for some thirty years past, made the rather startling statement that the earth of London increases a foot in thickness in every hundr years, through falling dust and other causes. In excavati the cloisters of St. Bartholomew, for example, about 7 of earth had to be taken out before the ancient floor lev was reached. Mr. Webb observed, further, that in the Ci many of the old buildings have sunk from 16 ft. to 18 below the surface since the Reformation; Bow Church 16 ft. to 18 ft. below the surface of the road. The d covery from time to time of Roman remains at consideral depths below present level further confirms this propensi of London for burying its past. It is a disturbing thoug this, that year by year we are imperceptibly getti nearer the sky, while our buildings are sinking lower a lower in the earth. One has only to look far enough ahe to picture the time when visitors to St. Paul's will en through a doorway in the lantern and drop down to t floor level in a lift. By that time all our present-d worries over the architectural development of the met polis will matter not at all. Our evil deeds will be bur and forgotten—unless some inquisitive antiquary of t future unearths them.

The British Empire Exhibition

A preliminary glance at the British Empire Exhibiti at Wembley, leaves upon the mind at least two impr sions: one, chaos, and the other, immensity. Mounds earth, empty sites, unfinished buildings, meet the eye every direction. It seems impossible that such confus can be turned into order within the six months that rem before the opening of the exhibition. Yet everything be ready by the appointed hour, we may be assur Though disorder prevails, one can detect the signs movement, slow movement, towards the consummation the ultimate idea—the groping of the chrysalis towards perfection of the full-winged butterfly. Until the exhibit has spread its wings, so to speak, it would be manife improper to attempt anything in the nature of seri criticism. But something may be said of its immens the second of the two prevailing impressions retained the sensorium. The major architectural elements of exhibition are the Stadium and the immense Halls Machinery and Industry—the first at the top axis and second and third disposed right and left of the n avenue. The width of this avenue is prodigious, so digious, indeed, that the buildings, though of consider height, seem to lose something of their significance. H ever, when the litter is cleared away everything may found to be well. Upon one point the exhibition author are to be sincerely congratulated—that is, the preserva wherever possible, of the natural beauties of the Many of the fine trees are left standing, one group ha been cleverly retained on an island formed within artificial lake. Wonderful lighting effects are prom A number of 8 ft. reinforced concrete lamp-posts illuminate the grounds generally, but the buildings wi be flood-lighted polychromatically. The lake itself wi lighted from its bed, giving the very water an appear of incandescence.

The Holt Building Competition

We published in our last issue a paragraph concer the competition for the new Holt Building at Liver In this paragraph, owing to incomplete informatio ceived as we were going to press, no mention was ma the name of Mr. Arnold Thornely as joint architect Mr. Herbert J. Rowse for the building. We much r this omission, and take the earliest opportunit repair it.

Modern Craftsmanship. 4.—Colour in Architecture

By THACKERAY TURNER

MANY people when admiring a building are quite unconscious of what it is which causes them to be pleased. In most cases it is the colour which charms them. They would say, perhaps, that e architecture interests them, meaning by that the form the building. In reality many qualities make up a whole charm them, the history attached to the building, mere e, and undoubtedly the texture and colour given by getation. But few are vare that the colour itended by the archi-ict is one of the most iportant elements in chitecture. Of course, there is no colour, then rm is all important. e know from docu-ientary evidence that e builders of St. Albans bbey whitewashed the hole of its outside as on as finished, and the ribe said "it looked if hewn out of one ock of stone." Other idence shows that the ediæval builders fre-ently lime - whited eir buildings. When e west front of Peter-rough Cathedral was paired, remains of ex-rnal whitewash were und. Many a modern ilding owes its ugli-ss to bad materials d colour, and if white-ashed it is greatly im-oved. In these cases e very absence of lour variety and the liberate attempt to without it have re-lted in gain. Good chitecture should ve both good form d good colour, and it ght well be main-ned that of the two lour is the more im-rtant.

GIOTTO'S TOWER, FLORENCE.

William Morris once d that a mediæval ilding never looked fine as when it first left the builder's hands, and the ne truth certainly holds in the case of a good modern ilding in a manufacturing town. The same building seen years later when it has become smoke-begrimed is a ry sight, for any pleasing colour which it had is lost. the other hand many a modern building in the country, en Nature has taken it over and lichens and mosses have guised its bad colour, will become beautiful. This will apply to all modern buildings, for if machine-made tiles bricks are used, these hard smooth materials will not w vegetation to grow upon them. The really satisfac-y result comes when good hand-made tiles and bricks h a good sand face are used, for then the gold and silver ens enhance the colour value of the good reds. Again, different kinds of stone are affected differently by vegetation, and the architect has to know what he is about. An amusing incident occurred in London many years ago. An architect decided to band his white stone building with black bands. The effect was a decided success, but as years went on the white stone became darkened by soot, and the black stone went grey owing to surface decay. The result was the exact opposite to what was intended. London smoke seems to have a greater affinity for some bricks than others, and curious effects may often be noticed from this cause.

In considering colour in architecture, perhaps the best way will be to take the different methods of building. In the case of timber work there is not only the colour of the timber, but also the filling in between the timbers. As regards the timbers themselves, which can scarcely be too big, nothing looks so well as when the oak is left in its natural state, for then with age we get a perfect silvery grey. There can be but little doubt that the origin of tarring timber work came about through the workmen white-washing the plaster filling in and splashing it on the oak, and then they tarred the oak to cover the splashes, but their tar was Stockholm tar, which is in itself quite a pleasing brown. When gas tar came in they used that instead, and the hard effect of black and white, or "magpie" buildings was the unfortunate result. In modern times many a half-timber building has been lath and plastered over. In such cases where the timbers have been uncovered, they will in nearly every case show the natural surface of the wood, so that we are thus led to the conclusion that the "magpie" building is of late origin. Where the oak of a half-timber building has become a good silvery grey and the panels are plastered, white will be found the most pleasing tone for the wash, but in arranging the colour of a building, it is the surroundings which really govern this problem, and the architect has a very wide choice of colour for his plaster. Again, he need not use plaster, but can fill in his panels with brick, which can vary in colour and method of laying, or he can use stone, which looks very pleasing if used thin, not thicker than 2 in. How many villages in Devon and elsewhere owe much of their charm to colour-wash, the pink of one or two buildings often setting off the whole group. It is a difficult colour to manage as it is apt to come too strong, but when right is very pleasing.

We will now pass on to talk of other forms of buildings, but before doing so it must be pointed out that by far the most important part of a building is its roof, as every architect knows. Since the roof is common to all buildings it may be treated separately, and it shall be kept to the last.

In considering stone buildings the first rule is to use the stone of the district. Supposing it to be blue limestone, the only way of escaping its colour is to plaster it; if used without plaster, Nature seems incapable of improving it. Like all other very hard stones it is seldom softened in tone by the growth of lichens and mosses. The Surrey Bargate stone is one of these hard stones, but it is a good colour, so that if the natural cleavage surface is used and the irregularities filled in with mortar, the whole will weather down to a pleasing colour. Many a fine Devon building owes its charm to this method of treatment. Indeed, it is sometimes carried so far that the wall surface shows about an equal part of stone and mortar. It cannot be too strongly insisted upon that from the colour point of view an even colour over the whole surface of a wall is to be avoided. These Devon walls look well because the stone and mortar weather differently, and yet the weathering blends the two together, the mortar being of one colour more or less, whereas variety of colour is given by the different coloured stones.

The mason, if instructed, can do much to help the effect by turning the best coloured face of the stone outwards, and by well mixing dark and light stones. Many walls which would otherwise be good in colour are spoilt by bad coloured mortar. Portland cement mortar, if at all strong, will ruin the colour of any walling, as it is of a blue-black colour, and, of course, mortar in which ashes are mixed is offensive in colour, and has spoilt the colour of numberless buildings.

An architect will be wise who has a sample piece of walling done before starting any building of consequence, as it gives him an opportunity of seeing how the colour of his mortar is going to work out, and of arranging the finish of the mortar joints. Good mortar can be made by grinding up old red bricks in a mortar mill; this results in a pink-toned mortar which, when the walls are of a red sandstone or red brick, gives a pleasing effect. There is an old method of treating mortar joints, never used now, called "garneting," which consists of pressing in small pieces of flint or ironstone when the mortar is wet. This, of course, has an important effect on the colour of the walling, for only about half an inch is left between the little pieces so that half the joint shows its natural colour, and the other half is the colour of the stone or flint. If the mortar is good, joints so treated never need repointing. Flints are but little used in building nowadays. The old builders used either to plaster their flintwork entirely over, or else to fill right up to the face of the flints with mortar, only allowing a small part of the rounded face of the flint to show. In some districts they would crack the flints in half, and build them in with the flat side to form the wall face, but it is a question whether, from a colour point of view, the effect of the cold grey surface is pleasing.

Marble is the obvious building material for obtaining a strong-coloured effect, and no material is so difficult to use for this purpose. Giotto's Tower at Florence is one of the finest colour schemes in marble, but only for about half its height. He died when it was about half built. There can be but little doubt that he chose each individual piece for its position. After he died the artist was gone. In completing the tower they used the same marbles without the same careful arrangement, and the result was, as we should expect, a partial failure.

The Church of St. Apolonaris at Ravenna has marble largely used. It is probably the most successful example of using marble that has ever been made, and the glory of it will never be surpassed. There is one very important difference between the ancient and the modern use of marble. We now saw the flat slabs and then polish them b machinery, and turn and polish the drums of columns i the same way. The ancient builders used to work them fla or round by hand, and then polish them by hand. Any on who carefully examines ancient marble work will find sligh unevenness in the surface, so that the light plays unevenl upon the polished surface, an effect quite unattainable i the machine-worked marble, and this is most noticeabl in the columns of St. Apolonaris Church. The effect may b noticed in any of our restored churches where Purbec marble has been used, as the hand-worked old, and machin worked new, can be compared. Surface texture needs car ful consideration and must be considered when dealing wit colour. For example, a piece of satin and a piece of velve both dyed the same colour, will each have quite a differen effect. So also will a polished marble differ from the sam marble unpolished. The marble at the Church of S Apolonaris is only used inside the building, and it is polishe The external marble of Giotto's Tower is only dull polishe The pleasing effect of any marble may be spoilt by its bein too highly polished. The glitter of glass in windows is al important to the effect of a fine building in the same way the glitter of the eye is important to the animal face.

All bricks and tiles depend upon surface texture for satisfactory result, and this is why, when they are machin made and pressed, the effect is in most cases bad.

The richest coloured buildings are those built of brick, f here in England we do not use marble. Brickwork allo the architect a wide scope in colour. Red bricks vary great in colour from orange red to plum red. Then there are t dark-coloured "headers" or ends of bricks which ha caught the fire in the clamp. Every one is familiar with t London yellow stock brick, and these will be found to va from almost white to an orange yellow, and they also ha dark headers like the red bricks. A satisfactory colo scheme is when the yellow bricks are used for the facing a red bricks for the window and door dressings and the ang quoins, but a good result will not be obtained unless the are a number of dark bricks and dark headers dotted ov the face.

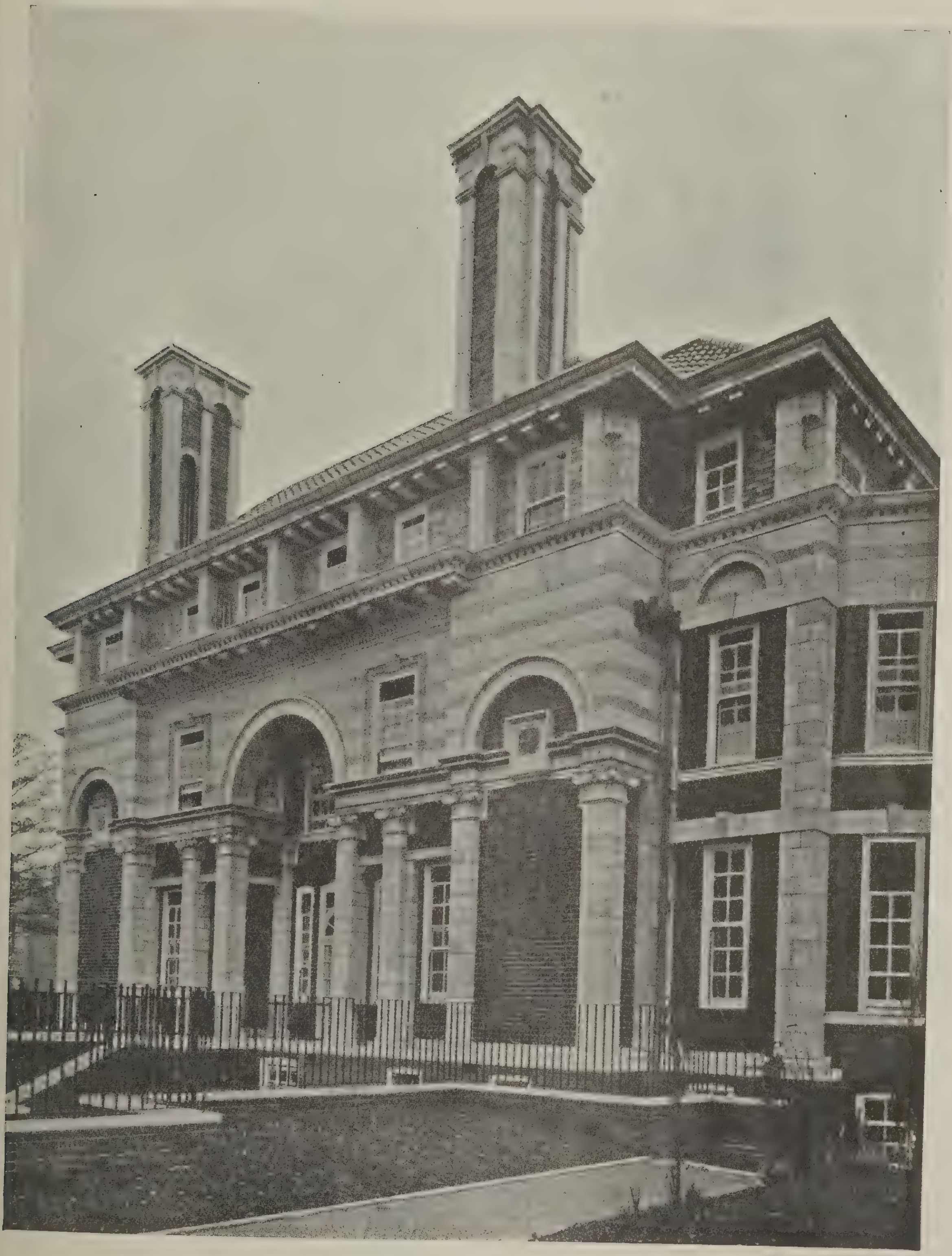
Brickwork, probably largely due to architects' specific tions, is always built to a definite bond. In the case hollow walls all "stretchers" are used. In other walls o course of headers and one of stretchers alternating, or ea course a header and stretcher alternating. When men bu of stone they never think of observing these mechani rules, and there is no sufficient reason why they should observed in brickwork. Good "bond" can be obtain with bricks just as with stone without observing any of t three methods named above.

Old brick buildings will be found where no definite bo has been observed, and very charming is the result. T old builders frequently put irregular diapers on their wa formed of dark headers, but they always were irregul which could not have been the case had they kept to uniform bond as the modern builders do. Interest a variety can often be added to a brick building by introd ing roofing tiles, using them like bricks, but, of course, c must be taken not to make the building too fussy.

Where good facing bricks are unattainable walls can plastered with smooth plaster—not roughcast—and dressings of the windows and doors and the angie quo formed of roofing tiles used like bricks with wide joint mortar between them; if this cannot be afforded red bri can be used. There seems no reason why yellow stock bri should not be used for the dressings to plaster work, in that case it would probably look well if the plaster whitewashed. Care must be taken, where the plaster i show, that it is of a satisfactory colour. This will dep upon the sand used, unless other colouring matter, such ground brick, is used. When considering the colour sch of a building shadow must be kept constantly in mind importance is even greater than positive colour, for course, it is colour, and in a building like St. Albans Ab which was whitewashed all over, the shadows were the colour. It is very noticeable that almost any building w

House in Addison Road, Kensington : Side View from the Garden

Halsey Ricardo, F.R.I.B.A., Architect



This shows very clearly how the variations in the tints of the glazed bricks have been utilized to make patterns in the walling; considerable care had to be taken in selection to avoid the dead evenness of tint which is so generally esteemed in glazed bricks.

THE LIBRARY
OF THE
UNIVERSITY OF ILLINOIS

s a strong projecting cornice or heavy projecting eaves nost always looks well.

So long as the air of our towns is so poluted by the exist- unreasonable and wasteful abuse of coal, building with y material which has not a glazed surface, cannot for ng have a good colour effect. Mr. Halsey Ricardo is the ly architect who has satisfactorily met the conditions. e fine house which he built in Addison Road looks as well w as it did when first built. The dark base which he has en it, and its green tiled roof are most effective. Seeing v good it is, one wonders why other men have not followed similar lines.

Ve may now consider the subject of roof from the colour nt of view, and the example of Mr. Ricardo's roof just ntioned may well be taken to show that all forms of roof ering in use did not prevent him from finding a new one. bably one of the earliest covering was reeds; few are re pleasing, its soft rich and dark colour make a delight- hat to a building, and it is not at all easily set on fire. aw thatch is not nearly so good; it is more easily burnt, l has not half the life. From churchwardens' accounts s known that reed-thatched Norfolk church roofs have ed over a hundred years. Lead forms a beautiful cover- , provided that cast lead is used, for with age it becomes er in colour and it is almost everlasting. Milled lead, ch has been used in modern times, is not nearly so lasting, goes black with age. Copper seems seldom used except bell turrets, it turns green when it rusts, and the bell et on the old Town Hall at Godalming, which is covered h copper gives a delightful piece of colour when seen as comes along the High Street. It might be that copper ld not look well when covering a large roof. Stone es give perfect colour effect, and Cotswold stone build- depend largely for beauty to their stone roofs. The e slates are thick and rough, which gives shadow and ure—most valuable qualities. It is these two qualities ch are so often missing in tile roofs, because they are erally made too thin. Half an inch, the usual thickness, is not enough, and for a good effect nothing less than three-quarters of an inch is enough, and then they ought to be well burnt, so as to cause them to curve both in their length and width, they hang firmer when this is the case. The colour of most roofs depends much upon lichens. Coal smoke is harmful to lichens, but where wood is used for firing a roof will soon become covered with them. Peat is almost as good.

For a stone or tile covered roof the surface should curve outwards on the eaves, and it will be noticed that where a roof surface is all in one plane it never looks very well, as there is only one play of light upon it.

Shingle-covered roofs, that is tile-shaped pieces of oak which have been rent, look very well, and become a delightful silvery grey, but they are not to be recommended for durability.

Welsh slates are thin and give no texture to the roof; they are an ugly colour, and they shine and take reflections. Anyone who has a building covered by them will do well to tar the roof over, and whilst the tar is wet scatter sand on it. It is not the natural product of the Welsh slate which is ugly, but only the modern use of it. Some perfectly delightful roofs covered with local slates will be found in Wales on old buildings, but they are used small and thick, and are graduated in size, getting smaller from the eaves to the ridge. To look well slates should never be less than half an inch thick. One of the ugliest customs is the banding of roofs with different coloured slates or tiles.

Colour in architecture has been dealt with entirely from the exteriors of buildings, and the reason for this is that the architect has so little control of their interior colouring. He may, and will try to get satisfactory colour inside his buildings, but he is at the mercy of the users of them, and a satisfactory colour scheme may be ruined even by a vase of flowers wrongly chosen.

[*The previous articles in this series appeared in our issues for Jan.* 10, *Feb.* 7, *April* 25, *May* 2.]

The Liverpool Shipping Office Competition

A Review of the Designs

THE brief exhibition of the drawings submitted in the Holt competition has aroused exceptional interest amongst architects. A limited competition for a building which is to cost over £1,000,000 may rally be expected to stimulate curiosity as to its results. the fact that it has been won by Liverpool architects contest with picked London practitioners has intensified given a special significance he interest that has been n.

fore considering the de- sent in it may be useful ive a short *résumé* of the itions of the competition. will be seen from the plan (page 493) the site he building is an island bounded by four existing ts. Of these, Water Street e most important; and it, her with Fenwick Street Drury Lane, will be ned by the setting-back e building line indicated e block plan. An agree- has further been made the Corporation that rebuilding takes place on ther side of Drury Lane, uilding line will be set back on that side also, making the street eventually 36 ft. wide. Brunswick Street alone is to remain unchanged in width. From the reduced levels shown on the block plan, it will be observed that both Water Street and Brunswick Street fall about 10 ft. from north-east to south-west in the length of the building. The ground floor will thus be about 3 ft. above the pavement level at the corner of Fenwick Street and Water Street, and about 13 ft. at the Water Street end of Drury Lane. Chorley Street, an existing alley running across the centre of the site, is to be closed and built over.

MR. ARNOLD THORNELY, F.R.I.B.A.,
Joint author of the Winning Design.

It was stipulated in the conditions that it should be possible to construct the building in two halves by successive operations. The south-west half was to be built first, in such a way as not to involve pulling down the block of offices north-east of Chorley Street—at present occupied by Messrs. Alfred Holt & Co.—until after the new portion was ready for occupation.

Above the ground floor the whole building was to have seven stories on the face. Above these again two more were to be set back from the main cornice; and the height of the latter from the lowest point at the street level was not to exceed 120 ft. Thus the building was to consist of a basement and nine stories above it. It was to be assumed that bank premises would occupy the whole north-east half of the ground floor and that an insurance or other company would become the tenants of the remainder. An impressive appearance was thus required for this accommodation, and a height of 23 ft. was allowed for it. The main frontage facing on to Water Street was to have a principal central entrance; another general entrance was to be placed at the centre of the Brunswick Street façade; and private bank entrances at both the Fenwick Street corners of Water Street and Brunswick Street. The suggestion was also made that it would be desirable to provide direct access from the street to the insurance or other accommodation on the south-west half of the ground floor. At the corner of Water Street and Drury Lane provision was to be made in the base of the building for an entrance to the subway which forms one approach to the James Street Station of the Underground Mersey Railway.

The basement frontages on to Drury Lane, the lower ends of the Water Street and Brunswick Street faces, and on to Fenwick Street (where an open area 4 ft. 6 in. wide was to be formed outside the building line) were to be let for shops, cafés, etc., and a garage might be comprised in the basement accommodation facing Drury Lane. General office accommodation was to be assumed for the seven floors above the bank and insurance premises. In the eighth and ninth stories quarters for a club, a public restaurant, staff, dining, and workrooms for Messrs. Alfred Holt & Co., stores, kitchen, and service rooms, and caretaker's quarters were to be located.

To come now to the actual designs. About the results of a number of competitions recently there seems to have been considerable dissatisfaction. But in the present case the assessor's award is not likely to be questioned by any impartial critic. Messrs. Thornely and Rowse have won handsomely. They have beaten their competitors on every issue. Their design is better conceived, better worked out, and better presented than any other in the competition. In the first place they have scored over all their rivals by showing exactly how each of the special problems in the programme—the bank, the insurance office, the club, the restaurant, etc.—could be solved. In so doing they have given themselves infinitely more trouble than might have been thought to be necessary; but the result has justified their attitude. And, indeed, it would seem reasonable to suppose that the whole object the owners must have had in mind when they initiated this competition was to discover precisely what could be done to meet each of the requirements they specified. All the other competitors have taken a different view and have trusted to their *partis* and elevational drawings to do all that was necessary—and have suffered for it by comparison.

The merits of Messrs. Thornely and Rowse's scheme are sufficiently evident from the drawings and need very little amplification. They have so designed their building that the south-west portion, which is to be erected first, is a self-contained whole, and yet takes its place as a complementary part of the final structure. The main halls, traffic corridors, and light wells, are disposed on axes that run at right angles to each other. As the bounding lines of the site are not in rectangular relationship, a problem of adjustment has been involved. The solution that is presented consists in laying down the principal axes of circulation on lines which run either parallel with or at right angles to the axis of Chorley Street. From this solution the following advantages accrue: the most important office accommodation on the Water Street and Fenwick Street fronts runs virtually parallel with those streets. Offices having the least average depth can be disposed along the minor cross street, Drury Lane. In the event of a building of equal height being erected on the opposite side of Drury Lane, the lighting of those offices would not be unduly restricted.

In a building of the type under consideration the floors devoted to office accommodation are of critical importance. Messrs. Thornely and Rowse have succeeded in evolving a typical office-floor plan that gives a maximum rentable space, well lighted at all points, and so formed that the greatest elasticity is possible in the method of its subdivisions. Second only in importance to the collective value of the office accommodation is the floor on which the bank and insurance premises are placed. Because that floor, properly developed, must very largely affect the public estimate of the building, it should not only be efficient in arrangement and adequately lighted, but it should impressive in effect. These considerations have clea determined Messrs. Thornely and Rowse's treatment of subject. It appears to have been assumed by them tha bank or insurance office occupying premises of this mag tude would necessarily comprise several departments, wh would be more or less self-contained. On that accoun has been considered desirable to place the public space a central position between the two main working-spa The latter areas then occupy the best-lighted positions, the ceiling of the public portion of the banking or insura hall is not interrupted by top-lights. In addition, fr this central disposition of the public space it is possi to obtain a double range of counters for the transactio various types of business, and to secure an interest and impressive architectural effect.

The entrances serving the building as a whole are m reasonably proportioned in relation to its size than th of the other competitors, which are all either too smal too large. Grouped immediately within them the eleva and staircases are in the most accessible positions. axial communication has been provided on the ground f between these entrances; and this is a considerable gai itself. For, as the London schemes show, any plan est lishing such communication sacrifices much valuable f space without securing compensating advantages.

Though the banking and insurance accommodation the ground floor and the floors of offices above are in th selves separate problems and may require for pract purposes no very elaborate or extensive connections, t are yet in the present case integral parts of the same build and ought to be logically related in the organic concep of it. That relationship has been secured by Messrs. Thor and Rowse by developments on the ground floor that the direct outcome of the planning of the typical office fl

In order that the lighting requirements of the ty office floor plan may be satisfied two light wells are provi the major axes of which are at right angles to the ax Chorley Street. By splaying the re-entrant angles of t wells, light is brought into all four corners of the office plan enclosing each well; and the plan is in consequ

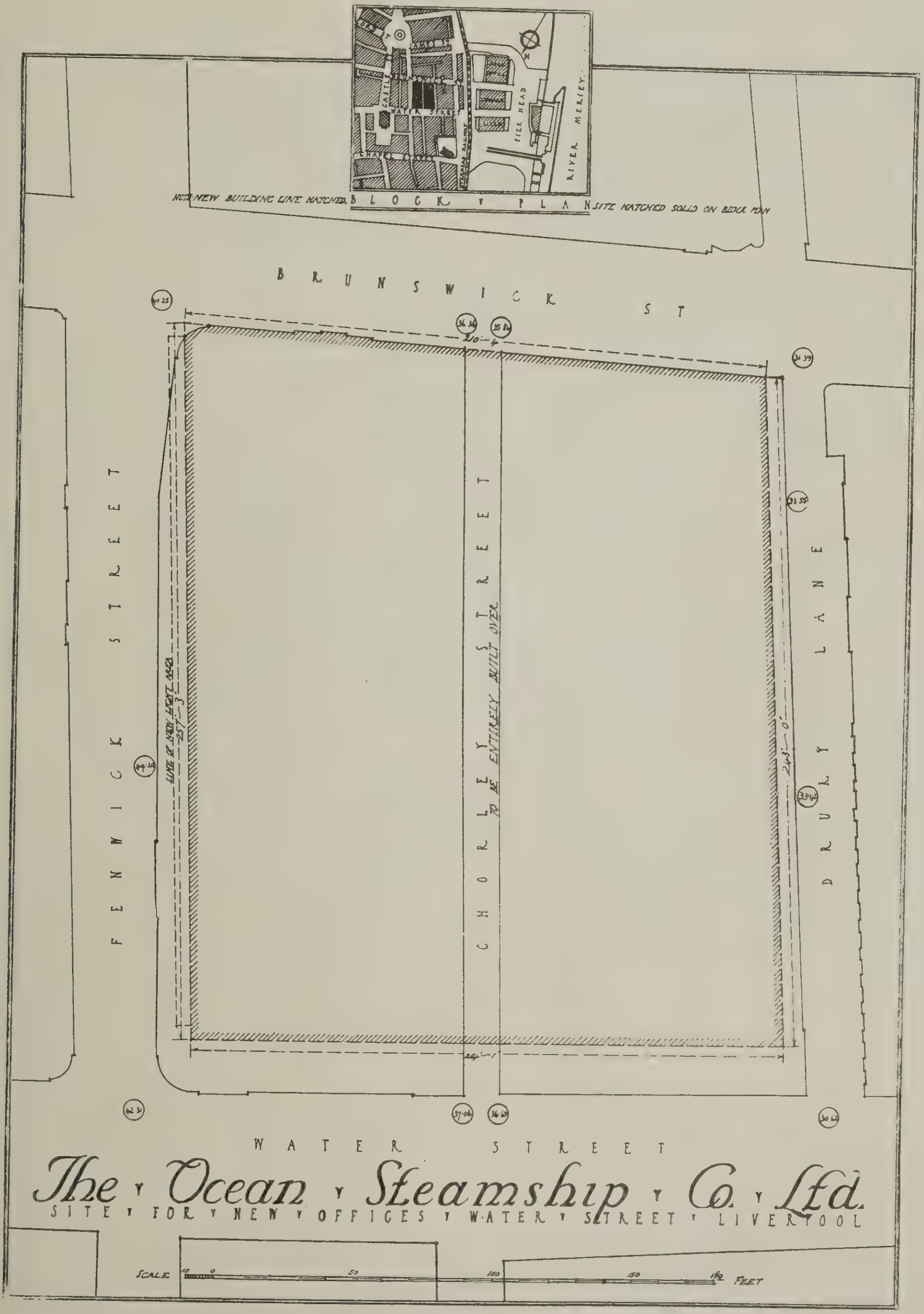
Photo: Tcpi

MR. HERBERT J. ROWSE, A.R.I.B.A.

Joint author of the Winning Design.

ly lighted at points which have not usually this advan-
ge. The splayed angles of the light wells are carried down the ground floor, where those that are nearest the outer gles of the building form each a side of the vestibules ached to the four octagonal halls serving the special ffic needs of the ground floor. A definite connection is is established between the form of the upper and ground ors, and coherence is given to the plan as a whole.

Ve have not the space to analyse in detail the basement l other floors of Messrs. Thornely and Rowse's design.


CASTLE
WATER STREET
CHAPEL
STRAND RAILWAY
PIER HEAD
RIVER MERSEY
N
NOTE NEW BUILDING LINE HATCHED
BLOCK PLAN
SITE HATCHED SOLID ON BLOCK PLAN
BRUNSWICK ST
FENWICK STREET
CHORLEY STREET
TO BE ENTIRELY BUILT OVER
DRURY LANE
WATER STREET
The Ocean Steamship Co. Ltd.
SITE FOR NEW OFFICES WATER STREET LIVERPOOL
SCALE 10 0 50 100 150 180 FEET

ould only say that they are models of skilful and effi- arrangement, and will repay the most careful study. elevations speak for themselves. They are pre- ntly characterized by those qualities which distin- the plan—simplicity and directness. The purpose building, its situation, and its size have rightly been tted to dictate a sober and dignified treatment of the , and no attempt has been made to invest the building any character but that proper to itself. The style yed is to some extent eclectic and cosmopolitan—as is appropriate. At the same time a definitely English expression has been obtained in it, and a building produced that will find its natural home in Liverpool.

One word should be said in conclusion about the presentation of the scheme. No other drawings in the exhibition could touch the winning set. For the purposes of a limited competition they are ideally right in type—quietly and delicately drawn with the most fastidious finish, and exquisitely rendered in ink.

Sir Edwin Cooper's design is presented with characteristic clarity. It relies for its interior lighting upon a single area. An extravagant plan is the inevitable consequence. Two alternative solutions of the ground-floor problem are submitted, both of which have the unnecessary central corridor connecting the Brunswick and Water Street entrances. In the one case the corridor is a narrow tunnel, in the other a spacious traffic hall. What is gained in effect is lost in working space, and the sacrifice proposed by the second scheme is not practicable under the circumstances. It will be recalled that the building is to be erected in two halves, the second part two years after the commencement of the first. In spite of this circumstance the elevators in both Sir Edwin Cooper's alternatives for the ground floor are placed in the portion to be built last, and temporary lifts would therefore have to be provided for the first part.

The accommodation on the ground floor in so far as it is shown might have been developed to better advantage. This is particularly true of the bank premises, in which the public space is placed adjacent to the Fenwick Street front instead of being centrally disposed with the working spaces on either side of it. The narrow corridor-like area of the public space running parallel and next to Fenwick Street could not give a fraction of the architectural effect that is offered by the arrangement adopted in the winning scheme. On the typical office-floor levels the plan is managed in a simple workmanlike manner, though the offices have too great a depth at the east end of the site facing Brunswick Street.

In spite of the fact that the detail throughout the design is heavy and undistinguished, Sir Edwin Cooper's elevations suggest better than do Mr. Davis's the nature and purpose of the building. They would have been more successful still had the Doric Order to the ground floor been omitted. A colonnade with large expanses of glass between the columns in such a position gives an effect of weakness precisely where strength is most required. And in any event an order is the least stable and satisfactory base motif when there is a considerable fall in ground under it.

The design presented by Mr. Curtis Green, like Sir Edwin Cooper's, is of the single-area type, but is less easy to read. As far as it is possible to judge from the tentative indications that are supplied, the bank and insurance accommodation appears to be merged. Generally the plans of the remaining floors exhibit the features and qualities usually associated with Mr. Curtis Green's work; and the same may also be said of his elevations.

Reviewing the competition as a whole the most remarkable thing about it is the difference between the provincial and the London work. Both the designs submitted by the Liverpool competitors exhibit a more intimate study of the subject and a greater competence in handling it; especially is this so in the case of the winners, whose solution is altogether more logical and at the same time more imaginative than anything sent in from London. The difference in the standard of presentation is not less remarkable. At every point the local drawings are incomparably superior—in draughtsmanship, in rendering, and in form. The explanation is simple: Liverpool as an architectural centre now tends to look for guidance to New York rather than to Paris or to London, and the results evident in this competition are amongst the firstfruits of the new orientation.

An exhibition of all the drawings in London might be usefully arranged. It could not fail to have a salutary effect.

Next in merit to the winning design is the scheme submitted by Messrs. Willink and Dod. They alone of the unsuccessful competitors have lighted the interior of their plan by twin courts, disposed on lines which in certain respects approximate to those of the successful plan; their scheme, in consequence, wastes less valuable floor area than any other except the winner's.

In comparison with the latter the rectangular adjustment of the elements of the plan has not been so well secured, and the spacing of the steelwork is therefore less regular. The disadvantages of this difference are markedly apparent in the neighbourhood of the canted angles of the light courts. Excessive dimensions appear to have been given to the entrance halls on the Brunswick Street and Water Street fronts. Vestibules of such a size might be appropriate in the largest kind of public building, fulfilling some non-commercial purpose, but as entrances to a block of offices they sacrifice too much rentable space and would tend to be empty and under-populated—a fact that would not react favourably on the reputation of the building as a commercial centre. Another defect is the changing over of the staircase on the Brunswick Street front above the ground floor. From its position against the external wall of that front it is transferred at the first floor level to an interior place adjacent to one of the inner courts, and a stretch of corridor has to serve as the link connecting vertical circulation thus broken.

But these are comparatively minor and perhaps argua points. The chief shortcoming of the scheme, which evidently been fatal to its success, is that it does not o in sufficiently developed form definite suggestions for solution of those specific problems of planning that involved in the programme. From the assessor's awar is clear that precise indications of how to treat the floor be devoted to a bank, an insurance office, a club, and so were required. And these indications are not adequa formulated.

In the elevational treatment of their building, Me Willink and Dod have produced a design of great intere which frankly is more than can be said for any of t London competitors. The façades up to the main cor are inspired by Florentine models of the type of the Pal Pitti, Strozzi, and Riccardi; and the effect up to and inc ing the cornice is one of great force and decision. Y may be doubted whether the massive external form o early Italian palace, with its widely-spaced windows great expanses of rustication, can satisfactorily be util as the envelope of a modern shipping office on the scale attempted. For a building of this size the elevations s to have too few parts, the distances between some of windows appear to be too great, and the general impre is that the motives employed have been over-infla Assuming, however, that a prodigious effect was del ately aimed at, there has been a curiously gratuitous of scale in the placing of the main cornice a story lower it need have been. Above the cornice the design cha rather abruptly in character and modelling.

When all criticisms have been made this design, neve less, remains unquestionably the second-best sent in. an efficient proposition, its plan entitles it to that p and the virtues of its elevations do so still more emph ally. Regarded from the point of view of abstract position each façade exhibits a fine feeling for the br qualities of architecture, whilst the half-inch details— large sheets admirably drawn and rendered—di unusual resources of scholarship.

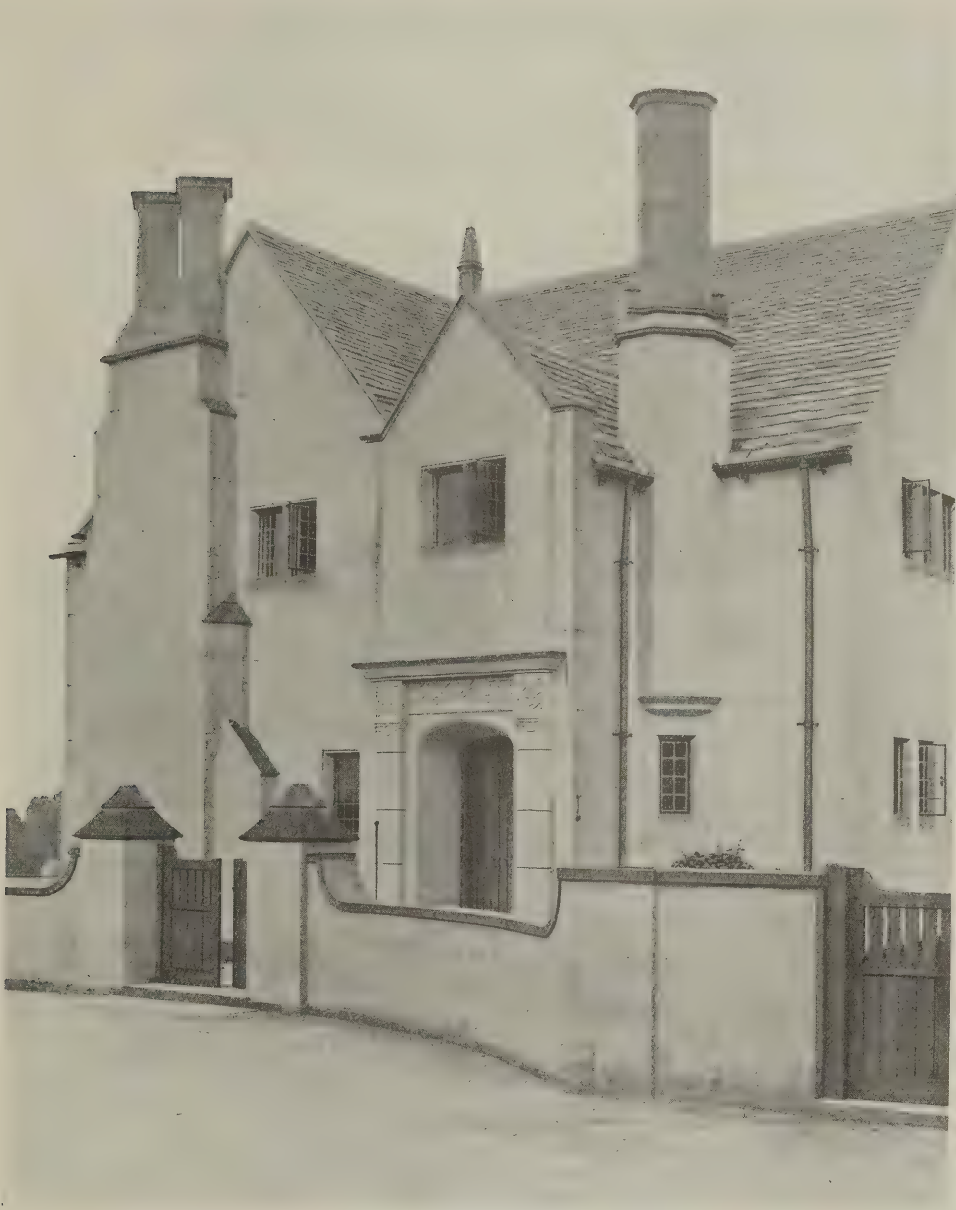
Of the remaining schemes that of Messrs. Mewès Davis has the most promising *parti*. But even this is to elementary objections of a serious kind. Thus, o ground floor a central corridor connects the Water S and Brunswick Street fronts. This corridor occ valuable space, and is, for the purposes of the buil almost wholly superfluous. The real needs which it be called upon to serve can be fully met in any ca the entrance halls themselves. For the rest the co would chiefly be used as a public way through the buil As the lifts serving the upper floors, instead of being gr conveniently near the entrance halls, are ranged in bat along the corridor, and as the corridor itself is rela narrow, traffic congestion is actually invited by the arr ment. This is so also at either end of the corridor. if the entrance vestibules provided by Messrs. Willin Dod are too large, those designed by Mr. Davis ar small, and in conception belong to a period of office that is past.

Mr. Davis employs four wells to light the lower flo his building, and develops these wells into four open above the third floor. The silhouette of the upper s on the plan gives then three projecting blocks on the Fe Street and Drury Lane fronts respectively. It is a frequently adopted in American hotels and apar houses. A well-lighted plan is obtained and, where tinuous circulation is not required, the result may b satisfactory. On the other hand, in an office buildi gain in external lighting is more than counterbalan the loss of rentable floor area, and by the fact that e the central corridors serving a projecting block inevitably be a cul-de-sac; and the direct and cont traffic connection which is essential on floors occupie great number and variety of offices has therefore to b gone.

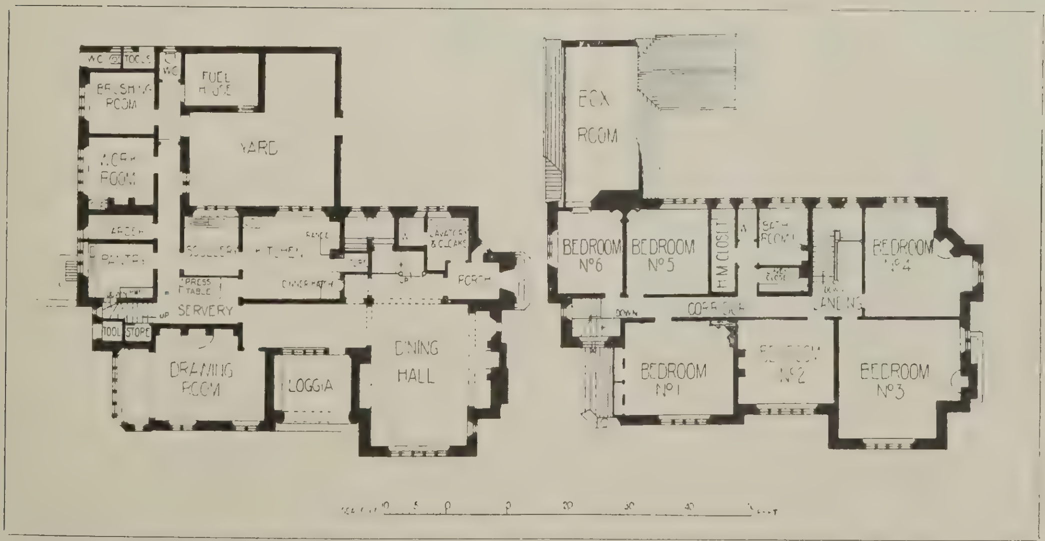
LIONEL B. BUDDE

Modern Domestic Architecture. 60.—"Stonedge," Leek-Wootton, Warwickshire

H. B. Creswell, F.R.I.B.A., Architect



THE ENTRANCE FRONT.

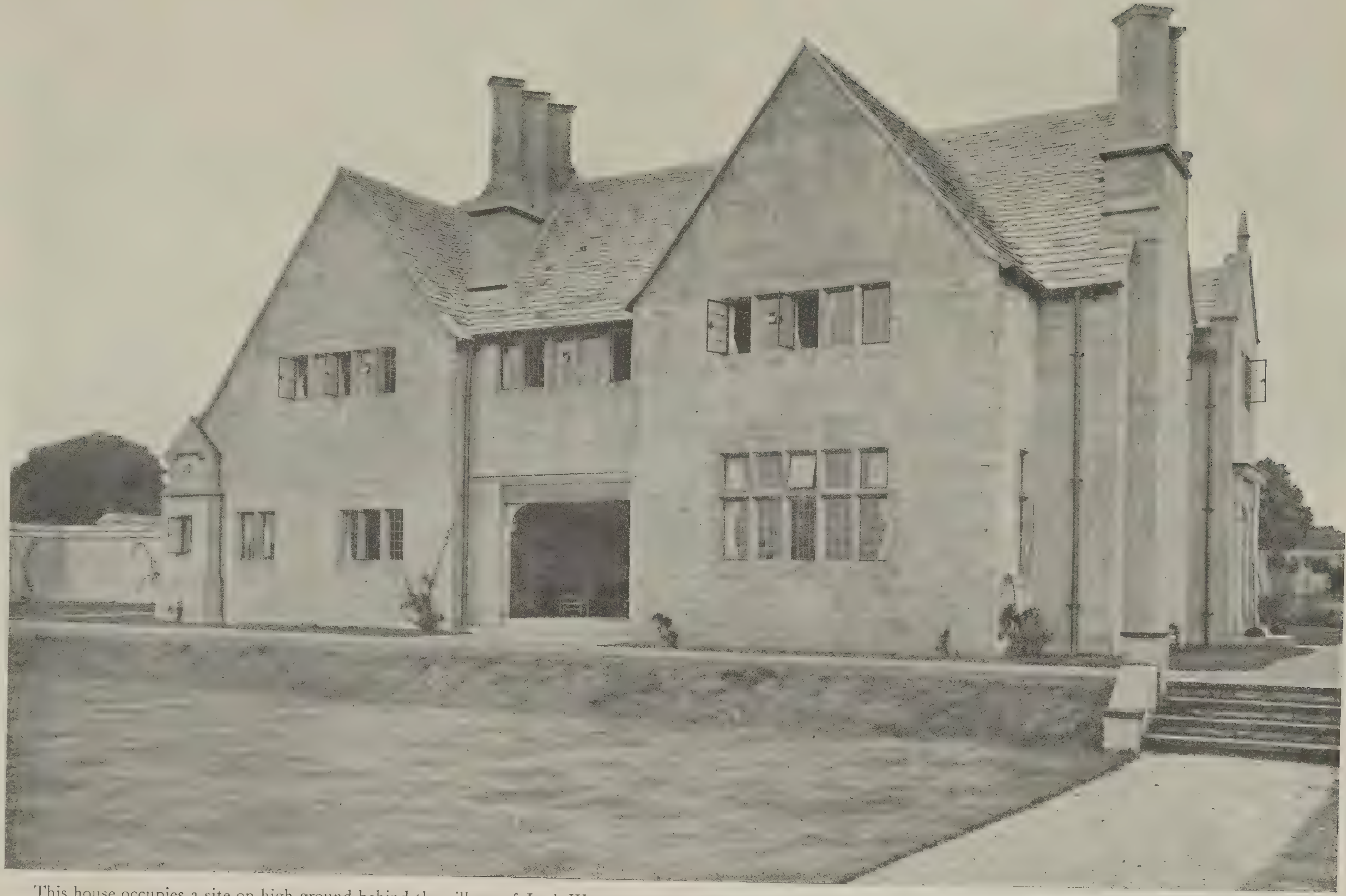


The interior fittings on the ground floor are in oak, and the setting to plastered walls throughout was finished with a felt-faced float to receive distemper.

THE LIBRARY
OF THE
UNIVERSITY OF ILLINOIS

Stonedge, Leek-Wootton, Warwickshire :
The Garden Front

H. B. Creswell, F.R.I.B.A., Architect



This house occupies a site on high ground behind the village of Leek-Wootton between Warwick and Kenilworth. It is built of soft, white sandstone obtained from re-opening an adjoining quarry which may have supplied some of the stone of which Leek-Wootton Church was built in the fourteenth century. The house is roofed with Cotswold stone slates with cement listings and valleys swept in without flashings, soakers, or gutters.

THE LIBRARY
OF THE
UNIVERSITY OF ILLINOIS

The New Parliament Buildings for Northern Ireland

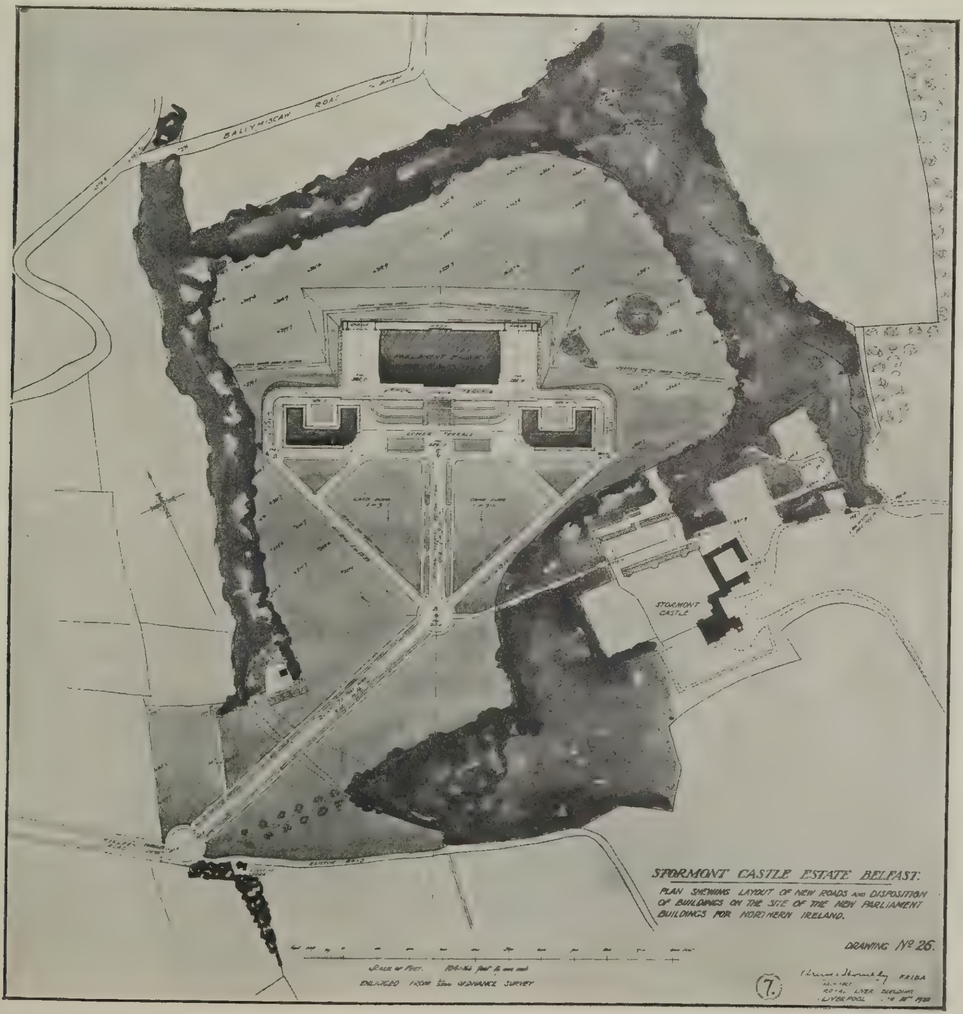
ARNOLD THORNELY, F.R.I.B.A., Architect

THE site selected for the new Parliament Buildings and Public Offices for the Northern Government of Ireland is situated about three miles from the centre of the City of Belfast, and is known as Stormont Castle Estate, on which is the residence of Sir James Craig, Bart., the first Prime Minister. Mr. Arnold Thornely, F.R.I.B.A., of Liverpool, is the appointed archiect for the Parliament Building, which is the centre block hown on the site plan, and Mr. Ralph Knott, F.R.I.B.A., of London, is the architect for the two blocks of Public Offices.

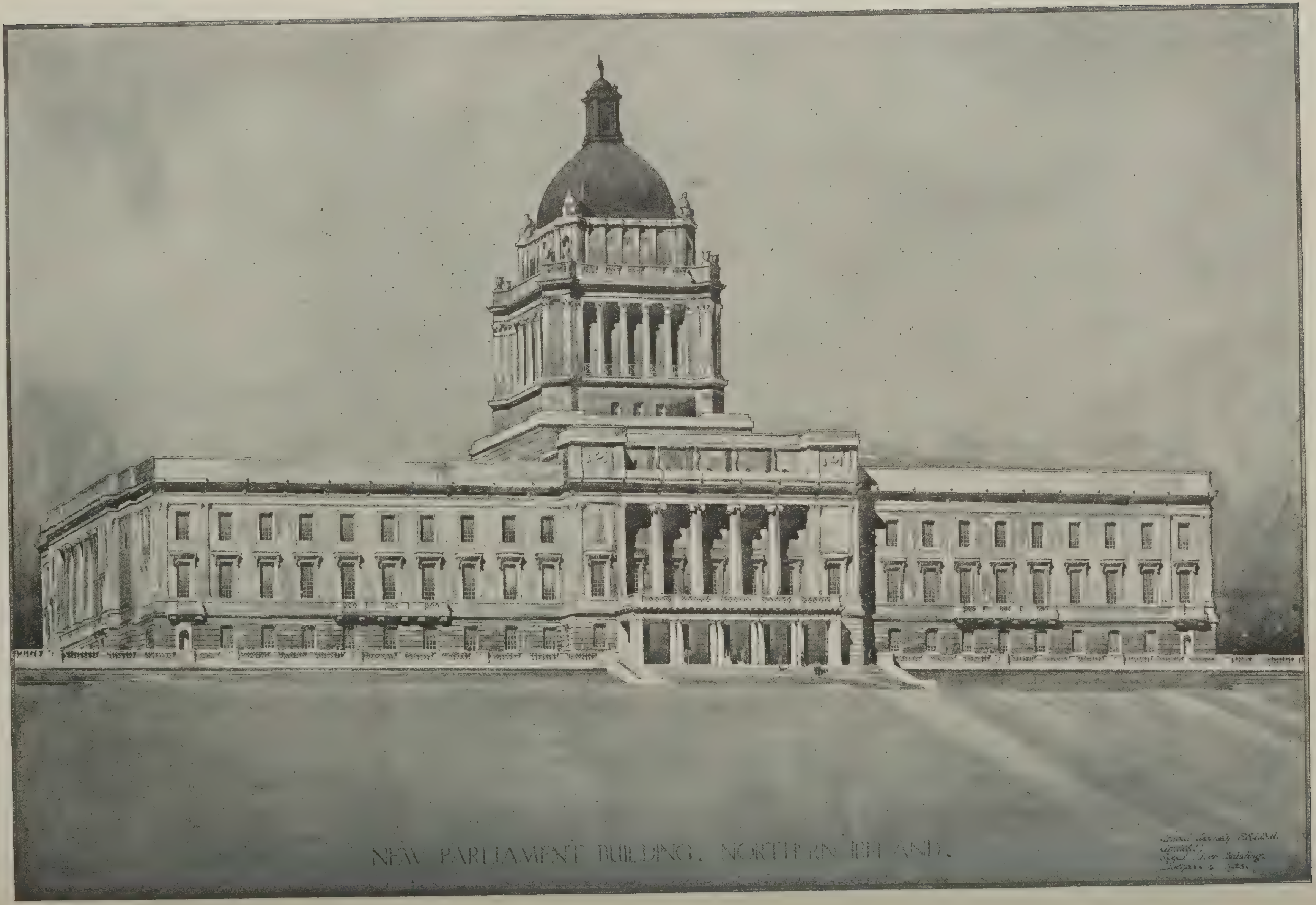
The ground slopes down from north to south with an average gradient of one in ten, and the selection of a suitable position on the site for the buildings was rendered difficult owing to the contours and the necessity for forming approach roads to the buildings with reasonable gradients. As laid out the gradients of the roads within the estate leadng to the buildings average about one in fourteen, and the entral avenue from the centre circus up to the lower terrace ises one in nine. The lower terrace on which the Public Offices are situated is 111 ft. above the level of the road at he main entrance or lower circus, and the upper terrace, n which the Parliament Building is situated, is at a 25 ft. igher level. A large number of trees have already been felled to open up that portion of the estate on which the buildings and approach roads are situated. A contract is in progress for the preliminary excavations on the site of buildings and for the preliminary formation of roads preparatory to commencing building operations.

The Parliament Building is planned to accommodate two chambers on practically the same lines as the Westminster Houses of Parliament, the portion west of the central hall containing the House of Commons and accommodation for members of the House, and the portion east of the central hall containing the Senate chamber and accommodation for members of the Senate. The building is approached by graded roads on the east and west sides, running at the side and rear of the public office blocks and leading to wide level plateaux at each end of the building. These roads are connected by a level terrace running the whole length of the south front.

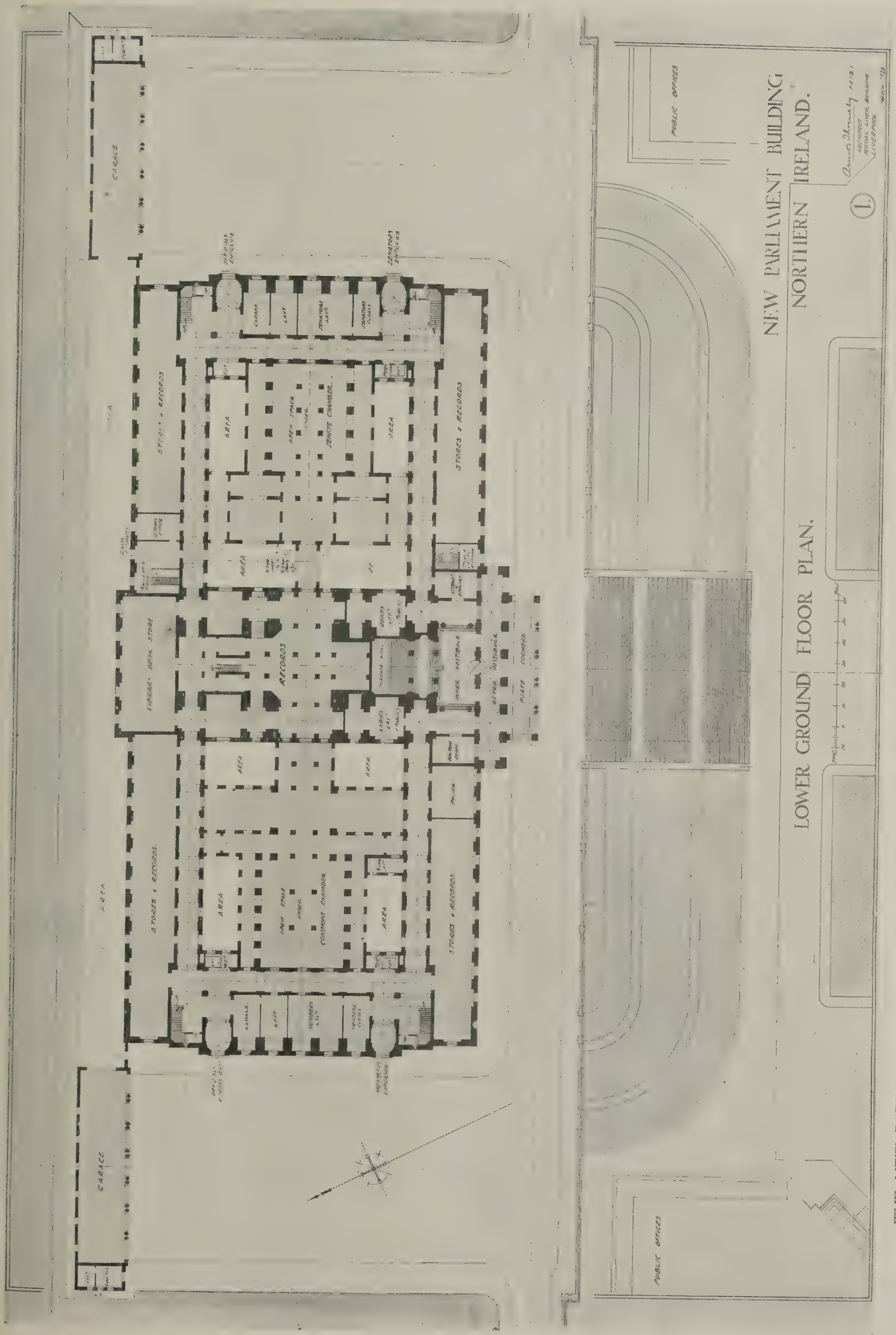
For members of the House of Commons and officials private entrances are provided from the west plateau, whilst similar entrances for members of the Senate are provided from the east plateau. The public or main entrance is situated in the centre of the south front, and a wide flight of steps leads direct to the central hall on the


BALLYMISCAW ROAD
PARLIAMENT BUILDING
LOWER TERRACE
STORMONT CASTLE
STORMONT CASTLE ESTATE BELFAST:
PLAN SHEWING LAYOUT OF NEW ROADS AND DISPOSITION OF BUILDINGS ON THE SITE OF THE NEW PARLIAMENT BUILDINGS FOR NORTHERN IRELAND.
DRAWING Nº 26.
ENLARGED FROM 25in ORDNANCE SURVEY
7.
F.R.I.B.A
ROYAL LIVER BUILDING
LIVERPOOL

PLAN SHOWING LAY-OUT OF NEW ROADS AND DISPOSITION OF NEW BUILDINGS.

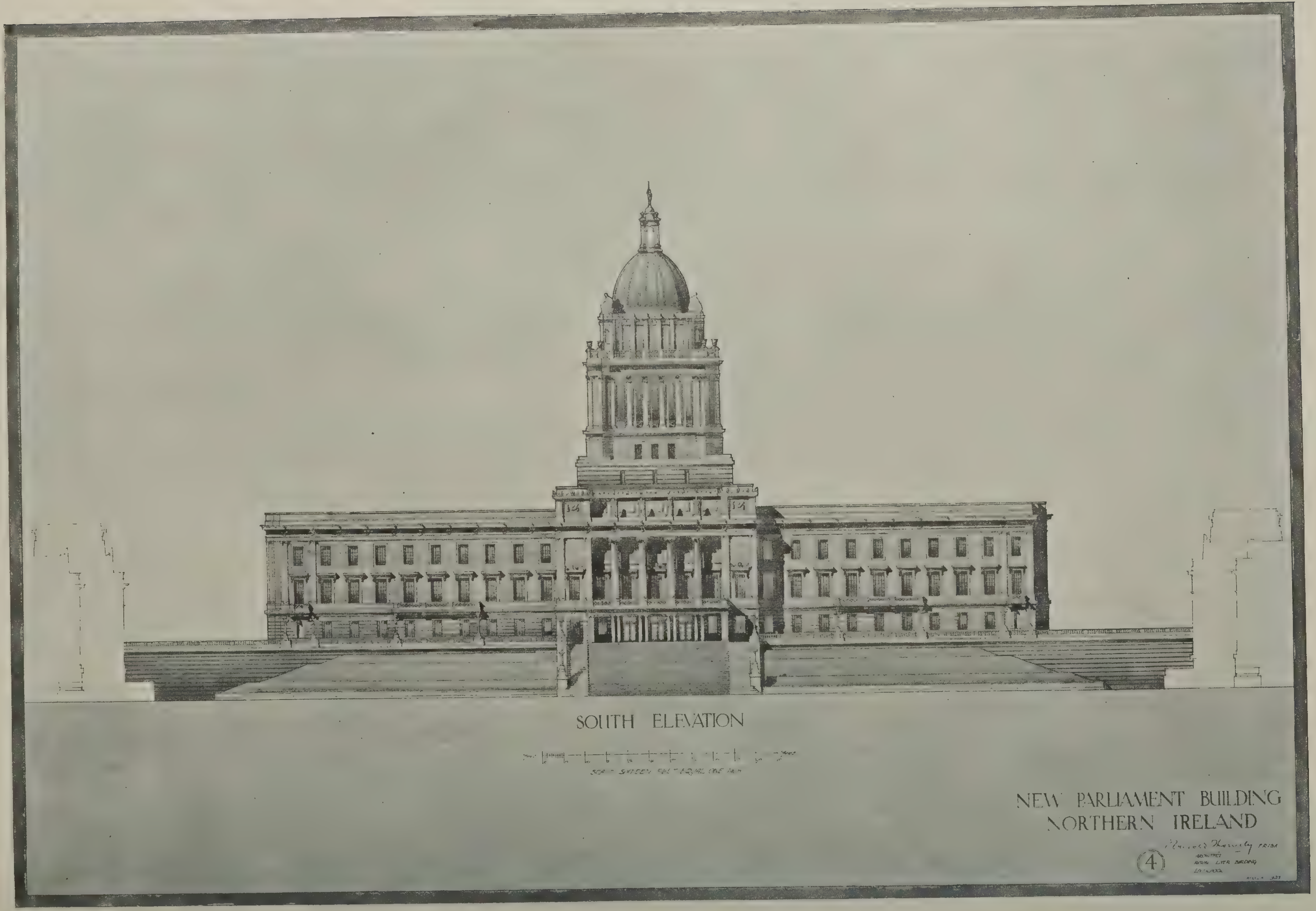


NEW PARLIAMENT BUILDING, NORTHERN IRELAND.

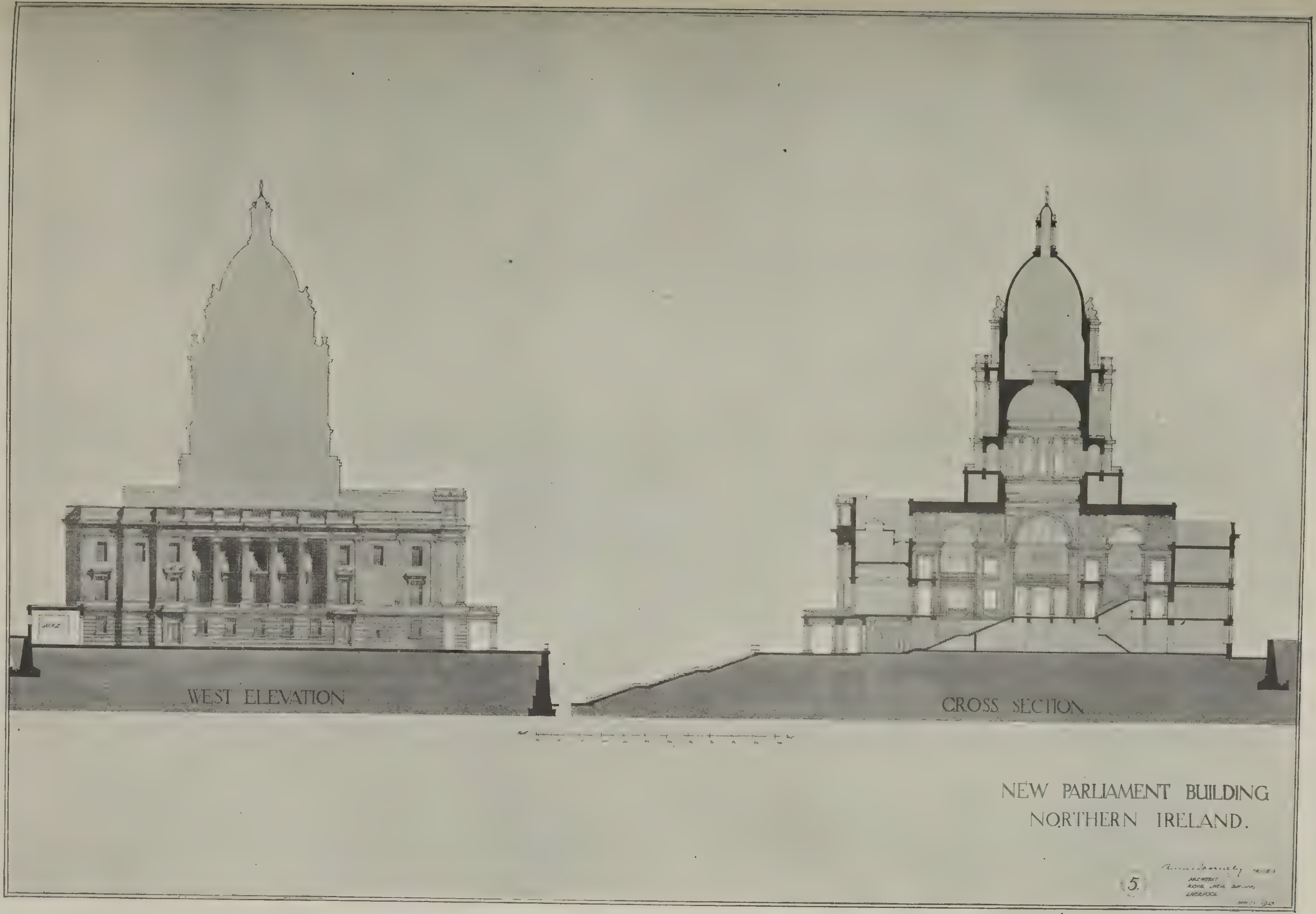


THE NEW PARLIAMENT BUILDINGS FOR NORTHERN IRELAND: VIEW OF MAIN FRONT AND PLAN OF LOWER GROUND FLOOR.

ARNOLD THORNELY, F.R.I.B.A., ARCHITECT



THE NEW PARLIAMENT BUILDINGS FOR NORTHERN IRELAND : SOUTH ELEVATION. ARNOLD THORNELY, F.R.I.B.A., ARCHITECT

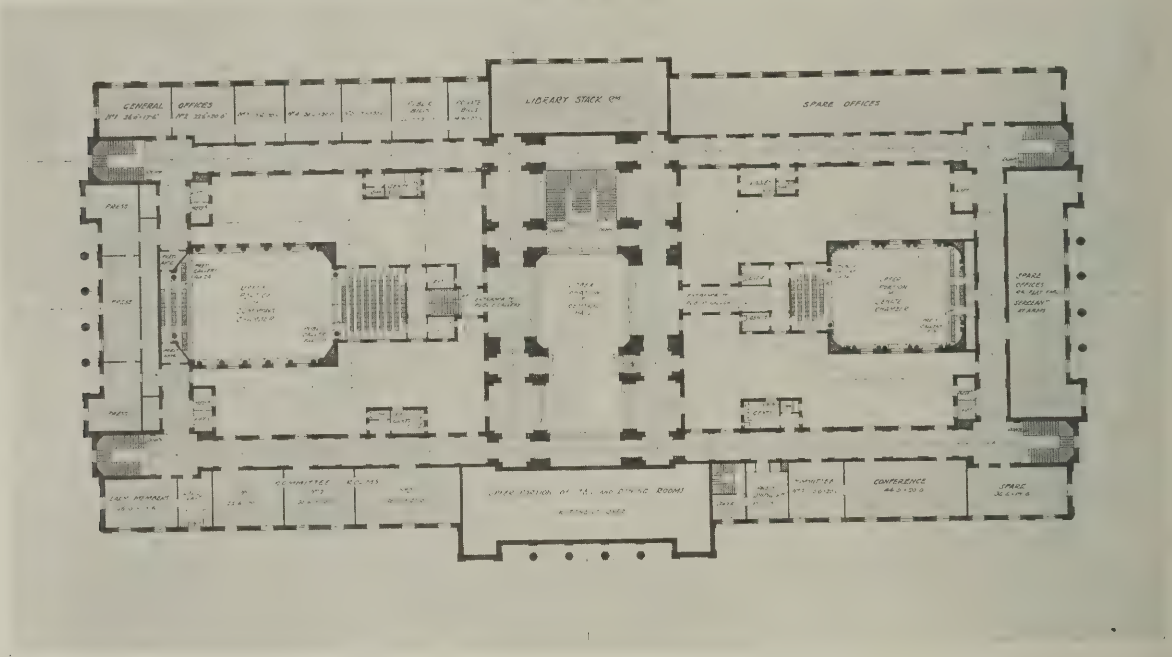


THE NEW PARLIAMENT BUILDINGS FOR NORTHERN IRELAND: WEST ELEVATION AND CROSS SECTION.

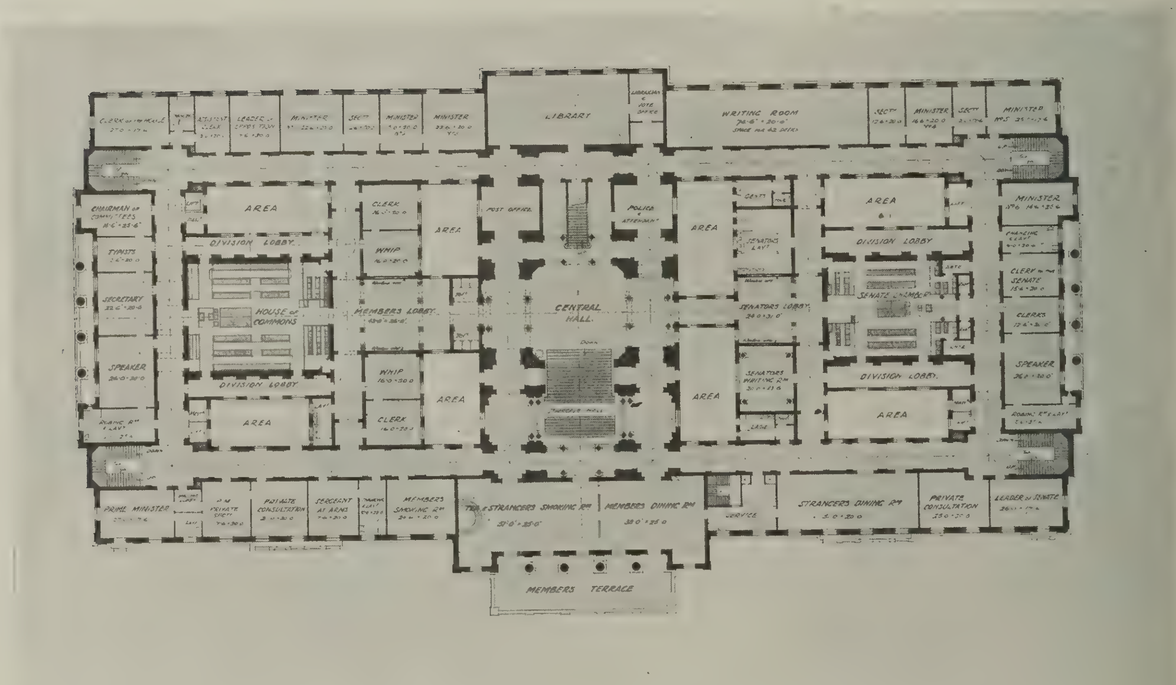
ARNOLD THORNELY, F.R.I.B.A., ARCHITECT.

upper ground or principal floor. A further staircase leads to galleries around the central hall on the first floor, from which entrances are made to the public galleries of the Commons and Senate chambers.

The lower ground floor is allocated chiefly to entrances, members and strangers. The first floor provides accomm dation for the lady members, committee and conferenc rooms, and general secretarial offices for the legislatu and public and private bills. The Press rooms and tl entrances to the Press galleries are also on this floor.



FIRST-FLOOR PLAN.



UPPER GROUND OR PRINCIPAL FLOOR PLAN.

THE NEW PARLIAMENT BUILDINGS FOR NORTHERN IRELAND.

ARNOLD THORNELY, F.R.I.B.A. ARCHITECT

cloak rooms, lavatories, and rooms for stores and records. On the upper ground or principal floor accommodation is found for the two chambers and lobbies, together with rooms for speakers, ministers, and secretaries; also library, writing-rooms, smoking-rooms, and dining-rooms for both

The building will be of fireproof construction throu out, and the structure mainly self-supporting. It is propc to use stone for external facings and the interior of central hall, whilst the remainder of the interior will b a very plain character.

Magazines of the Month[*]

A Literary and Pictorial Digest

A RECENT issue of THE ARCHITECTURAL FORUM contained an interesting article upon the Franklin Field Stadium, University of Pennsylvania. In designing and planning a permanent stadium to eplace the wooden structure which for many years had ccommodated spectators at the university's athletic vents, there were several problems to be solved. It was esired to make use of the tract known as Franklin Field r long identified with the university's history. Yet he area (about six acres) was small for the building of a tructure for seating the desired number of people, and to se the site at all it was found necessary to extend the tadium over the sidewalks around three sides of the roperty. Another problem lay in planning a structure uitable for football, baseball, and a running track, in which was necessary that the ntire field be visible from very seat in the stadium. ut the difficulties in regard plan were no greater an other difficulties in e way of design. Franklin ield is adjacent to the niversity gymnasium, a ructure built in what ight be termed the colleiate Gothic style, while so close at hand stands e archæological museum, esigned in what is deribed as the Early Chrisan style. Then there was so the difficulty of scale, nce the required seating caacity necessitated a large panse of vertical wall.

The stadium, as it stands mpleted, represents a iumph over all these diffilties, for it is of a seating pacity of about 40,000. reater harmony in colour d architecture between e stadium and neighbourg structures has been seured than at first seemed ssible, for the stadium rees in colour and marial with the gymnasium d the museum, and with e museum as to architectural style, both being of Italian igin, while the differences in scale between the stadium d the gymnasium are so marked that there is little portunity of congruity.

The appearance of the exterior of the stadium was verned by the necessity of extending the structure over e sidewalks. This logically involved the use of an arcade, d the predominating architectural motif therefore conts of a long series of brick arches, the piers which carry em having recessed panels in which it is intended to ace memorials or tablets commemorating important ents. The area beneath the slopes has been arranged with ree levels and contains three large team rooms, complete th lockers, showers, rubbing tables, etc., a physician's ice, a directors' room, two squash racquet courts with lleries for spectators, five additional smaller courts for squash or handball, a rifle range, a dirt floor area for indoor practice of jumping, pole vaulting, etc., ticket offices, and storage space for equipment and the temporary stands which are sometimes erected for providing additional seating. The structure, within its encircling brick arcade, is built chiefly of reinforced concrete on foundations of concrete piles. Use has been made of concrete columns, girders, beams and slabs, following in general the type of construction now familiar for structures of this kind. The first row of permanent seats is high enough above the playing field to allow a sloping bank of temporary seats to be placed over the running track to augment the seating capacity for football games. The vertical curves of the cross sections are arranged to bring the surfaces of the seating platforms of the adjoining stands together on approximately true mitre lines, and these lines give useful and logical locations for expansion joints, which do not, however, extend through the brick facing. An open cut has been left in the east stand for the 220-yard straightaway track, and is filled with temporary seats at football games.

THE NATIONAL EXCHANGE BANK, AUGUSTA, GA.
MOWBRAY AND UFFINGER, ARCHITECTS.

(*From "The Architectural Forum."*)

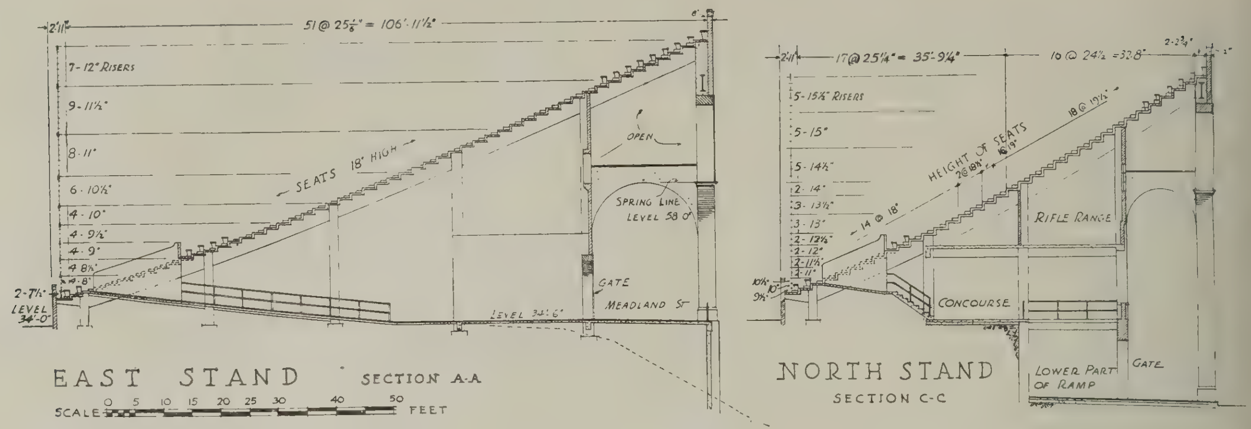
No description of a modern structure of this sort would be complete without some mention of the orientation of the field of play. The orientation of the gridiron on Franklin Field, with its long axis running west of north and east of south, was already fixed by its location and the restricting streets, but it happened to be almost perfect. By astronomical calculations the position of the sun for each hour of the afternoon of November 25 was determined. It was found that the sun would reach its ideal position, with its rays paralleling the short axis of the gridiron, at about 2.45 on this date, and that between the hours of 1.20 and 4.30 p.m. it would shine entirely within an angle of 19 deg. with this axis.

An outstanding detail in connection with the construction is the shortness of time required. The stadium was built during the five months between the time of using the old structure for the relay races on April 29, 1922, and the use of the new structure for the football games commencing September 30, 1922. The permanent stands cost, including all facilities, the brick facing and professional fees, $798,342, or $5·919 per square foot or $20·498 per seat.

Mr. W. Pope Barney contributes to the same number an article upon "European Sketching." In the course of this he writes: "When one stops to consider how many studies, sketches, and notes an architectural designer produces in the course of any ordinary morning's work in the office, one realizes that half a dozen is in no wise an unusual number; of course, these are not very finished, but they convey an idea, and sometimes possess considerable charm. In the light of this, is it not surprising that the same man,

---

[*] All the above magazines and many others may be seen in the Reading Room 9 Tothill Street, Westminster.

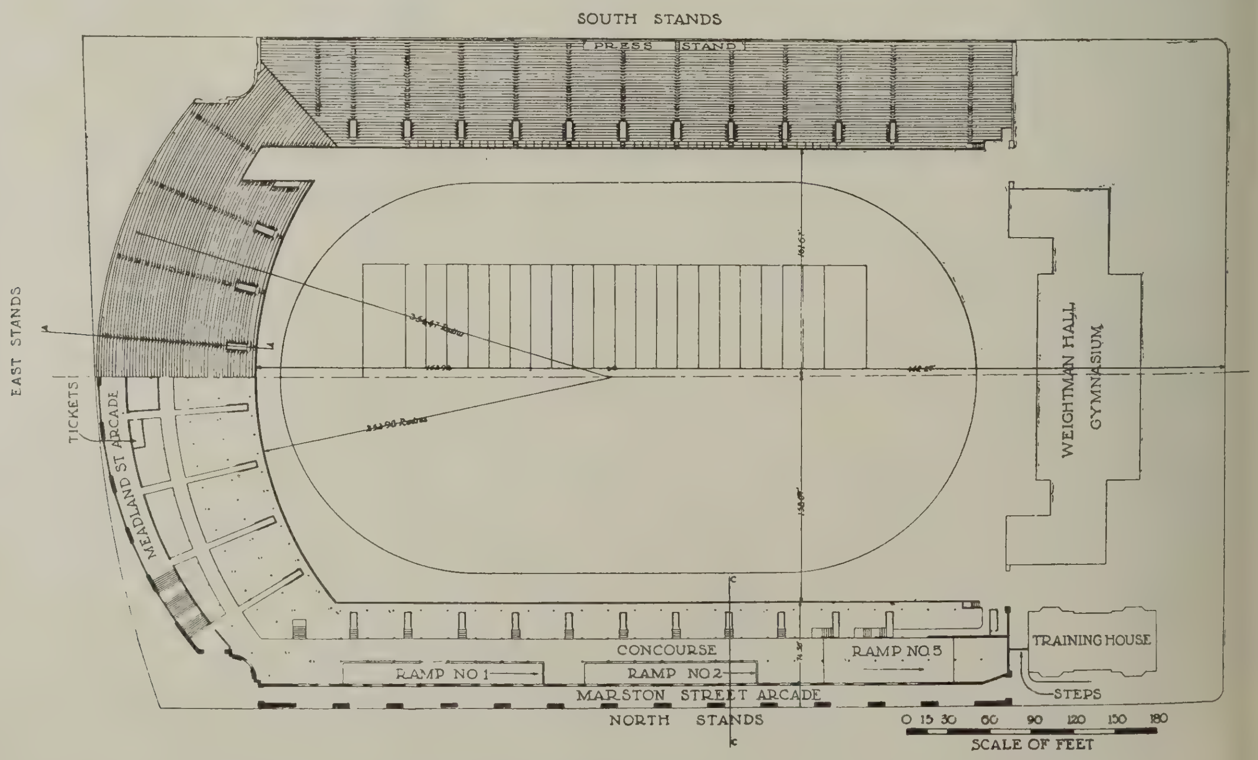


Sections through East and North Stands

when travelling in Europe, will probably have only a few drawings to his credit at the end of each week?

"Perhaps this is largely because to make a sketch from Nature seems such an effort—there seems to be no place to sit; the wind blows one's paper; one cannot hold it and sharpen a pencil at the same time, and half a dozen other obstacles arise, silly but irritating, which can only be overcome in advance by giving sufficient study to the working out of a thoroughly efficient outfit—and then by leaving none of it at home. And in planning this outfit, it would certainly seem wiser, at least until one becomes an inveterate sketcher, to stick to one medium, as this relieves the mind of any possible indecision on that score; and at first there will seem plenty of indecision in another direction—the choice of that point of view which is exactly right. So few things, fascinating though they be, seem to lend themselves to one's idea of a composition, frozen and set in a groove as one is by the making of formula sketches, with a tree on the right, a cloud on the left and a shadow across the foreground—a perfectly good formula in the office where it often seems necessary to get out sketches so rapidly that time is lacking for the study of new compositions, and one repeats the old standby rather than make a failure with the building committee which meets the next day."

THE AMERICAN ARCHITECT AND THE ARCHITECTUR REVIEW for August contains a series of authoritative ill trated articles on the mechanical equipment of hotels a clubs. Mr. F. S. Marlow, architect, in dealing with "T Mechanical Equipment of Hotels: Its Relationship to t Total Cost of the Building," asks: Do architects as a wh appreciate the relative importance and cost of the mecha cal work for plumbing, heating, ventilating, electric wiri laundry equipment, etc., in investment buildings? T majority undoubtedly do, but apparently only a few g it the office attention its initial cost justifies or its ultima importance makes imperative. Architects fully real the importance and value of the steel framing and, as a ru give it proper attention. Yet the plumbing installati the elevator equipment or the ventilating system seld receive their share of his attention and are usually accep as recommended by the individual contractor. It is r expected that an architect should have the knowle necessary to cope with the details of speciality proble but it is essential that he should know the relative co values, and importance of the principal equipment in or to complete his store of information indispensable to efficient development of all investment projects. T analyses of many different types of buildings deve



Half Seating Plan and Half Plan of Lower Level

FRANKLIN FIELD STADIUM, UNIVERSITY OF PENNSYLVANIA, PHILADELPHIA.

artling figures as to the importance and cost of mechanical uipment when compared with those of other necessary arts. We find this equipment responsible for 20 per cent. 35 per cent. of the total net cost of many modern fire-oof investment buildings such as lofts, offices, apartments d hotels. Naturally, the individual item cost varies r each type and class, but the fact to be realized is that e total percentage in any case is much greater than many em to appreciate.

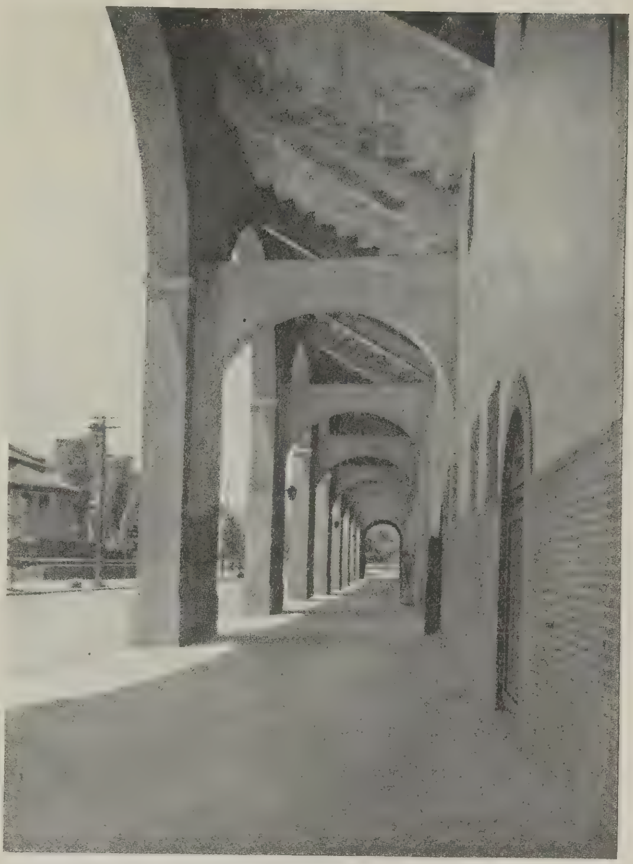
As a rule, so much time is spent on plans and architecral design without any preliminary consideration for the uipment installation that often investors are actually oceeding with their operation without adequate facts ncerning their equipment requirements. When we conder that this equipment, unlike much of the other material ed, is constantly affected by use and that its maintenance d operation absorb a large percentage of the annual erating cost, we should be doubly impressed with its lue and its relation to the ultimate worth of the building.

While the architect's efficiency in planning may produce e estimated gross income, his apathy in dealing with the echanical equipment may not only increase the initial st but also the expense of operation, and thus to a greater tent than is usually appreciated tend to decrease the herwise satisfactory ratio of income to cost.

The September issue of L'ARCHITECTURE is devoted to the rty-seventh Congress of French Architects.

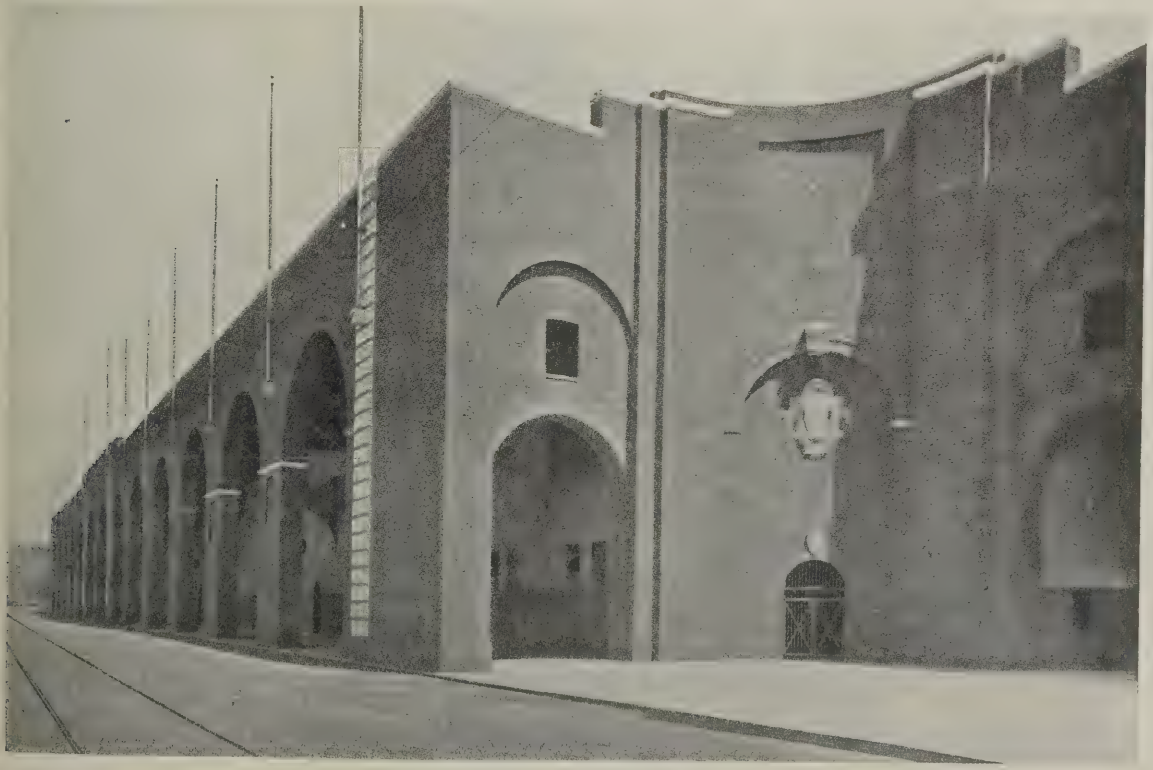
THE ARCHITECTURAL RECORD for September opens with profusely illustrated article by Mr. Thomas Mawson, the ll-known landscape architect, on "The Gardens of the lace of Peace at the Hague."

Shortly after the acceptance of the designs for the Palace, occurred to the trustees that they ought to have a scheme the layout of the gardens. In furtherance of this, they tituted a limited competition, in which the writer was arded the first place, and afterward appointed landscape hitect to carry out the work. M. de Wilde, a well-known dscape architect from Brussels, was second favourite; his eme was so excellent that the assessors must have exrienced difficulty in reaching their decision.



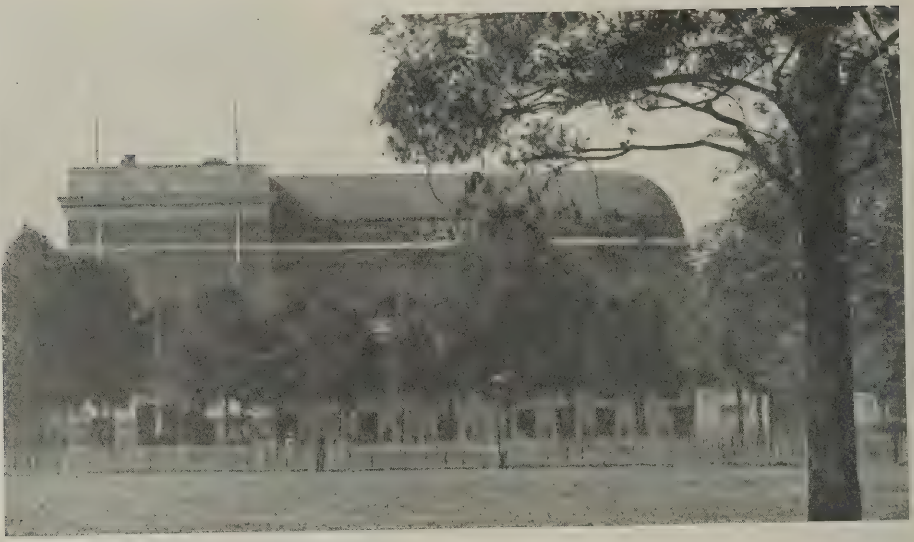
INTERIOR OF ARCADE BELOW STANDS

The problems to be dealt with were in many ways unusual, and such as seldom come within the practice of an English landscape architect. In the first place, although not primarily intended to serve the purpose of a public park, ample space had to be provided for the pleasure of a large number of diplomats and visitors on special occasions, and in particular to make very accessible the approaches to



FRANKLIN FIELD STADIUM, UNIVERSITY OF PENNSYLVANIA, PHILADELPHIA: DETAIL OF ENTRANCE AT JUNCTION OF STANDS.

(*From "The Architectural Forum."*)



THE SHEPHERD'S BUSH PAVILION: A GENERAL VIEW.

the main entrances and provide for the easy gyration of a large number of automobiles. In the second place, the character of the edifice seemed to call for the emphasis of a quiet, restful dignity in the gardens, and for the preservation so far as possible of all existing shade trees within the grounds. There was a stream passing through the northern part of the grounds, the levels of which had to be maintained, whatever water treatment was decided upon for the surrounding layout. The chief difficulty was in the nature of the soil, which was almost pure sand, with a depth of only some 30 in. or so to the water level.

In their original scheme the gardens were designed to fit the architect's accepted design for the Palace, but in the interval which elapsed between the acceptance of this original competitive design and the scheme for the gardens as executed, such alterations had been evolved in the building plan as called for drastic modifications. This was particularly so in the case of the carriage court and entrance and the terracing on the north side.

Apart from the modifications necessitated by the replanning of the Palace, other factors operated which had considerable bearing upon the work executed. Originally Mr. Mawson proposed a modification of the existing boulevard along the eastern boundary of the property to focus the axis of Scheveningen avenue upon the Dutch tower as its focal point. The city authorities were not sympathetic towards external improvements which might interfere, as they thought, with any projected town planning scheme for the Hague. The most important factor, however, operating in the modifications of our scheme was the presentation to the trustees of the piers, wing walls, and wrought-iron gates by the Kaiser. This foreshortened the carriage court with its flow-and-return drive and suggested the advisability of omitting the fountain and the obelisk surmounted by the statue of Peace, and led to the adoption of a ramped carriage way to the main Palace entrance. In the execution of this eastern part of the scheme it was decided to adopt a freer treatment in the plantations, omitting the pleached lime avenue and securing colour interest in flower borders.

By far the most interesting part of the scheme is the north front where the space is ample and expansive. Moreover, the property is secluded on this side by the embankment and existing timber, which completely screen the gardens. There is also a welcome break in the levels on this side; first the upper terrace, then the level of the canal, and finally the tree covered embankment already referred to. The illustrations show the value of the garden setting, enhancing the Palace building and the excellent proportions which the available width of ground permitted; the central portion of the canal and the north-east corner of the Palace. Unfortunately, the photographs were not taken in the time of roses, when the two panel gardens on either side of the
canal, which are planted with several thousand tea ro
arranged in a graduated colour scheme, were in bloom.

With the two terminal bridges which mark the int
and outlet of the canal, is combined a pergola treatm
clad with climbers of interesting foliage. Owing to the w
level being so near the surface, the construction of
ornamental canal was a matter of some difficulty, but
tunately these are problems which the Dutch contra
(and the nation generally we may say) are consta
called upon to tackle. The whole canal had to b
reinforced concrete, and is so excellently executed that t
has never been a leak.

The gardens at the west end of the Palace were sugge
by the contours which here are more varied than elsewh
and the fringe of forest and undulating glades. T
suggested a simple and effective treatment, with as l
interference as possible with the natural contours and
brageous effect of shade trees. The space immedia
between the Palace and the radiating panel garden
laid out as a secondary carriage court, partly for depar
automobiles on state occasions. The panel gardens
planted with American plants, such as Gaultheria, E
Andromeda, Azalea, Kalmia, and Rhododendron of
early flowering varieties. The central glade leads up t
old mount which is chosen as the site for a Temple of P
not yet erected, the glen leading thereto being hedged
tree box.

Along the southern boundary there was little op
tunity for any landscape effect, partly because the ce
part of the southern wing was apportioned to the se
department, including the heating apparatus, and
because the boundary follows the line of a light railway
its unsightly station building and sheds. Therefore,
laying down the service road, Mr. Mawson's energies
directed to the preservation of all existing timber t
supplemented by the planting of such undergrowth
shrubs and trees, as would quickly screen off the unsig
buildings and the property beyond. The results
exceeding all expectations. Needless to say, in orde
maintain the foliage and floral effects, many hundre
cubic yards of fibrous peat and loam had at conside
expense to be incorporated with the soil to enrich it.
expense has been fully justified.

The author's son, Mr. E. Prentice Mawson, was act
engaged with him in the preparation of the designs a
the execution of the work.

THE ARCHITECTURAL REVIEW (London) for Oct
illustrates the new Shepherd's Bush Pavilion, Lon
which has been recently completed after designs by
Frank T. Verity. Mr. Paul Waterhouse, PP.R.I.B.A.,
contributes an appreciative criticism of the building, s
The building to which Mr. Frank T. Verity has

Current Architecture. 200.—The Shepherd's Bush Pavilion

Frank T. Verity, Architect

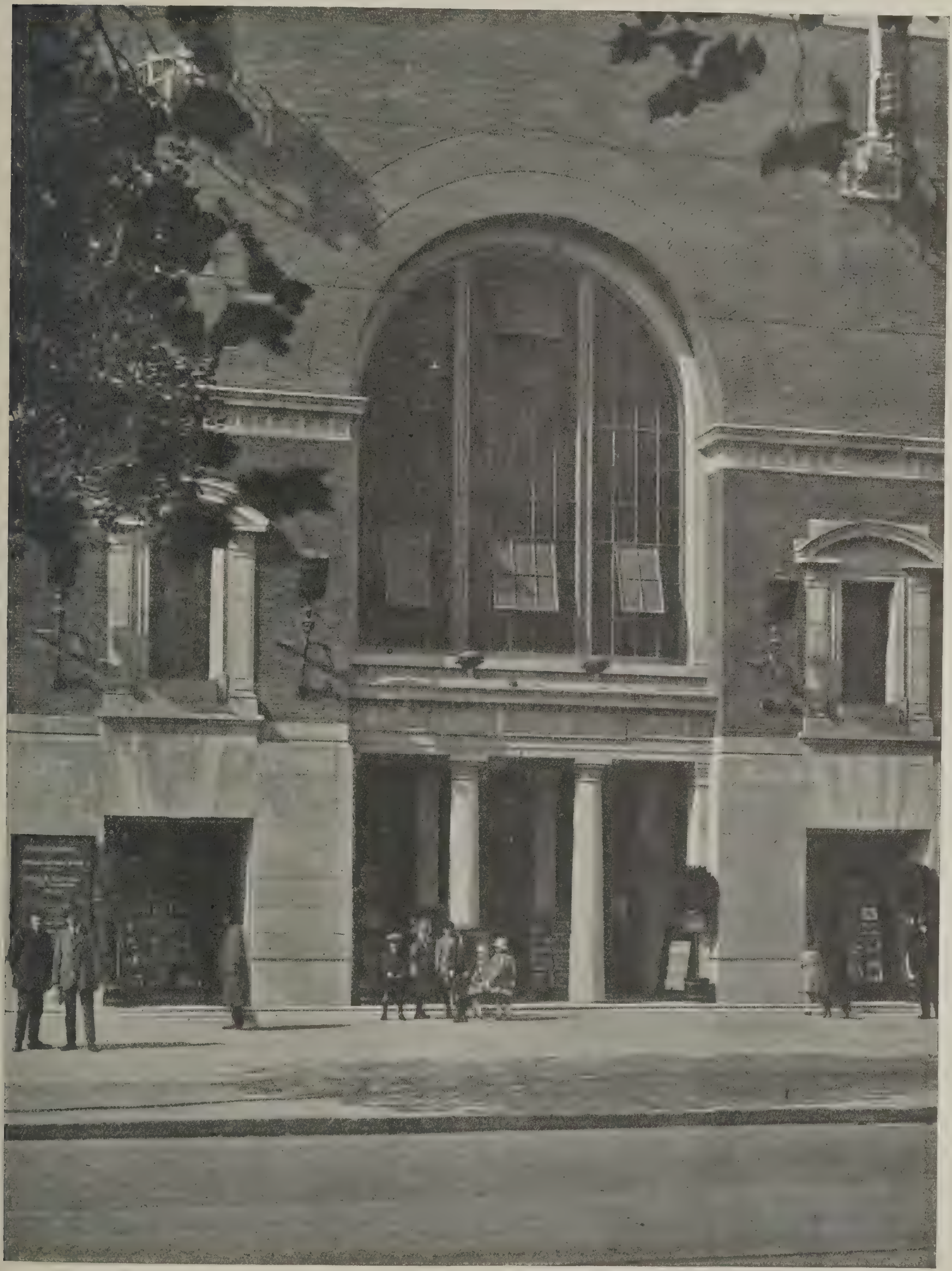


Photo: F. R. Yerbury.

The principal feature of the entrance block is the great Roman arch supported by stone columns, and with, to right and left, two simple pedimented window openings.

(From "The Architectural Review.")

THE LIBRARY
OF THE
UNIVERSITY OF ILLINOIS

operly put his graven name faces the broad end of the epherd's Bush green, with a countenance that entitles to be called an essay in the Roman manner. By this I an a great deal more than that it is a Classic design.

"Countenance," as it happens, is a misleading expres- n; for whereas the majority of street designs are coun- ances pure and simple, and none the worse for that, peculiarity of Mr. Verity's building, and its specially man aroma, are due to a restriction of the countenance per to a portion of the composition. In this I see not rsimony, but skill. Economy if you like, but economy the sense which means not the avoidance but the regula- n of expenditure.

Dimly through the trees the approaching passenger is de aware of a mysteriously red bulk with a mysteriously y roof—a roof formed not on British lines, but on the erous curves associated with that Latin Empire to whom things seemed possible so long as they were big enough.

Nearer approach confirms the Roman impression, and e through the barrier of trees one reads with increased erest what I may call the writing on the wall. Red brick the prevailing motive coupled clearly enough with a ssage as to the big span within. And Mr. Verity's bricks y him as the Roman bricks obeyed the Romans. Like man bricks, they are bricks not brickwork, a mass of ltitude, not a dull surface. Their multiplicity, their close thronged disposition over wide surfaces, and the deep reveals of the openings with which they are pierced, tell truly, or perhaps artfully, a tale of lavish simplicity. It is upon this brick background, in itself a design, that there is drawn, not as a diagram upon a blackboard, but as a face upon a creature, that super-design—a design in stone which gives the building not character only, but expression.

The only objects which trouble me in the design are the external lamps. These are rather important in their effect on the exterior as seen by daylight. They are points of challenge in a field of quiescent dignity, and to my mind the challenge is challengeable.

How the Romans would have enjoyed the designing of a cinema!

I am not sure that even if they were as generally unintelligent as some of their adverse critics suppose, they would, as spectators, have put up with any performances so uninteresting and graceless as those which the kings of the screen consider their best. In any case the Roman appetite would have been more or less natural, and would not have been cajoled by a Press which gives to the film industry and the estate market an advocacy accorded to no other interests of the nation. But if for some reason the Roman plebs had been a class devoted to "the pictures" their picture palaces would have been, I am sure, as good as their thermæ and their theatres.

The Teaching of Colour Decoration

IT is probable that there will always be a number of people who maintain that a colour-sense is a gift with which one is born and which cannot be cultivated, and this is probably true to a certain extent. t the possibilities of cultivating this as well as other ses by a system of training commenced at a sufficiently y stage are as yet sufficiently undeveloped to permit of matism. All artists and most laymen will admit the ortance of colour in every art and, indeed, in every ere of life. In life colour is a synonym for variety and trast. In music one has a distinct perception of colour sound, in harmonies, and discords. In painting and itecture the presence of pigments makes colour visually ious.

t is the business of the architect to master, in the theory practice of his design, all the means and resources ch will assist in creation and realization. And it is clear t a knowledge of principles, the grasp of a theory as hematical as our present learning permits, cannot fail e an aid to natural capacity. It is for this reason, and ause the proper use of colour is an integral part of any me of architectural design, that the Architectural ociation Schools have been experimenting for the past e years in the teaching of colour design on a method ch will be based on sound theory and reasoning rather n on the personal influence of any individual colourist, gh it is recognized that the personality of the teacher is nd to have a bearing on the result. In the first instance, ur decoration was considered as a specialist subject ble only of being assimilated by the advanced student. mistake was soon realized, however, and the theory of ur is now taught in the early stages of the school at period when the inculcation of first principles is vital. method of instruction is based with the modifications h experience has dictated, in certain theories of colour, hich that of Carpenter is a good example. From the y of the spectrum with its natural order of colours ng certain elementary exercises in which the student overs that effects can be produced as it were by law and by accident.

e production of colour harmonies, the effect of colour rds, and the immense importance of actual propor- in colour as well as in architectural form, are milestones in a path of extremely interesting discovery. From the study of forms and patterns grow the applications to architecture proper, or, rather, the incorporation into the architectural design, for repeated failures have shown that colour cannot successfully be applied to architectural conceptions which are not designed to receive it. The properties of certain colours in producing a "recessive" or an "advancing" effect are known to painters, but all architects are not equally aware of them. That a scheme successful in actual colour will be a failure if form and proportion are bad is not for everyone a *vérité de la Palice*, and the influence on colour of the surface and texture of different materials and textiles is a point which is often neglected but which need not remain a mystery.

The work of the two students whose designs are reproduced this week is illustrative of the point which has been reached in this important branch of training. The designs must be considered as typical of a certain stage in a course of instruction which experience is continually modifying. That there is scope for variety and personal expression for students working on identical theoretical lines is evident by the diversity of character and effect produced.

There seems to be no reason why a general development in the teaching of decorative design and colour should not lead to a substantial widening of the architect's horizon, and a gradual regaining of the ground lost to his commercial rivals. Business men are quick to seize on "art" when it can be employed as a commercial asset. And the development of the theory of colour is no exception.

Mr. Henry Fitch Taylor, an American artist, has devised a colour chart which is rendering a practical service to industry in the shape of automatically producing colour-schemes and "scientifically harmonized colours." It is being utilized by textile manufacturers in the designs of fabrics for ladies' gowns, and the most colour-blind wholesaler can now be assured that his creations are insured against bad colour-schemes. The idea is a little appalling in its substitution of the machine for the human element. But its lesson lies in the fact that such a chart is possible based on principles of colour which exist and which can be at the service of all architects who are able to devote a comparatively small amount of time to their study.

H. R.

Birmingham Masonic Temple Competition

The Winning Design

AS announced last week, the design of Mr. Rupert Savage, F.R.I.B.A., has been placed first in the competition, promoted by the Provincial Grand Lodge of Warwickshire, for designs for a new Masonic building to replace the present premises in New Street. Second place was secured by Mr. Samuel S. N. Cook, and third place by Mr. Hurley Robinson. The Grand Lodge acquired from the Corporation a site in Broad Street, appropriately enough facing the Peace Memorial, as the new temple to be built is a memorial to those brethren who lost their lives during the war.

In his report the successful competitor says: In preparing the scheme, the initial difficulty was to produce a shapely and coherent plan from the heterogeneous elements comprised in the schedule of accommodation. This was particularly apparent in the case of the lodge suites, which differed so much in size as to render orderly planning a matter of some difficulty. The site is irregular in shape, and somewhat shallow relatively to the frontage.

After experimenting with many types, it was found that a completely isolated plan would entail a lofty and expensive building with the accommodation scattered over many floors. The type ultimately adopted (viz., a comparatively low building covering a large part of the site) was found to afford many advantages in compactness, economy, and—above all—in ready access to the various suites without the use of lifts.

The form adopted gives architectural isolation to the front building, and a maximum window wall, thus affording good light and ventilation to the interior rooms, while avoiding the use of enclosed areas. The front block is devoted to rooms requiring a good outlook, such as offices, common room, library, and committee rooms. The three principal lodge suites are placed at the rear to secure quietness and privacy. These rooms, being used almost exclusively at night, require only such window space as is necessary for purposes of cleaning and ventilation, and the question of outlook is unimportant. Having regard to the fall from front to back, a large basement was unavoidable, and the utilization of this space was a matter for serious consideration. The choice of planning the kitchen department at the top or bottom of the building was decided in favour of the latter, having regard to the amount of traffic likely to arise from the bringing in of supplies, and the constant ingress and egress of waiters and servants.

The accommodation provided follows closely the schedule in the conditions of competition, and comprises four complete suites of lodge rooms, for 150, 80, 50, and 30 respectively. The smallest suite is arranged for occasional Rose Croix working. It will be noticed that the locker rooms and stores for lodge property are placed in close contiguity with the several suites.

The external walls and principal cross walls are of brickwork, the floors of reinforced concrete, and the partition walls of brickwork or hollow sound-proof slabs, according to thickness. The façade to Broad Street and the two return ends are faced with Portland stone; the plinth in Broad Street is of Cornish granite; and the remaining external walls are faced with small red facing bricks, and stone dressings. The roofs are to be constructed of concrete (hollow) finished with asphalt, and the windows on front elevations are to be of gunmetal.

The interior decoration as shown on the sections is merely tentative, and would require the same careful consideration as the exterior design. The introduction of sculpture and mural decoration would be a matter for later consideration. Generally speaking a certain quantity of marble work would be used in the floors and dadoes of the main halls and staircase, and the walls of same wou be finished in stucco. Hardwood panelling and decorati plaster ceilings would be introduced in the principal room The general effect aimed at would be low relief ornamer and flat colour tones. In designing the façade to Broa Street, an attempt has been made, by heavy massing ar primitive ornament, to express the age, dignity, and serio purpose of the Order.

In view of the moderate height and weight of the pr posed building, the presence of the railway tunnel, at considerable depth, need cause no anxiety, but, if notic able vibration is detected, it may be found desirable reinforce the foundation concrete.

The building generally would be warmed by low-pressu hot-water pipes and radiators, and ventilated by means opening windows and inlet panels behind the radiator The larger rooms would be warmed by warm air wi electric extraction fans.

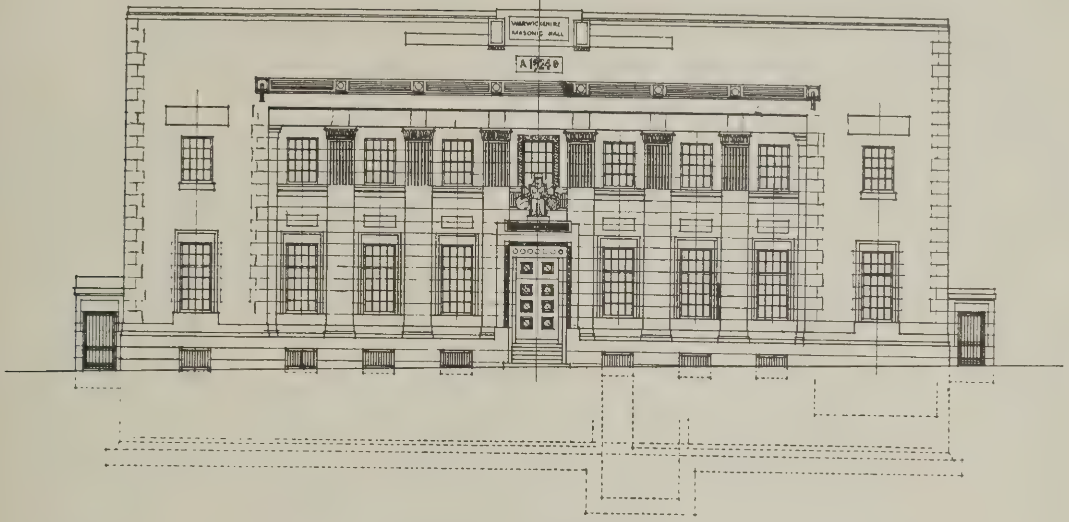
The building is to be lit by electric light from the Co poration mains, power plugs being inserted where requir for kitchen appliances and vacuum cleaners. Gas servi to be provided for cooking and emergency lighting.

The cubical contents have been measured from the t of the foundation concrete to a height of 2 ft. 6 in. abo the flat roofs. Cubings are appended.

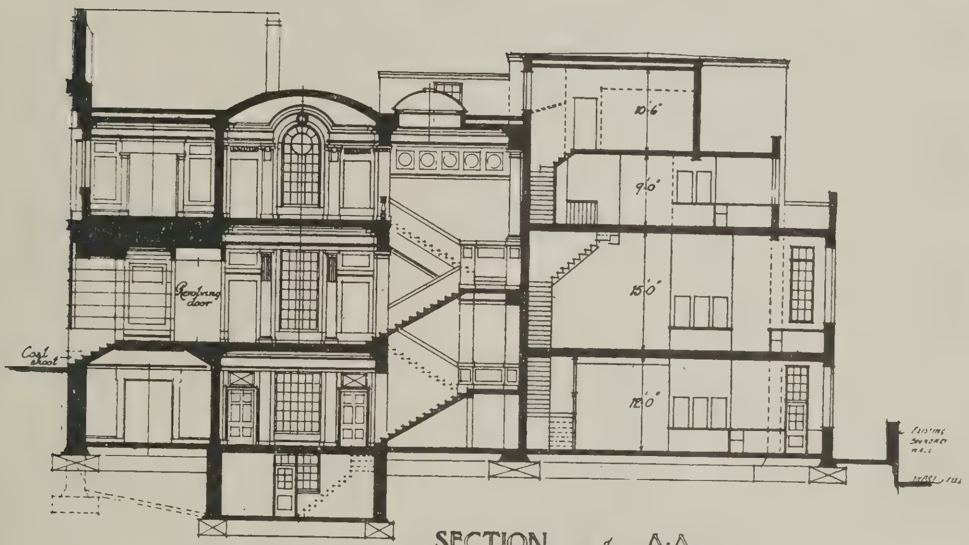
Cubical contents 526,577 cu. ft. at 2s. 6d. ..	£65,8
Steps, parapet walls, stacks, etc., not included in the above	1,5
Heating and ventilation	3,3
Electric lighting, etc.	1,6
Total ..	£72,3

Sir Banister Fletcher, F.R.I.B.A., the assessor, in l report says: The author of design No. 3, to whom I awa the first premium of £500, has been most successful fulfilling the conditions and requirements, and has produc a straightforward and skilfully arranged plan. The fro elevation is extremely simple and distinctly origin somewhat reminiscent of an Egyptian pylon with plair treated wings, flat pilasters, and a dignified central entranc It presents a very reposeful appearance, quite in harmo with the purpose of the building, and I feel confident th it would make an extremely satisfactory façade, of whi Warwickshire Masons would have reason to be prou The author of No. 5, to whom I award the second premiu of £300, has sent in a symmetrical and well-arranged pl The elevation to Broad Street is effective and restraine The author of design No. 1, to whom I award the thi premium of £200, has sent in a very compact plan. T elevation is a well-balanced and extremely satisfacto composition.

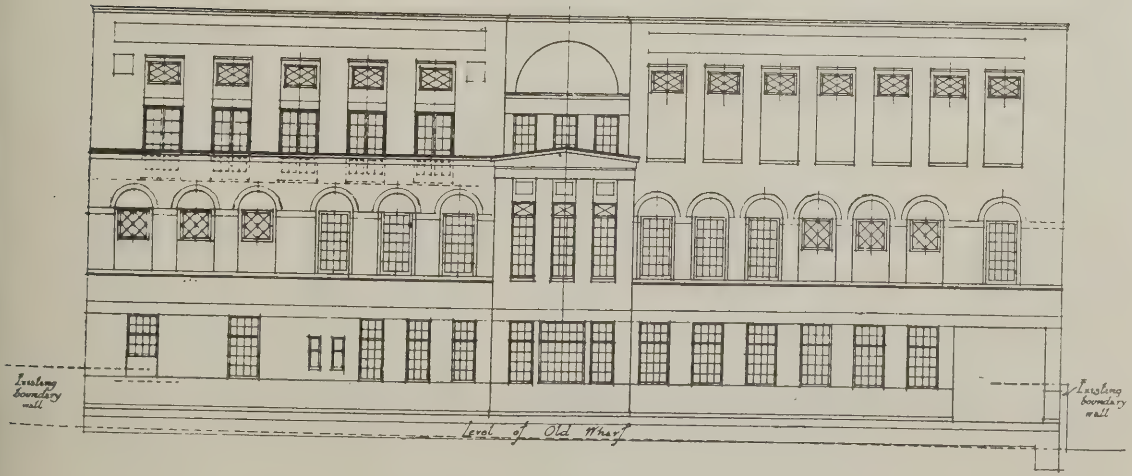
Many of the remaining designs show considerable me and the Temple Committee are to be congratulated on t response to their invitation for competitive designs. of these have defects of some kind; some are too large a wasteful or extravagant in character, or have impro lighting; others have bad service accommodation to dining-rooms, an inconvenient kitchen arrangement, i proper linking up of lodge rooms with ante rooms and dini rooms, absence of simplicity in planning or other vari minor defects, some of which indicate a want of knowle of the requirements which are necessary for the effici and economic working of a lodge. The problem was difficult one, but after a careful and prolonged examinat of all the drawings, I feel perfectly confident that I thoroughly justified in the awards which I have made this competition.



FRONT ELEVATION



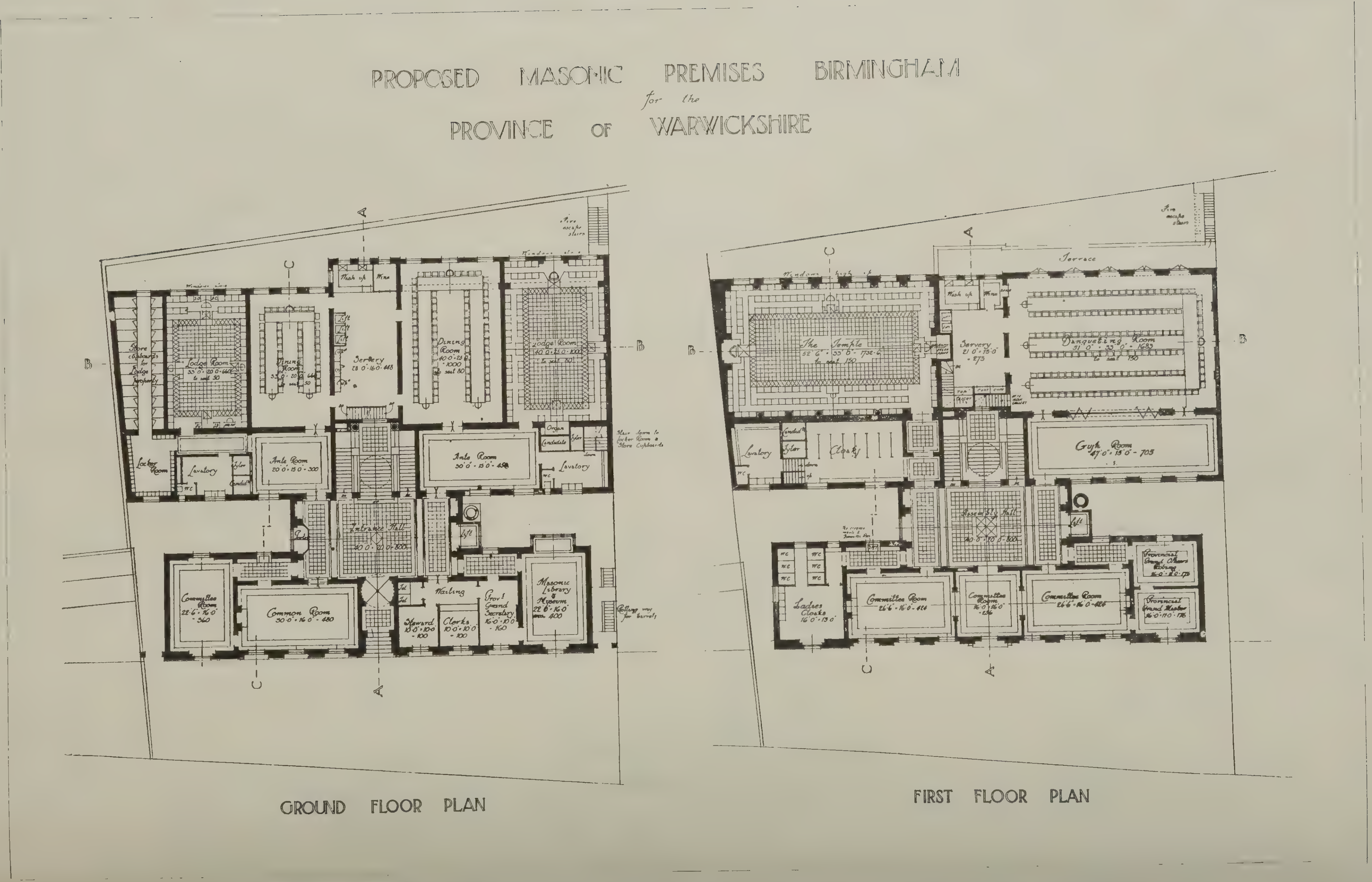
SECTION on line A·A



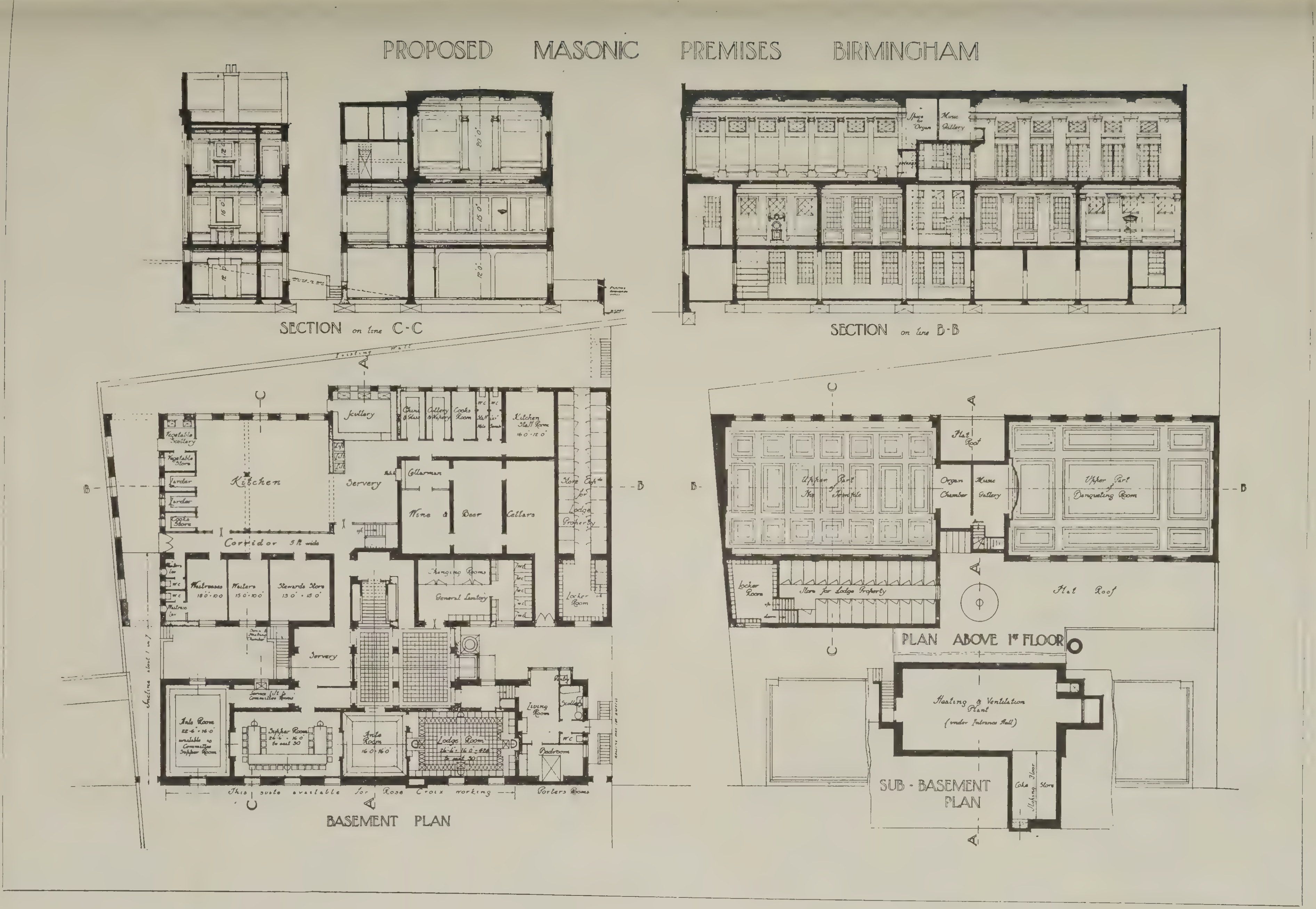
BACK ELEVATION

BIRMINGHAM MASONIC TEMPLE COMPETITION: FIRST PREMIATED DESIGN.

RUPERT SAVAGE, F.R.I.B.A., ARCHITECT.


PROPOSED MASONIC PREMISES BIRMINGHAM
for the
PROVINCE OF WARWICKSHIRE
GROUND FLOOR PLAN
Store Cupboards for Lodge property
Lodge Room 33'0" · 20'0" · 660 to seat 50
Dining Room 33'0" · 20'0" · 660 to seat 50
Servery 28'0" · 16'0" · 448
Wash up
Wine
Lift
Dining Room 40'0" · 25'0" · 1000 to seat 80
Lodge Room 40'0" · 25'0" · 1000 to seat 80
Organ
Candidate
Tyler
Stair down to Locker Room & Store Cupboards
Locker Room
Lavatory
Ante Room 20'0" · 15'0" · 300
Ante Room 30'0" · 15'0" · 450
Lavatory
WC
Entrance Hall 40'0" · 20'0" · 800
Lift
Fire escape stairs
Committee Room 22'6" · 16'0" · 360
Common Room 30'0" · 16'0" · 480
Waiting
Steward 10'0" · 10'0" · 100
Clerks 10'0" · 10'0" · 100
Prov! Grand Secretary 16'0" · 10'0" · 160
Masonic Library & Museum 22'6" · 16'0" 400
Rolling way for barrels
A
B
C
FIRST FLOOR PLAN
Fire escape stairs
Terrace
The Temple 52'6" · 33'0" · 1732·6 to seat 150
Servery 21'0" · 13'0" · 273
Wash up
Wine
Banqueting Room 51'0" · 33'0" · 1683 to seat 150
Lavatory
Candidate
Tyler
Cloaks
WC
Gyft Room 47'0" · 15'0" · 705
Assembly Hall 40'0" · 20'0" · 800
Lift
Ladies Cloaks 16'0" · 13'0"
Committee Room 26'6" · 16'0" · 424
Committee Room 16'0" · 16'0" · 256
Committee Room 26'6" · 16'0" · 424
Provincial Grand Officers Robing 16'0" · 11'0" · 176
Provincial Grand Master 16'0" · 11'0" · 176
A
B
C

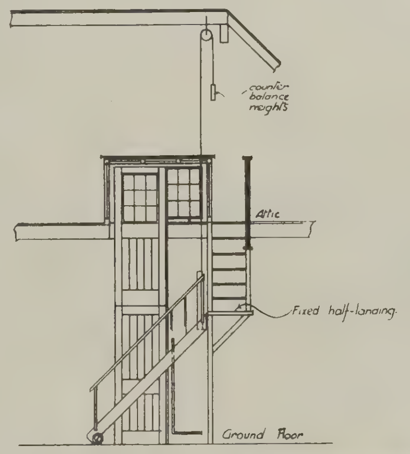
BIRMINGHAM MASONIC TEMPLE COMPETITION: FIRST PREMIATED DESIGN. RUPERT SAVAGE, F.R.I.B.A., ARCHITECT.



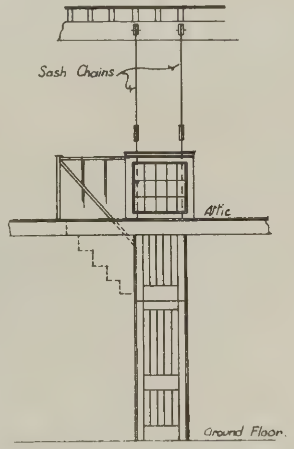
BIRMINGHAM MASONIC TEMPLE COMPETITION: FIRST PREMIATED DESIGN. RUPERT SAVAGE, F.R.I.B.A., ARCHITECT.

COLLAPSIBLE STAIRCASE

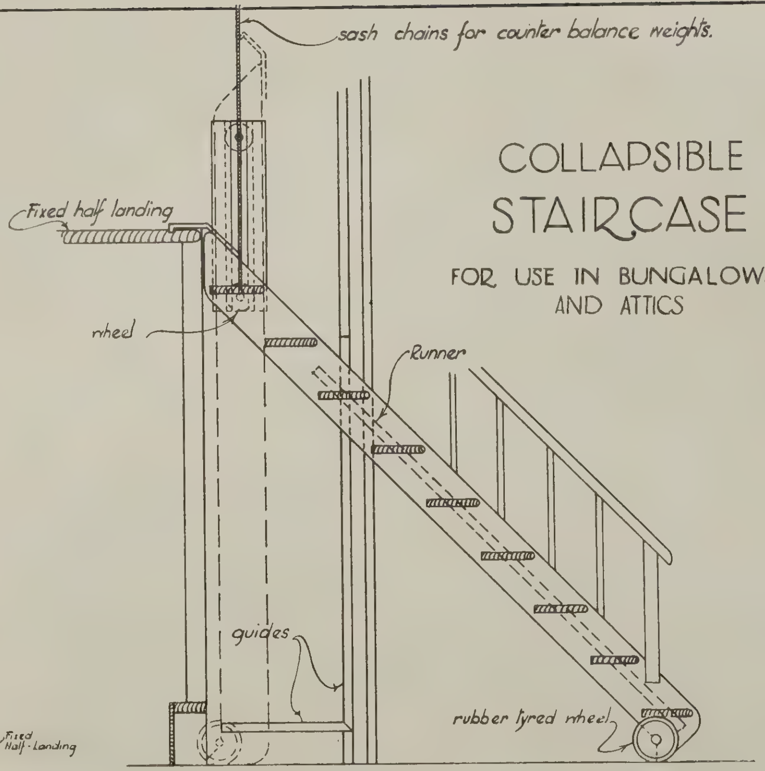
FOR USE IN BUNGALOWS AND ATTICS



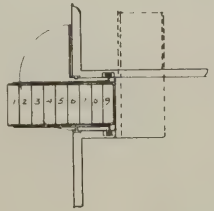
SIDE VIEW.
STAIRS EXTENDED
DOORS OPEN.



FRONT VIEW.
DOORS CLOSED.

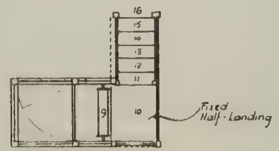


DETAIL SECTION OF STAIRS EXTENDED.

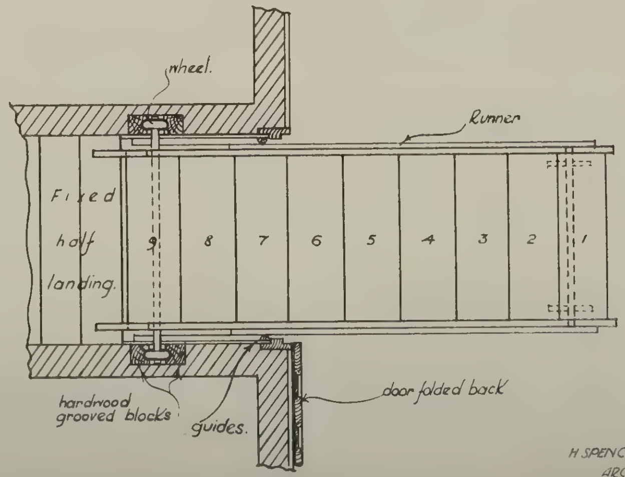


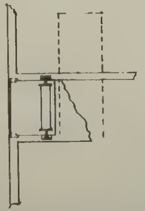
GROUND FLOOR PLAN
DOORS OPEN
STAIRS EXTENDED

DOORS OPEN, STAIRS EXTENDED.



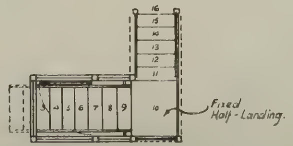
ATTIC FLOOR PLAN.
DOORS CLOSED





GROUND FLOOR PLAN.
DOORS CLOSED.

STAIRS CLOSED.



ATTIC FLOOR PLAN.
DOORS OPEN
STAIRS EXTENDED.

DETAIL PLAN.

H. SPENCER STOWELL, M.S.A.
ARCHITECT.
70, VICTORIA STREET, S.W.1

The above drawings and photos show a collapsible staircase which has recently been erected in a bungalow. The arrangement would also suit an attic when access is occasionally required, or where access is required to the roof under the Building Act. It will be seen that the upper part of the staircase is fixed, the soffit of same shows in the room below

The Week's News

Hendon Relief Works.

Hendon Urban District Council are spending £46,000 on nds as work for unemployed.

Chepstow's New Post Office.

A new post office, erected under the supervision of the ef architect to the Office of Works, has been opened. The proximate cost of the work was £10,000.

Wages in the Building Trade.

The National Federation of Building Trades Operatives have mally applied for an advance of 2d. an hour for all grades oughout the country to become operative at the end of rch next year.

Discoveries at Byland Abbey.

During excavations at Byland Abbey, Yorkshire, a Cistercian use founded by Roger de Mowbray in the twelfth century s discovered.

Change of Address.

Mr. Walter W. Gibbings, of 231 Strand, architect and suryor, is carrying on his practice from new offices at 53 Great rlborough Street, W. 'Phone: Gerrard 6158.

New Public Park for Watford.

The Ministry of Health have sanctioned the purchase by Corporation for £15,980 of thirty-three acres of the Cassiory estate to be added to the public park.

Garrick's Temple Sold.

Garrick's Temple and lawn, Hampton Reach, has been sold. is the intention of the purchaser to erect a house which will in entire keeping with the Temple. Mr. G. Alan Fortescue, R.I.B.A., is the architect.

Free Bricks for Houses.

The Welshpool Housing Committee are considering an offer Mr. David Davies, M.P., to give free bricks for houses. It is ted that the offer would reduce the probable cost of each use from £300 to £260.

More Houses for Hull.

The city architect has been instructed to prepare plans for parlour houses on the three Corporation housing estates. e Ministry of Health have sanctioned the borrowing of ,980 for the widening of Clough Road.

New Reredos for Bath.

At the Ascension Church, Bath, next Sunday, the Archcon of Bath will dedicate the new decorated reredos. The rk has been executed by Mr. Christopher Webb, of Guildd, ecclesiastical artist.

Postmaster's Bequest to Marlow.

For the erection of a clock tower or drinking fountain or any er object which can be used by all persons, Mr. John Charles tler, postmaster of Marlow, Bucks, for many years, has left local loan stock to the Marlow Urban District Council.

The late Alderman C. F. Dixon.

It is with deep regret we record the death of Alderman rles Frederick Dixon at Raventhorpe, Darlington, aged y-four. He was associated with several of the greatest lge-building schemes in the world.

Proposed New Bridge for Essex.

Brightlingsea and Wivenhoe Urban District Councils are sidering a project to construct a bridge over the River ne, so as to give the Essex parishes on the Colchester side ter facilities for transport to the nearest railway station.

Coatbridge Slum Clearance Scheme.

he Board of Health's chief housing inspector has visited tbridge, and reported favourably on the suitability of the nd suggested at Whifflet for 200 new houses to be provided er the local authority's slum clearance scheme.

New Y.W.C.A. for Bradford.

fforts are being made to raise £23,000 for a new Y.W.C.A. ding in North Parade, Bradford. There is to be a restaurant, and reading rooms, an information bureau, a large hall and -room with gymnasium combined on the ground floor. re will be class-rooms, a library, and girl guides' headquarters in addition. On the second floor there will be a hostel for accommodating the girls. The new premises consist of basement and two floors, with twenty-six rooms, and three shops facing North Parade. The shops will be let.

An Edinburgh Relic.

The Edinburgh Corporation have arranged to purchase Huntly House and the adjacent properties in Bakehouse Close. Huntly House, which is conspicuous in the Canongate with its timber front and its three gables facing the street, has mottoes in Latin with the date of its erection, 1570.

New Football Enclosure for the Crystal Palace.

Crystal Palace Football Club are issuing £50 bonds bearing 5 per cent. interest with the object of raising the £6,000 necessary for the starting of work on their new ground. Mr. A. Leitch, the football-ground architect, has prepared plans for a first-class enclosure, and the contractors are ready to start work.

Ilford Land Sold.

The Corporation at its first meeting after the summer recess approved the action of the Special Housing Committee, who reported the sale of 168½ acres of surplus land on the Ilford housing estate to Mr. P. A. Bayman for £57,000. This figure represents a profit of £75 per acre to the Corporation, which is still left with a surplus of land of 33 acres.

War Memorials and Housing.

"I can prove that some of the war memorials being erected in this country were produced on the Continent, because the cost was less than at home," said Mr. Coppock, secretary of the National Federation of Building Trades Operatives, at Acton. Referring to the housing situation, he observed that if sardines were packed as badly as the London workers are, they would go bad.

Tynemouth Fish Quay Extensions.

Tynemouth Town Council have under consideration a big scheme for the extension of the fish quay. The scheme which is to cover a wide area includes the acquisition of Clifford's Fort and many new and excellent facilities for the fishing industry. Mr. J. Mitchell Moncrieff, engineer, has been engaged to prepare plans, specifications, and estimates.

The late Mr. G. Wilson.

We regret to record the death at Knaresborough, in his seventy-second year, of Mr. George Wilson, architect and surveyor. He was surveyor to the Knaresborough Urban District Council for fourteen years, and a member of the Council for six years. In the open competition for the laying-out of the castle grounds, which was carried out in commemoration of Queen Victoria's 1887 Jubilee, Mr. Wilson was awarded the first prize.

An Encyclopædia of Imperial Trade.

A new effort is being made by the Federation of British Industries, in conjunction with the various Governments of the Empire, to promote the development of inter-Imperial trade. This is the compilation of a thorough survey of the commercial resources and possibilities of the Empire for the use of business men in this country and overseas. The work is under the general editorship of the Federation, who have been promised the co-operation of the Dominion Governments. Despite the magnitude of the task it is hoped to have the survey ready to synchronize appropriately with the opening of the British Empire Exhibition 1924.

Civic Design and Town Planning.

The University of Birmingham town-planning course has been augmented by three series of Bournville Village Trust lectures in civic design and town planning. The first series comprises ten lectures by Mr. William Haywood, F.R.I.B.A., M.T.P.I.; the second series three lectures by Mr. H. H. Humphries, M.Inst.C.E.; two by Mr. John Robertson, C.B.E., M.D., B.Sc.; and four lectures by Mr. Francis C. Minshull, LL.M., city engineer, medical officer of health, and chief assistant solicitor, respectively, of Birmingham; and the third series comprises twenty lectures by Mr. William Haywood. An inaugural lecture will be given at the university, Edmund Street, by Dr. Raymond Unwin, F.R.I.B.A., on October 9, on "The City, its past and its future form." Further information can be obtained from the secretary of the university or from Professor F. C. Lea, D.Sc., M.Inst.C.E., Civil Engineering Department, University of Birmingham.

The Week's News—*continued.*

£22,191 for Cottages.

The Ministry of Health have sanctioned the Chester Corporation's scheme for the erection of forty-nine cottages upon the Heath Lane site, and application is to be made for sanction to a loan for the sum of £22,191.

Hendon Building.

Owing to the withdrawal of a tender which had been accepted the Hendon District Council have been compelled to ask the Ministry of Health for sanction to increase the loan for building fifty flats at Mill Hill, the amount now required being £18,130.

Big Scottish Road Scheme.

Sir Henry Maybury, director of Government road schemes, has conferred with Glasgow Labour M.P.s at Glasgow with regard to the proposed Glasgow-Edinburgh new road. The scheme is estimated to cost about £2,000,000, and to employ several thousand men.

Blackwell Sewerage Scheme.

The Blackwell Rural District Council have decided to proceed with a scheme of sewerage and sewage disposal for their Langwith area. Messrs. W. H. Radford and Son, of Nottingham, civil engineers, have been instructed to prepare the necessary plans for submission to the Ministry of Health.

Discovery of Limonite in Wales.

Deposits of limonite, a mineral substance used in the manufacture of paint, linoleum, tiles, and for glazing, are reported to have been found at Penderyn, in South Brecon. At present supplies come from America. Traces of limonite have been previously noted on the farm lands of Aberilla, Penderyn.

The Proposed Bridge Over the Nith.

The Navigation Commission have decided to oppose the provisional order to be asked for by the Dumfries Town Council for the erection of a new traffic bridge over the River Nith and connecting with the adjoining burgh of Maxwelltown. The proposed bridge is to cost £25,000, and the Ministry of Transport have promised a grant of one-half the cost.

Sheffield War Memorial.

The site of the proposed war memorial is in Barkers Pool, on the axial line of the proposed public hall. Conditions of a competition limited to Sheffield architects and sculptors are to be prepared, and as soon as a suitable design has been accepted steps will be taken to appeal for the remainder of the money required to carry out the approved design.

The Grand Avenue, Stowe.

Although every effort has been made to save it, the Grand Avenue leading from Buckingham to Stowe Park, formerly the seat of the Dukes of Buckingham and Chandos, now a public school, is to be sold. Some months ago it was purchased by Mr. Clough Williams-Ellis, the architect, in the hope that it might be preserved. This hope, however, has not been fulfilled, and it seems that the property must pass away from the great house to which it makes so magnificent an approach. There is a Corinthian arch at the entrance to Stowe Park. This arch was included in the purchase of Stowe House for the purposes of a scheme by Lord Gisborough's committee, but this body did not feel it was possible to buy the avenue.

Doncaster Housing Scheme.

At a recent meeting in committee, the Doncaster Corporation decided to lend money to prospective house-builders upon terms which will enable them by weekly repayments of little more than rental value, to become owners in a period of twenty years. The committee decided that the houses needed in Doncaster are of the parlour and non-parlour type, with three bedrooms suitable for working-class families. To assist in their provision, it was agreed to lend money up to a maximum of 80 per cent. of value in the case of houses ranking for subsidy, and 90 per cent. for houses not so ranking.

York Minster Windows.

The City of Hull have inaugurated a fund for the preservation of the York Minster windows. The fund has the active support of Leeds, Bradford, Bury, Wakefield, and Scarborough. A strong local committee has been formed, under the chairmanship of the Lord Mayor of Hull, and an explan
tory circular has been sent to citizens inviting contributio
to be sent to the honorary treasurer, Mr. T. G. Miller, at t
Guildhall. There is no window which has any very close h
torical association with Hull, but the committee have decid
that Hull shall be responsible for the repair of the Saint Willia
window, and also one of the clerestory windows almost imm
diately above the Saint William window. The cost of th
preservation will be about £1,000.

Glasgow and Smokeless Fuel.

Plant for the manufacture of smokeless fuel is to be install
by the Glasgow Corporation. The production of a smokel
fuel for use in factories and in domestic grates has been enga
ing the attention of a special committee of the Corporati
for some time, and they have now decided that, in additi
to the experiment to be carried out at the Provan Gaswor
with the Woodall-Duckham plant for the production of
smokeless fuel, a five-unit battery of Maclaurin producers
installed at Dalmarnock for the manufacture of smokel
fuel and for supplying Dalmarnock Electricity Station wi
industrial gas. It is understood that Glasgow is the first mu
cipality in the world to tackle the question and try to give t
citizens a smokeless fuel.

The late Mr. W. Higginbotham, F.R.I.B.A.

We regret to record the death of Mr. Walter Higginbotha
F.R.I.B.A., of Highbury, Heaton Mersey. He was born
Chorlton-on-Medlock in 1849, went to school in Paris, and
1865 returned to his native city and became a student
Owens College. From there he was articled to Mess
Walters, Barker and Ellis, architects. He was with them
number of years, and then went into partnership with
brother, the name of the firm being Messrs. W. and G. Higg
botham, architects and surveyors. His firm were responsi
for the plans of many important buildings in Manchester a
district, including the Manchester Warehousemen and Cler
Schools (scholastic section), Cheadle Hulme; Fylde Fa
School, Poulton-le-Fylde; Messrs. Ralli Bros.' warehou
Stanley Street, Salford; a packing warehouse for Messrs. Bo
and Others, Ltd., Piccadilly, Manchester; Clayton Hou
Piccadilly, for Messrs. Chorlton Bros.; Messrs. Pugh, Davies
Co.'s warehouse, Dale Street, Manchester, and many ot
warehouses.

Recent Excavations.

The lectures on Recent Excavations given during the summ
by Miss Claire Gaudet will be repeated this winter on Thursda
at the British Museum (by kind permission of the Truste
The subject, as before, will begin with the earliest kno
civilization as shown by the discoveries made within the l
few years in Mesopotamia, and will include the excavati
at Ur and this year's work at Kish, now known to have b
the capital of the first Empire in the world's history, and s
to date from about 5000 B.C. The evolution of architecture fr
these early times until the Roman and Early Christian perio
showing the classical influence on all subsequent art up to t
present day, will form the basis of the lectures, includi
whenever possible, the arts and crafts of the people. T
lectures begin on Thursday, October 4, at 4.30. Furt
particulars may be obtained from the Hon. Secreta
120 Cheyne Walk, Chelsea.

The National Building Guild.

At Manchester County Court Judge Mellor made a windi
up order which had the effect of placing the affairs of
National Building Guild, Ltd., in the hands of the liquidat
Mr. J. Grant Gibson, official receiver in bankruptcy.
making the application, Mr. Harold Rhodes reminded
judge that in December last he agreed to an arrangem
under which the Guild was to be financed by a certain firm.
was hoped that the Guild might be able to carry on under
scheme, but the arrangement fell through. Afterwards
Court of Chancery appointed a receiver, but neither that Co
nor the Palatine Court could deal with the matter finally unl
the capital were over £10,000. Hence the matter had to
brought before his Honour. The grounds for the applicati
were that the Guild was insolvent and was unable to pay
debts. On the application of Mr. John Bennett, appeari
for the Union Bank of Manchester, who are debenture holde
consent was formally given by the judge for the continuance
an action by the bank (the costs to be costs in action itsel
Mr. F. Murgatroyd (deputy official receiver) indicated th
the liquidator had no objection to this course.

Coming Events

Wednesday, October 3rd.

Central School of Arts and Crafts.—Lecture 1, Introductory urvey. By Sir Banister Fletcher.

Thursday, October 4th.

British Museum.—Introductory Lecture, "Recent Excava-ons." By Claire Gaudet, 4.30 p.m.

Northern Polytechnic.—"Mechanical Appliances used in uilding."

Friday, October 5th.

A.W.G.—"The Present-Day Poster," 8 p.m.

Royal Academy of Arts.—Introductory Lecture, 4.30 p.m.

The Northern Polytechnic Institute

The following special lectures are to be delivered at the orthern Polytechnic Institute during the session 1923–24: ctober 4—"Mechanical Appliances used in Building," Mr. H. Bennetts. October 25—"The Lighting of Buildings," r. Lawrence M. Tye. November 15—"Heating Systems used Buildings," F. Broadhurst Crait, M.B.I.H.V.E., .A.S.H.V.E. December 6—"The Painting and Preserva-on of Metals," J. Newton Friend, D.Sc., Ph.D., F.I.C. anuary 17—"Ventilation," Ronald Grierson, A.M.I.E.E., M.I.Mech. February 7—"Housing and Recent Legislation," P. Bennett, F.R.I.B.A. February 18—"Electricity," Nicol, B.A., B.Sc. March 14—"Acoustics of Buildings," A. Hurren, M.C., F.C.S.

The Town Planning Institute Conference at York

The fifth annual country meeting of the Town Planning stitute will be held from October 5–7, at York. Most of the tel accommodation provisionally reserved at the Royal ation Hotel has now been taken, and those who have not ready sent in their names to the secretary, Mr. Alfred R. otter, 11 Arundel Street, Strand, W.C.2, should do so imme-ately, stating accommodation required. Delegates will pay eir own hotel bills.

Members residing in the neighbourhood and not requiring tel accommodation should notify the secretary if they desire attend the dinner on October 6.

The programme is as follows :—

Friday, October 5.—10.30 a.m. : Meeting at the Tempest nderson Hall Museum; paper by Mr. George Benson, R.I.B.A., "The Evolution of the City of York," illustrated lantern slides; paper by the city engineer, Mr. F. W. Spurr, he Town Planning Proposals of the City of York"; dis-ssion. 1–2.30 p.m. : Interval for luncheon. 2.30 p.m. : At e Tempest Anderson Hall—paper by Mr. F. C. Mears, T.P.I., "The Planning of Mediæval Cities," illustrated by tern slides; discussion. 4.30 p.m. : Tea interval, and then ssibly a visit to one or two points in York referred to in Mr. nson's or the city engineer's lectures. 9 p.m. : Reception at Guildhall (evening dress).

Saturday, October 6.—Morning : Visit to New Earswick del Village. Start from Station Hotel, 10 a.m. Messrs. wntree have most kindly arranged to convey the party. ternoon : Free. Evening, 7 p.m. : Dinner at the Station tel, to which guests will be invited (evening dress). Price of nner, 7s.

Sunday, October 7.—Char-à-banc excursion to some place archæological interest near York.

New Inventions

Latest Patent Applications.

832.—Bayer, E. C.—Manufacture of porous building materials. September 11.

734.—Beccat, G.—Hoisting-apparatus for flying scaffolds. September 10.

809.—Bivert, E.—Concrete floors. September 11.

111.—Brown, R. F.—Prevention of rot in timber, etc. September 15.

014.—Grueby, W. H.—Building construction. September 13.

744.—Haggerty, J. F.—Plaster wall-board. September 10.

801.—Novocretes, Ltd.—Manufacture of tiles, pavements, etc. September 11.

Specifications Published.

203042.—Laurie, A. P.—Preservation of stone.

203112.—Douglass, A. S.—Building-blocks and the like.

203132.—British Everite and Asbestilite Works, Ltd., and Jucker, E. F.—Roofing tiles or sheets.

Abstract Published.

201284.—Floors; roofs.—Mr. E. W. Roberts and Mr. L. F. W. Leese, Gammons Farm, near Watford, Hertfordshire.—Floors, ceilings, and roofs are formed of long hollow cells or units which are not more than half an inch thick and are composed of cement and asbestos or like fibre, the sides being inclined inwardly and the bases flanged to abut; concrete with bars is placed between and above the cells. The adjacent ends of the cells may abut or be supported by beams cast *in situ*. Specification 169,212 is referred to.

This list is specially compiled for the JOURNAL by Messrs. Rayner & Co., registered patent agents, of 5 Chancery Lane, London, W.C.2, from whom readers of the JOURNAL may obtain all information free on matters relating to patents, trade marks, and designs. Messrs. Rayner & Co. will obtain printed copies of the published specifications and abstract only, and forward on post free for the price of 1/6 each.

Competition News

Chiswick : River Embankment and Promenade Competition.
Eastleigh : New Assembly Hall and Extensions to Council Hall Competition.

The following notice has been issued by the R.I.B.A.: "Members and Licentiates of the R.I.B.A. must not take part in the above competitions because the conditions are not in accordance with the published regulations of the Royal Institute for architectural competitions."

List of Competitions Open

Date of Delivery.	COMPETITION.
Oct. 15 *	Lay-out of a river embankment promenade, adjoining the River Thames below Barnes Bridge, for the Chiswick Urban District Council. Premiums: £105, £52 10s., and £26 5s. Apply Mr. E. F. Collins, Clerk, Town Hall, Chiswick, W.4. Deposit £1 1s.
Oct. 22	Bridge over the River Medlock, Limehurst. Designs are invited by the Rural District Council for a bridge over the River Medlock. Apply Mr. R. Thompson, Council Offices, Ashton-under-Lyne.
Nov. 5	Art Gallery for Hull. Assessor, Mr. John W Simpson, PP.R.I.B.A. Apply, with cheque for £2 2s., to Mr. H. A. Learoyd, Town Clerk, Guildhall Hull.
Dec. 10	The War Memorial Committee of the Burgh of Coatbridge invite designs for the erection of a War Memorial on a site in the West End Park. The estimated cost of the work amounts to £3,000, and premiums of £75, £50, and £25 are offered for designs placed first, second, and third respectively. Assessor is Mr. James Lochhead, F.R.I.B.A., Hamilton. Apply Town Clerk. Deposit £1 1s.
Jan. 1	The Imperial War Graves Commission invite architects who served during the war as members of the Military, Naval, or Air Forces raised in any part of the British Empire to send in their names for admission to a competition for the designing of memorials to the missing to be erected by the Imperial War Graves Commission at Bethune, Armentières, Cambrai, and Soissons. Applications for particulars of premiums and other regulations from those desiring to compete are to be addressed to the Secretary (Works Branch), Imperial War Graves Commission, 82 Baker Street, London, W.1, and must be received there not later than January 1, 1924, and must be accompanied by a statement giving particulars of the war service and professional career of the applicant and clearly stating which of the memorials it is desired to compete for. Deposit, two guineas for each set of plans. The Assessor is Sir Aston Webb, K.C.V.O., P.R.A.
Jan. 5	Memorial Building and Tower, Dudley. The Council of the County Borough of Dudley invite Competitive Designs from duly qualified Architects for the "Brooke Robinson Memorial" Building and War Memorial Tower comprising a Public Hall, Coroner's Court, small museum, and a new sessions court. Premiums £300, £200, and £100. Mr. W. Curtis Green, A.R.A., F.R.I.B.A., Assessor. Conditions of competition, together with a copy of the site plan, can be obtained on application to E. W. Tame, Town Clerk, Town Clerk's Office, Dudley, with deposit of £2 2s., which will be returned on receipt of bona-fide designs, or if the Conditions are returned within 14 days of the date of receiving answers to questions. All designs must be sent by January 5 to the Town Clerk.
No date *	The Eastleigh and Bishopstoke Urban District Council invite designs for the extension of their existing Council buildings, and the erection of an assembly hall, on the site adjacent. Premiums: 50, 30, and 20 guineas. Apply, with deposit of £1, to Mr. J. Lawrence, Clerk to the Council, Council Offices, Eastleigh.
No Date	Taunton School War Memorial. The Council of the Taunton School invite designs for a War Memorial, consisting of an Art and Science Block, the cost of the building to be approximately £10,000. The Assessor is Mr. Robert Atkinson, F.R.I.B.A., who will have the power to nominate a second Assessor if desirable. Premiums first, £100; second, £50. The first premium will merge in the architect's commission. Particulars, together with photograph of the present buildings, may be obtained from the Secretary of the School, H. J. Pollard, F.C.A., 3 Hammet Street, Taunton, in return for a cheque for £2 2s., which will be returned on receipt of a bona-fide design.

* Indicates Competitions whose conditions are not in accordance with those laid down by the R.I.B.A. and the Society of Architects.

Rates of Wages in the Building Trades*

The following table, which is published in the first issue of THE JOURNAL for each month, shows the revised rates of wages for craftsmen (bricklayers, masons, ca penters and joiners, woodcutting machinists, slaters, plumbers, plasterers and painters), and labourers in the building trade. The labour rates for London are given the Table of Current Prices on pages xxi and xxii.

Grade.	Craftsmen.		Labourers.		Grade.	Craftsmen.		Labourers.		Grade.	Craftsmen.		Labourers.	
	s.	d.	s.	d.		s.	d.	s.	d.		s.	d.	s.	d.
A	1	7	1	2¼	B	1	5	1	0¾	C	1	3½		11¾
A1	1	6½	1	2	B1	1	4½	1	0½	C1	1	3		11¼
A2	1	6	1	1½	B2	1	4	1	0	C2	1	2½		11
A3	1	5½	1	1¼	B3	1	3½		11¾					

Grading of Towns.

The towns in which the above grade rates have been reported to apply are shown below, divided into their main area groups. The principal exceptions are indicat in the notes appended to each Group. In towns marked* the rate for painters is 1d. less than that paid to other craftsmen, and in those marked† it is ½d. less th the craftsmen's rate.

NORTH-EAST COAST :—

Grade A.—Alnwick, Annfield Plain, Birtley, Bishop Auckland, Blackhill, Blyth, Chester-le Street, Consett, Darlington, Durham, Ebchester, Gateshead, Hartlepoo Hebburn, Hexham, Jarrow, Lanchester, Leadgate, Medomsley, Middlesbrough, Morpeth, Newcastle, North and South Shields, Seaham Harbour, Stanley, Stockto Sunderland, Thornaby, Tynemouth, Wallsend, Whitburn, and Whitley Bay.

YORKSHIRE :—

Grade A.—Alltofts, Barnsley, Batley, Bingley, Birstall, Bradford, Brighouse, Calder Valley, Castleford, Cleckheaton, Cleethorpes, Colne Valley, Crosshills, Dewsbur Doncaster, Gomersal, Grimsby, Guiseley, Halifax, Harrogate, Hebden Bridge, Heckmondwike, Holmfirth, Horbury, Hoyland, Huddersfield, Hull, Ilkley, Immingha Keighley, Knottingley, Leeds, Liversedge, Mexborough, Mirfield, Morley, Normanton, Ossett, Penistone, Pontefract, Pudsey, Rawdon, Rotherham, Scunthorpe, Selb Sheffield, Shipley, Sowerby Bridge, Stocksbridge, Wakefield, Wombwell, and Yeadon. **Grade A3.**—Barnoldswick, Beverley, Bridlington, Goole, Hornsea, Scarboroug Skipton, Worksop, and York. **Grade B3.**—Kirby Moorside, Malton, Northallerton, Norton, and Wetherby.

NORTH-WESTERN COUNTIES :—

Grade A.—Accrington, Adlington, Alderley Edge, Altrincham, Ashton-under-Lyne, Atherton, Bacup, Barrow, Birkdale, Bispham, Blackburn, Blackpool, Blackro Bolton, Broughton (Flints), Burnley, Bury, Carlisle, Chester, Chorley, Church, Cleveleys, Clitheroe, Colne, Connahs Quay, Dalton-in-Furness, Darwen, Dent Droylsden, Eccles, Farnworth, Fleetwood, Frodsham, Glossop, Great Harwood, Haslingden, Hawarden, Helsby, Heywood, Higher Kinnerton, Horwich, Hy Kirkham, Leigh, Leyland, Littleborough, Longridge, Lymm, Lytham, Manchester, Middleton, Mossley, Nelson, Ormskirk, Oswaldtwistle, Oldham, Padiha Pendlebury, Poulton, Preston, Prestwich, Queensferry, Radcliffe, Ramsbottom, Rawtenstall, Rishton, Rochdale, Runcorn, St. Annes-on-the-Sea, St. Hele Saddleworth, Sale, Salford, Shaw, Shotton, Southport, Stalybridge, Stockport, Swinton, Thornton, Todmorden, Tyldesley, Walkden, Warrington, Westhought Whalley, Whitefield, Widnes, Wigan, and Wilmslow. **Grade A2.**—Lancaster and Morecambe. **Grade A3.**—Askam, Broughton-in-Furness, Buxton, Cleator Mo Congleton, Coniston, Crewe, Distington, Egremont, Grange-over Sands, Harrington, Knutsford, Macclesfield, Maryport, Market Drayton, Middlewich, Millom, Mo Nantwich, New Mills, Northwich, Sandbach, Tarporley, Ulverston, Winsford and Over, Whitehaven, Workington, and Wrexham. **Grade B1.**—Colwyn Bay, Conwa Holywell, Llandudno, Llandudno Junction, Mostyn, Prestatyn, Rhos and Rhyl. **Grade B2.**—Bala, Cockermouth, Kendal, and Penrith. **Grade B3.**—Amblesid Bangor, Bowness-on-Windermere, Carnarvon, Grasmere, Holyhead, Langdale, and Windermere.

[NOTE.—*In the Liverpool and Birkenhead districts the rates remain at 1s. 9d. for plumbers, 1s. 8½d. for other craftsmen, and 1s. 4d. for labourers. The new rate for plumbers at Warrington is reported as 1s. 8d.*]

MIDLAND COUNTIES :—

Grade A.—Alfreton, Belper, Bilston, Birmingham, Blackheath, Burslem, Chesterfield, Coalville, Coventry, Derby, Hanley, Heanor, Hinckley, Ilkeston, Kenilwor Leicester, Lincoln, Long Eaton, Loughborough, Mansfield, Newcastle-under-Lyme, Nottingham, Ripley, Stoke-on-Trent, Sutton Coldfield, Sutton-in-Ashfield, W Bromwich, Willenhall, and Wolverhampton. **Grade A3.**—Atherstone, Bewdley, Boston, Brierley Hill, Bromsgrove, Burton-on-Trent, Cannock, Coseley, Darlast Dudley, Gainsborough, Gornal, Grantham, Halesowen, Hednesford, Kidderminster, Knowle, Leamington, Leek, Lichfield, Louth, Malvern, Market Harborou Matlock, Melton Mowbray, Newark, Northampton, Oakengates, Old Hill, Peterborough, Redditch, Retford, Rugby, Rugeley, Sedgley, Shifnal, Skegness, Sleafo Solihull, Stafford, Stamford, Stourbridge, Stourport, Stratford-on-Avon, Swadlincote, Walsall, Warwick, Wednesbury, Wellington, and Worcester. **Grade B1.**—Kett ing and Wellingborough. **Grade B2.**—Ashbourne, Bridgnorth, Horncastle, Oakham, Oundle, Raunds, Rushden, Spalding, Thrapston, Uttoxeter, and Wirkswor **Grade C.**—Buckden, Eaton Socon, Huntingdon, St. Ives, and St. Neots. Market Harborough, craftsmen 1s. 5d., labourers 1s. 0¾d.

[NOTE.—*For plumbers in the Potteries district and at Strafford the rate remains at present 1s. 9d. The rate for plumbers at Leek is reported as 1s. 6½d. and for plumbers at Chesterfield, 1s. 8d.*]

EASTERN COUNTIES :—

Grade B1.—St. Albans, Southend-on Sea, and Westcliff. **Grade B2.**—Norwich. **Grade B3.**—Baldock, Bedford, Berkhamsted, Biggleswade, Braintree, Cambrid Chelmsford,* Colchester, Halstead, Hatfield, Hemel Hempstead, Henlow, Hertford, Hitchin. Hoddesdon, Ingatestone, Ipswich, Letchworth, Luton, Norwich, Ong Sawbridgeworth, Stevenage, Stotfold, Ware, and Welwyn. **Grade C.**—Aldeburgh, Attleborough, Aylsham, Braughing, Clacton, Cromer, Dovercourt, Dunstab Ely, Fakenham, Felixstowe, Frinton, Gorleston, Halesworth, Harwich, Hunstanton, King's Lynn, Leighton Buzzard, Leiston, Lowestoft, March, Much Hadha Newmarket, Puckeridge, Renthem, Saxmundham, Southwold, Standon, Stowmarket, Walton-on-the-Naze, Wickham Market, Wisbech, Woodbridge, Wymondham, a Yarmouth. **Grade C2.**—Bungay, Coltishall, East Dereham, Hadleigh, Haverhill,* Royston.

SOUTHERN COUNTIES :—

Grade B.—Leatherhead.† **Grade B1.**—Gosport, Portsmouth, and Southampton. **Grade B2.**—Bournemouth, Brighton (see below), Christchurch, Eastbour Fareham, Hove, Poole, Reading, and Tilehurst. **Grade B3.**—Abingdon, Addlestone, Amersham, Ascot, Ashford (Middlesex), Beaconsfield, Bracknell, Byfleet, Chesha Cremborne, Egham, Eton, Gerrard's Cross, Goring, Gravesend, Guildford, Henley, Laleham, Maidenhead, Marlow, Northfleet, Oxford, Staines, Stanwell, Sunningd Sunninghill, Tonbridge, Tunbridge Wells, Wallingford, Windsor, Woking, Wokingham, and Wycombe. **Grade C.**—Arundel, Ashford (Kent), Aylesbury, Bagsh Banbury, Basingstoke, Bicester, Bletchley, Bognor, Bosham, Brockenhurst, Camberley, Canterbury, Chatham, Chichester, Chipping Norton, Deal, Dorking, Dov Fareham, Faringdon, Faversham, Fenny Stratford, Folkestone, Gillingham, Godalming, Hailsham, Haslemere, Hastings, Herne Bay, Hythe, Lambourn, Lipho Littlehampton, Lymington, Maidstone, Margate, Milford, Milton Regis, Newbury, New Milton, Newport Pagnell, Pangbourne, Petworth, Ramsgate, Roches Sandgate, St. Leonards, Sevenoaks, Sittingbourne, Strood, Stony Stratford, Thame, Walmer, Wantage, Wendover, Westgate, Whitstable, Winchester, Winsl Witney, Wolverton, and Worthing. **Grade C2.**—Alton,* Andover, Bishop's Waltham, Farnham, Godstone, Hawkhurst, Hartley Wintney,* Isle of Wight, R Smallfield, Staplehurst, and Uckfield. Andover, craftsmen 1s. 3d., labourers 11½d. Bournemouth, Poole and Christchurch, craftsmen 1s. 4½d., labourers 1s. o Camberley, Godalming, Grayshott and Haslemere, craftsmen 1s. 4d., labourers 1s. Guildford and Woking, craftsmen 1s. 4½d., labourers 1s. 0½d. Tonbridge Tunbridge Wells, craftsmen 1s. 4½d., labourers 1s. 0½d.

[NOTE.—*It is understood that no reduction has yet been made at Brighton and Hove and Eastbourne, the rates remaining at 1s. 4½d. for tradesmen and 1s. 0½d. for labourers. The rate for plumbers at Dorking is reported as 1s. 4½d., for labourers at Basingstoke, 11½d., and for labourers at Folkestone, Hythe and Sandgate, 1s. Gravesend, Northfleet and District, craftsmen, 1s. 5½d.; labourers, 1s. 1½d.*]

SOUTH-WESTERN COUNTIES :—

Grade A.—Bristol. **Grade A2.**—Keynsham. **Grade B.**—Plymouth* and Devonport.* **Grade B2.**—Bath, Cheltenham, Gloucester,* Hereford,* Swindon,* Tewkesbury.* **Grade B3.**—Exeter, Newton Abbot, Portishead, Stroud† and Taunton. **Grade C1.**—Barnstaple, Bradford-on-Avon* Bridgwater, Brixham, Brut Burnham-on-Sea, Calne,* Castle Cary, Cheddar,* Cirencester,* Coleford,* Corsham,* Crewkerne,* Dawlish, Dorchester,* Exmouth, Fairford,* Frome,* Glastonbu Lydney,* Melksham,* Midsomer Norton, Minehead,* Radstock, Shepton Mallet, Street, Tetbury,* Thornbury, Totnes,† Trowbridge,* Wells, Westbury,* Weston-su Mare, Weymouth,* and Yeovil.* Weston-super-Mare, craftsmen 1s. 4d., labourers 1s. Plymouth, Devonport and Stonehouse, painters 1s. 5d., other trades 1s. 6d., labourers 1s. 1½d. Newton Abbot and Paignton, Torquay, craftsmen 1s. 4½d., labourers 1s. 0½d. Barnstaple, Clevedon and Exmouth, craftsmen 1s. 3 labourers 11¾d. Exeter, painters 1s. 3½d., other craftsmen 1s. 4½d., labourers 1s. 0½d.

SOUTH WALES AND MONMOUTHSHIRE :—

Grade A.—Aberavon, Aberdare, Abertillery, Ammanford, Barry, Bridgend, Briton Ferry, Brynmawr, Cardiff, Chepstow, Duffryn Valley, Ebbw Vale, Glamorganshire and Monmouthshire Valleys, Garw Valley, Gorseinon, Llanelly, Maesteg, Merthyr, Mountain Ash, Neath, Newport, Ogmore Vale, Pontarda Pontardulais, Pontypool, Pontypridd, Porthcawl, Port Talbot, Rhondda and Rhymney Valleys, Sirhowy Valley, Swansea, and Tredegar. **Grade A2.**—Abergaven **Grade B.**—Brecon, Carmarthen, Llandilo and Llandrindod Wells. **Grade B2**—Fishguard, Hay, Monmouth, and Talgarth.

SCOTLAND :—

Grade A.—Airdrie, Alloa, Alva, Armadale, Ayr, Bathgate, Bellshill, Bridge of Weir, Buckhaven, Burntisland, Clydebank, Coatbridge, Dumbarton, Dun Dunfermline, Edinburgh, Falkirk, Glasgow, Gourock, Grangemouth, Greenock, Haddington, Hamilton, Harthill, Irvine, Kennoway, Kilmarnock, Kirkcaldy, Lar Largs, Leith, Leslie, Leven, Markinch, Methil, Motherwell, Neilston, Newmains, Paisley, Pencaitland, Perth, Port Glasgow, Renfrew, Stenhousemuir, Uddingston, Upl Wemyss, Whitburn, Windygates, and Wishaw. **Grade A2.**—Arbroath, Montrose, and Peebles. **Grade B.**—Dumfries, Galashiels, Hawick, and Maxwelltown. Aberd joiners 1s. 6d. Dumfries and Galloway, plumbers 1s. 5d.

[NOTE.—*The rates quoted do not apply to plasterers and painters in Scotland, who are not affiliated to the National Wages and Conditions Council. The rate for labourers at Leslie, Markinch, and Perth is reported as 1s. 2d., and at Arbroath, Bathgate, Irvine, and Montrose 1s. 1d. Aberdeen, and Dundee and District, plumbers, 1s. 7d.*]

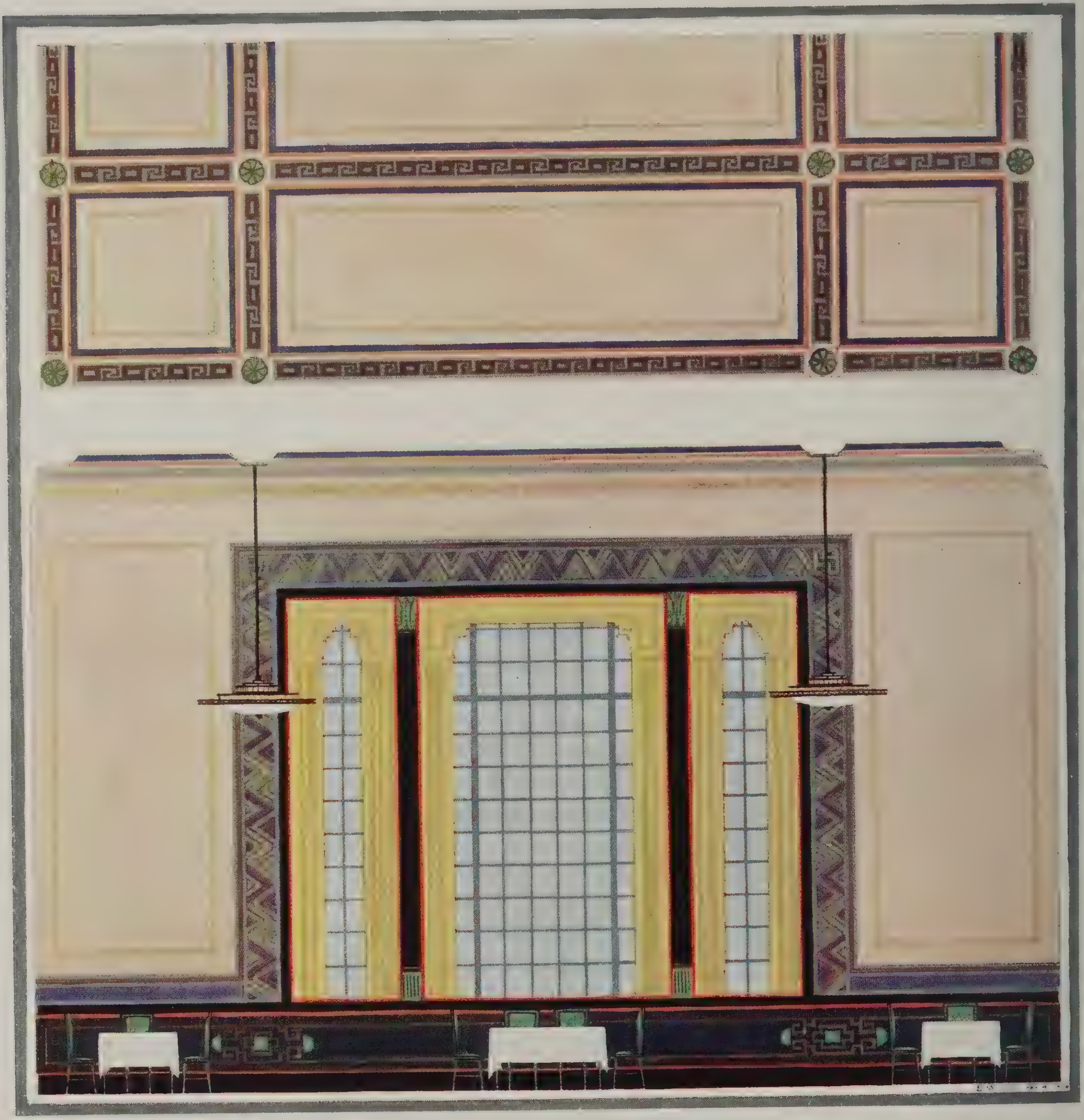
---

* From "The Labour Gazette."

THE LIBRARY
OF THE
UNIVERSITY OF ILLINOIS

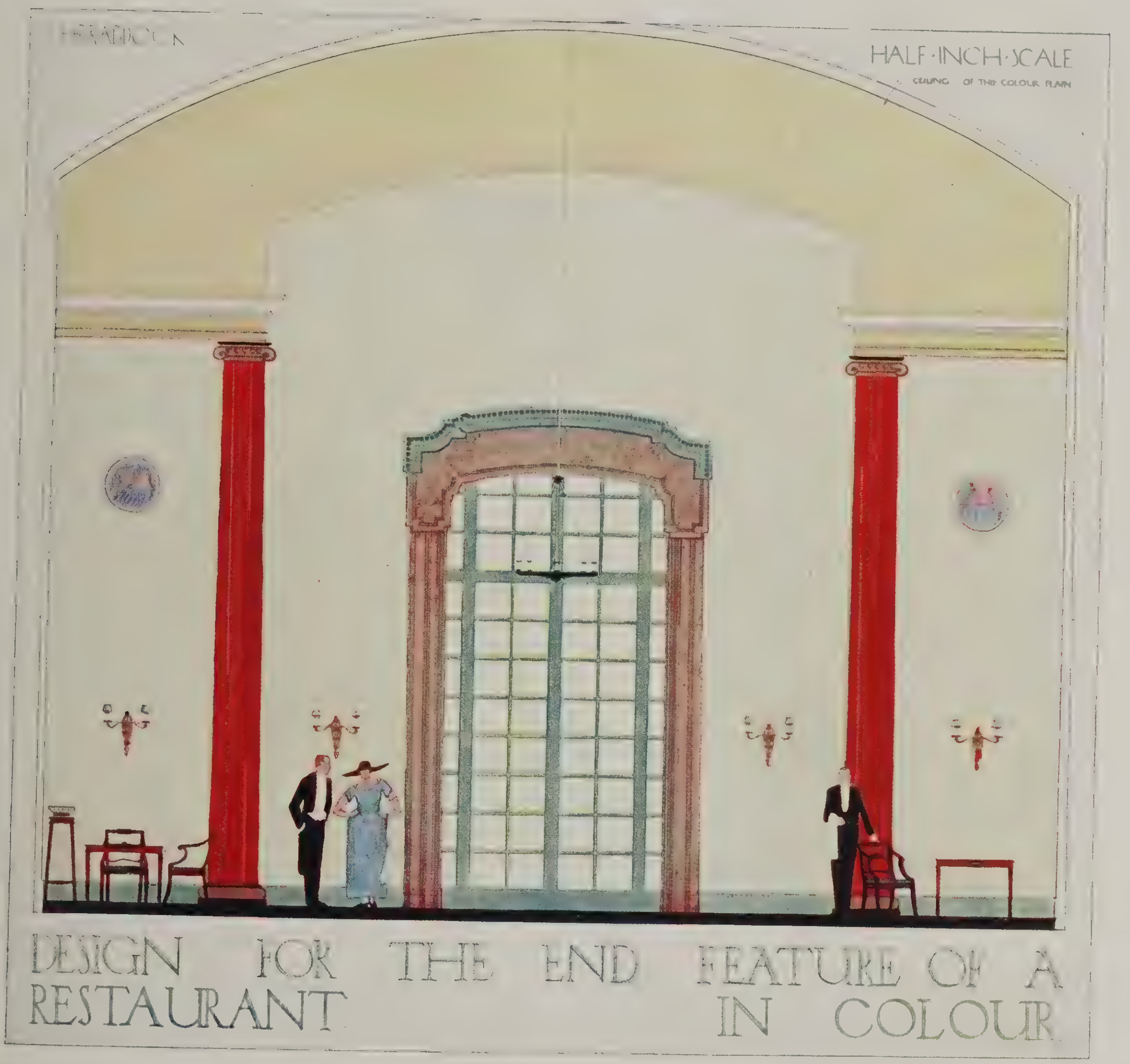
Colour Work of the Architectural Association School of Architecture

(Fourth and Fifth Year Decoration Course).



DESIGN IN COLOUR: CAFÉ CONCERT.
BY MISS E. MEIKLE.

Colour Work of the Architectural Association School of Architecture
(Fourth and Fifth Year Decoration Course).


H BRADDOCK
HALF·INCH·SCALE
CEILING OF THE COLOUR PLAN
DESIGN FOR THE END FEATURE OF A RESTAURANT IN COLOUR

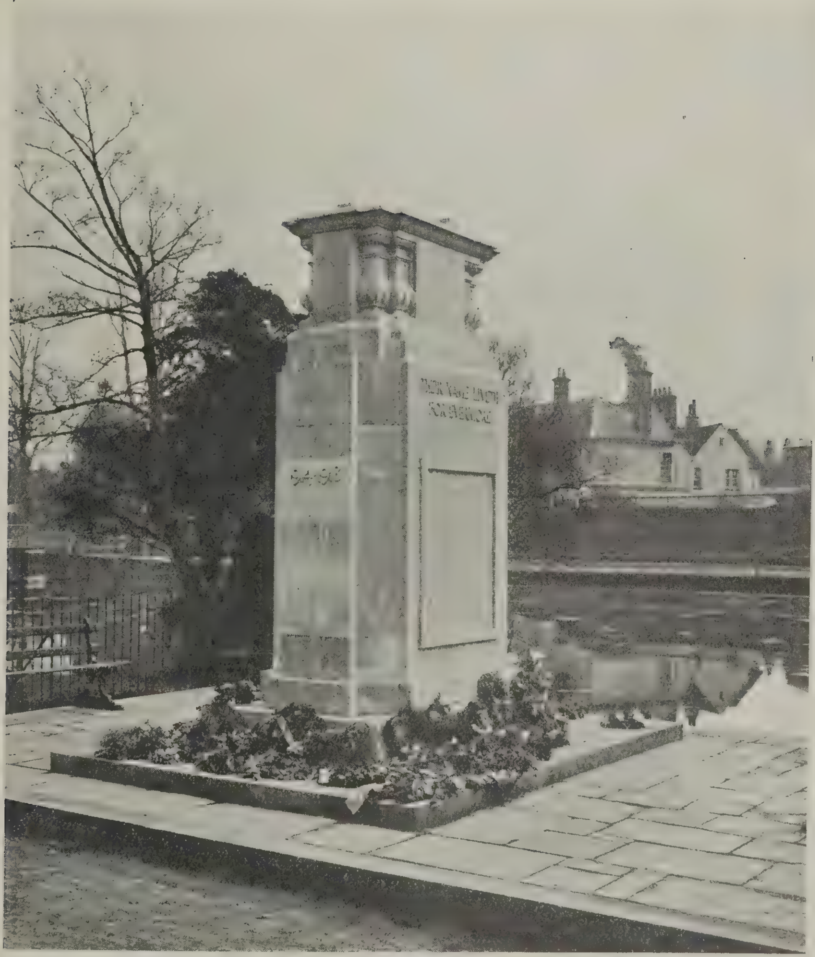
BY H. BRADDOCK.

THE LIBRARY
OF THE
UNIVERSITY OF ILLINOIS

ednesday, October 10, 1923.
Vol. LVIII No. 1501.

THE ARCHITECTS' JOURNAL & Architectural Engineer

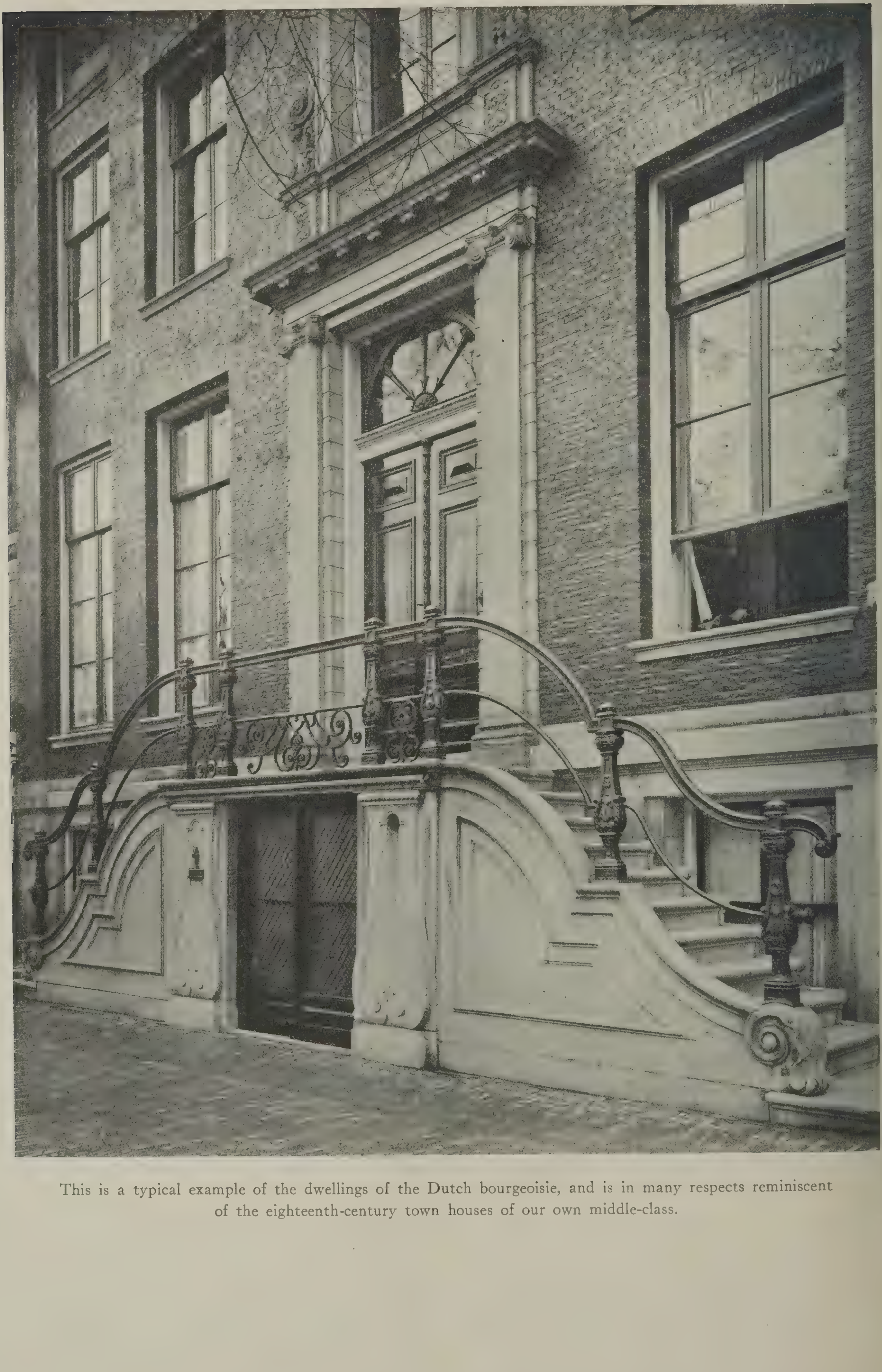
With which is incorporated "The Builders' Journal."



CARSHALTON WAR MEMORIAL
BOURCHIER, TATCHELL, AND GALSWORTHY, FF.R.I.B.A., ARCHITECTS.

27-29 Tothill Street, Westminster, S.W.1.

Amsterdam: Entrance to an Old House on a Canal



This is a typical example of the dwellings of the Dutch bourgeoisie, and is in many respects reminiscent of the eighteenth-century town houses of our own middle-class.

THE ARCHITECTS' JOURNAL

27-29 Tothill Street, Westminster, S.W.1.

ednesday, October 10, 1923

Volume LVIII. No. 1501

Preservation or Demolition?

ARCHITECTURE differs from the other arts in many respects, but in none more fundamentally than that in which it subserves to national needs. So long as a building fulfils the purpose for which was created it remains complete; so soon as it ceases, or artially ceases, to fulfil that purpose, or no longer fulfils hat purpose adequately, it loses its completeness. And hen it is that the extremely complex question as to its reservation may arise.

The question presents itself constantly in many forms. ften the solution is so simple that the very existence of an ternative is scarcely considered. Let us take a hospital s an example, built, let us say, eighty years ago. Here we nd that although the building may have been the most erfect of its kind, the constantly changing standards of ygiene and the advance of medical science have now ndered the building inadequate, inefficient, in fact, in-omplete, but the question of its demolition will probably epend upon finance and expediency, architectural con-derations, as the term is generally understood, will not ise. Now, however, let us take as an example a fine uare of large eighteenth or early nineteenth century ouses. The demand to-day being for small houses these rge ones are unoccupied. They have ceased to fulfil e function for which they were intended, indeed, the very yle of living for which they catered has passed away. is possible that in some modified form they could still d a further life of usefulness, but the question of their tal demolition and replacement by blocks of flats or the e, must arise sooner or later, and here we find the archi-tural consideration appearing as a factor. A similar uation arises with a street of beautiful shops which no ger meets the commercial needs of the day. Although inions may vary as to the beauty of the new Regent reet, few will contend that the preservation of the old gent Street, despite its supreme beauty, was under the cumstances, possible.

With the City Churches the problem arises in a different se. These buildings, too, fail to fulfil their function, not, with the hospital, because they have become inefficient, owing to the withdrawal of the community whose ds they served. They are, therefore, incomplete; they husks. And since they stand on very valuable land the stion of their demolition inevitably arises. But these rches are of such rare beauty and interest that their servation solely on these grounds needs, and is receiving, y serious attention. Here, then, we find the architec-al consideration at its strongest.

nd so it will be found that there is, in fact, a scale of es for buildings whose demolition is under considera-, beginning at its lower end with those whose architec-al merit is negligible, and culminating with those whose itectural merit or historical interest is so great that it weighs any pleas for demolition based on utilitarian or financial grounds. And this problem is constantly arising, not only in our towns, but in the country districts.

It is quite apparent that no hard and fast rules can be established for the guidance of those whose task it is to decide whether a building is to be preserved or to be demolished. The broad consideration is this: will the community and posterity be better served by the preservation of this building, in spite of the necessary sacrifices, than by its demolition? Now how is this great question to be decided? It is surely obvious that such a matter cannot be left to one man, of whatever impeccable taste or archæological knowledge, for we are dealing here not with facts, but with opinions.

It would seem, therefore, that the question must be dealt with by some committee composed of representative men; men who are honoured and respected in their community no less for their sound sense and good taste than for their integrity. The duties of such a committee would not be restricted to advising as to the preservation or demolition of particular buildings, but would extend to all matters affecting the public amenities. Thus it would criticize schemes of development, suggest the removal of offensively placed advertisements, give advice in such matters as the design of lamp-posts, sand-bins, and the like. But however great its labours they must be absolutely disinterested and without emolument. Nowadays when commercial creeds are spreading with rapidity, the public are becoming quite rightly suspicious of paid committees, every member of which may have his own axe to grind. To-day, although the claims of the community are recognized, there is less willingness than heretofore on the part of individuals to devote time and labour to social work.

The kind of committee, then, that we have in mind would probably have as its chairman a respected member of the corporation or district council, and it would comprise local men of accepted taste—architects, craftsmen, men respected in the world of commerce, and other leading public men. It would have no statutory power whatsoever, indeed it would have no recognized or official position. Yet, nevertheless, gradually its decisions and opinions would become respected, that every question of importance affecting the district would be referred to it, and its decision would be accepted without question.

In considering, for example, a question concerning the preservation or the demolition of a particular building it would carefully sift the evidence of those favouring demolition and those favouring preservation, it might obtain an outside expert opinion as to the particular claims of the building for preservation, whether it was a rare example of some style or epoch and the like. And from all this evidence it would make out a careful and unbiased case for or against demolition, always remembering that it is the good of the community as a whole which is the ultimate touchstone. The past must be preserved only insomuch as it helps the present and may be considered likely to help the future. Nothing of the past has any value except in its relation to the certain present and the possible future.

One of our largest cities already possesses a committee of the kind that we have in mind. We refer to the Birmingham Civic Society. This Society, the services of whose members are entirely honorary, has already become a recognized body whose opinions and advice are eagerly sought for, and already it has done much to preserve and to increase the amenities of the city. Birmingham, it is true, has always had an alert civic consciousness, and among her citizens there have always been men keenly aware of their commercial responsibilities. There is, however, no reason why her example should not be taken up so that every district has its civic society or its committee of public amenities, which, by dint of hard work, wise and disinterested decisions, shall at length be recognized and valued, and its advice sought in all matters affecting the welfare of the town or district.

In the past the architect has rarely figured prominently in public affairs; this fact is, indeed, largely responsible for the neglected position in which he finds himself to-day. These societies and committees will give him his opportunity, and his contribution should be the most valuable of any, for his outlook, both from his training and his profession, is a happy combination of the practical and the æsthetic.

The Condition of Waterloo Bridge

"London Bridge is broken down," runs the nursery rhyme; but we search in vain the juvenile poetry books for any mention of Waterloo Bridge, which, if outward appearance counts for anything, is in far greater danger of a breakdown. No one of any sensitiveness can cross Waterloo Bridge on foot nowadays without feeling something of that sinking sensation associated in youthful memory with the downward rush of the switchback railway car. The pavement and roadway are distinctly, even alarmingly, undulating throughout the length of the bridge—the rises corresponding with the piers and the falls with the centres of the arches. The parapets add to the sense of insecurity by not only going up and down, but by leaning over—now inwards, now outwards. Rennie's great arches appear to stand as firm as ever, but widened joints and fractures in the granite of the parapet wall seem to indicate some amount of settlement in the infilling of the space within the spandrels of the arches. It is not surprising that, after nearly a hundred years of service, the bridge should begin to show signs of wear and tear. The wonder is that these signs have not appeared earlier; for the bridge, for many years past, has been carrying loads that could not possibly have been foreseen by Rennie when he designed it. Traffic across it is steadily increasing in volume, and there is no prospect of any diminution while London continues to be so inadequately provided with bridges. The condition of Waterloo Bridge is a strong argument in favour of the Charing Cross Bridge proposal. The dangers of delay are manifest to all who care to see.

The Improvement in Lettering

No one who has kept an eye on the fascia boards of shop-fronts can have failed to be struck by the improvement that has taken place within recent years in the art of public lettering. The vogue of the clumsy block letter, and the distorted and elaborately decorated variant of it much affected by the imaginative sign-writer, is obviously passing away. Much of the credit for this very welcome improvement may be awarded to architects, who, though themselves (may it be whispered?) often among the offenders about a decade ago, have now, generally speaking, given whole-hearted allegiance to the Roman model or to one or other of its eighteenth-century variants. Architects should and do lead the way in this matter of lettering. In the case of th County Hall Mr. Ralph Knott has seen to it that the name directions, and notices on the walls and doors are of properly dignified character, the services of Mr. Percy Smit the etcher, who has made a close study of the art of lette ing, having been enlisted to this end; Mr. Harvey Corbe has insisted upon a uniform standard of lettering for th name panels in the entrance hall of Bush House; while th Architects' Department of H.M. Office of Works has set a exemplary standard for Government offices. If a gener criticism may be allowed (there is, of course, no referen to the instances cited above) it must be directed against th tendency of lettering to become too attenuated. Delica of outline is all very well for close range, but it loses signi cance on a distant view. In lettering, as in architectur composition, scale and proportion must be considered if th parts are to be properly related to the whole.

Sooty Cities

Coal-smoke as the enemy of architecture is the theme an article which Professor Reilly contributes to a g industry supplement of "The Manchester Guardian Though coal smoke may not necessarily cause bad arch tecture, it is undoubtedly a direct incitement to it; for wh inducement has an architect to produce refined work wh he knows for a certainty that within a few years it will smothered over with a thick coat of soot? What we ha in our smoky English towns is (in the words of the Professo "heavy over-ornamented buildings trying by over-empha in every direction to force their way through the grim and in a clean, smokeless town, like New York, light g buildings with clean line and surface and delicate orname leaping up to the light and trusting to their general sha and mass for their main effect. The sunny city (he say with a nice use of imagery) brings about bright, clean-shav buildings; the smoky one bewhiskered coalheavers grinni at us in their oily facetiousness." The Professor drea of a time when, with soot eliminated and everythi clean and bright, the architect guilty of a vulgar moul ing or an over-emphasized piece of ornament will cut by his fellow architects and regarded by his lay frien as a man of bad and flamboyant taste. Many prac tioners, we fear, are destined to lose their friends wh we reach the sootless millennium. Apart, however, fr the abstract question of architectural design, coal smo should be put an end to because it destroys buildings. Frank Baines, in his evidence before the Committee Smoke Abatement, stated that the cost of upkeep of building would be reduced by at least half if the atmosph were smoke-free. The material damage to Manchester its own smoke has been calculated at no less a figure th £1,000,000 a year.

Hotels or Flats?

Hotels or flats? That is the question. Hotels, it wo seem, are not in demand, in spite of the fact that a number of hotel buildings taken over by the Governm during the war have not yet been, and probably never be, returned to their original service. The steel skele in Piccadilly has for long borne the legend "Proposed for the Green Park Hotel," but this is not to be; building is to be turned into service flats. The May district, it may be noted, is rapidly losing its aristocra exclusiveness; one after another the big mansions appear and blocks of flats rise upon their sites; or th are sold, to be converted to new uses—women's clubs one or other of the higher and more refined forms of co mercial enterprise. But this falling off in the building hotels is inexplicable. Either London must be attract fewer visitors or the existing accommodation is unco fortably overcrowded. The latter, we imagine, must the true state of affairs. We have yet to learn that ho keeping is an unprofitable business, so why this coyn on the part of promoters?

MONTHLY CAUSERIE

Joking Apart

Ugly is that Ugly Does

THE daily Press, egged on by the Architecture Club, is at last becoming conscious of the existence of the Mother of the Arts, and is beginning to offer small courtesies to that lady. Thus, a opular morning paper recently addressed itself to the uestion: "Why ugly houses are built," and solved the roblem by quoting the opinion of "an architect," who formed its readers that the existence of ugly houses was ue to builders making use of plans published in the build- g papers. It is satisfactory to have the perplexing number the periodicals addressed to architects and builders thus early explained, and, as knowledge from the very fount is e best esteemed, it may be assumed that a section of the ıblic has learnt something it will not readily forget. he unnamed architect was further reported as saying that cal authorities could prevent such plans being carried ut when they were structurally unsound or insanitary, ut that the only radical cure for the erection of the ugly, nstable, and insanitary houses propagated by the building ıpers was for the public to refuse to own them or live in iem. This picture of the mass of the British public as elpless, protesting victims of builders whose native ompetence has been sapped and taste degraded by close udy of the building papers is so fatuously perverse that ne can only laugh; but if the Architecture Club is to be sponsible for making us laugh it must be responsible also r seeing that we laugh on the right side of our mouths.

* * * * *

Everyone agrees that many ugly houses are built; but who n say what sort of house it is which the readers of popular ily papers regard as ugly? To review the subject of blic taste in building is to be confounded. No less ltivated a writer than Mr. E. V. Lucas openly challenges inion by stating that he regards the Record Office in hancery Lane as one of the two finest modern buildings London; and I am well acquainted with a retired colonel the Royal Engineers who used to travel up to town every orning, and who confided to me that his daily crossing of aterloo Bridge was made painful to him by the unampled hideousness of Somerset House. Another friend mine accidentally laid bare to me the directive mechanism his sense of the beautiful when he was invited to admire antique brass fender I had lately acquired. "I don't e it," he said bluntly; and then went on to explain: horrible old aunt of mine had one exactly the same when was a boy." A large, and I fancy increasing, number of rsons actually prefer an imitation of a building material the thing itself, as though the ingenuity and particularity the counterfeit sublimated authenticity, just as a paperight exactly simulating a penny bun with a fly on it is emed more delightful to contemplate than an actual bun d a real fly. Beautiful eighteenth-century houses are jected to as "plain," or "like a doll's house," and people nble over one another to acquire a ramshackle and invenient house at an enhanced price merely because the serable place has obviously been converted from an oast use or a mill, or a barn, or, conceivably, a range of pigs. Such makeshift domiciles are spoken of, for some scure reason, as "delightful houses," and all their inveniences and shortcomings are looked upon as special rits. "The chimney smokes! Yes, but then the fireace is the sheep-dip! They pushed the sheep through t very arch. The beam you knocked your head against t now is part of the old manure slide! Isn't it all pertly fascinating?" The psycho-analyst could, perhaps, ibit the principle underlying these preferences, but I reduced to prostration when I try to do so. The fact to be recognized is that an ugly house can be readily defined and known directly it is seen; and it is true to say, not only that the public, as a whole, dotes on ugly houses, but that the majority of ugly houses have been expressly built to meet the demands of the public, by builders long experienced in courting public taste. What then exactly is an ugly house? And why does the public desire ugly houses, and usually refuse to live in a house that is not ugly as long as an ugly one is available?

* * * * *

The beauty of a house, then, as of all other buildings, does not depend upon its pleasing prejudices of the eye, but upon its appeal to the mind: the house that is ugly is the house that is unfit. The monstrous affectation of a cottage which supports no associations of a cottage in its size and luxurious appurtenances is ugly, however erudite its architectural forms may be; and the microscopic "ideal home" of redundant frills and no reality—which reminds us of the elaborated birdcage in which the linnet marvellously draws its own water—is also ugly. It is unnecessary, however, for any house to be ugly. Two hundred years ago our villages, towns, and cities were uniformly beautiful; so far as they remain to us they are so still; and there is no reason why they should not now be entirely beautiful as, for instance, is Bruges, which, though constantly rebuilding and containing few buildings that are architecturally memorable, is entrancingly lovely. Ugly houses, therefore, are unnecessary; they have come into existence only during the last hundred and fifty years, and the reason for their ugliness is their unfitness. It appears therefore that during the last century and a half a preference has arisen for ugly—or unfit—houses. No house can be ugly which has been properly built by competent builders with the single motive of honestly meeting the decent self-respecting needs of human beings, and it is clear that two hundred years ago houses were always so built. Singleness of purpose invests the homes of our ancestors, humble or rich, and for this we delight to contemplate them. The needs of human beings are still decent and self-respecting, so that the existence of ugly houses must be due to incompetence or dishonesty of purpose in the builders. Competent builders are, as we know, at the service of all; and, accordingly, ugly houses must be attributed to dishonesty of purpose in those building them.

* * * * *

I have already said that the public demands ugly houses, and I now contradict myself! Do I? The savage demands gin, the pleasure-seeker morphia, the housemaid sham jewellery, the shopgirl spurious furs; but who created these demands? Assuredly the "gin-runner," the "dope smuggler," the tally-man, and the tout, and they are accountable by their activities for the depraved, perverse, enervated and ignorant taste which nourishes the demand. The demand is not that of customers, but of victims. Each of these demands—like multitudes of others—is the result of sly, skilful or deceptive exploitation of the public by individuals whose only motive is to gain money; no such needs would exist if the honest motive of serving the community, instead of the dishonest purpose of preying on it, subsisted. In similar, but more intricate, ways which cannot now be examined, the public has been deluded, misled, and flattered into a preference for ugly houses; whereas, if the motive of capable building with a single-minded purpose prevailed, as it did two hundred years ago, our houses would be beautiful, and the public would have been guided to a love of that beauty and educated to recognize ugliness and to hate it.

KARSHISH.

The Architectural Association in Provenc

By G. D. GORDON HAKE, A.R.I.B.A.

THE choice of Provence for the annual excursion of the Architectural Association proved most popular. Between thirty and forty members left London on September 6, bound for that wonderful land of sunshine and romance. The journey of twenty-four hours is convenient but trying, owing to the increasing heat as one travels south. Avignon was chosen for the headquarters. The Hotel du Louvre, where the party stayed, is noted for its dining-hall, which was the mediæval Chapel of the Templars. Much could be made of this Hall by a careful scheme of decoration and lighting; at present it is cold and unfriendly.

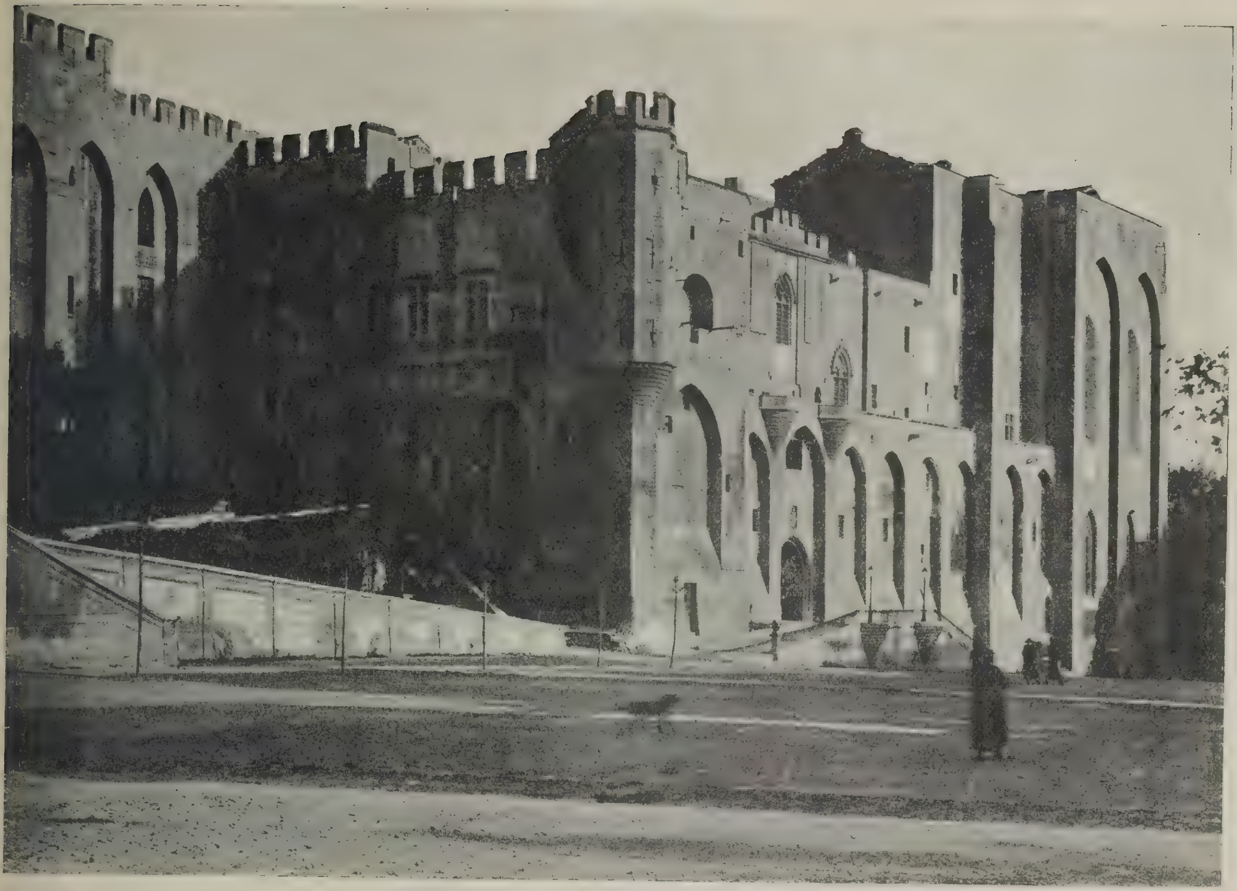
A Corner of the
Palais des Papes. Avignon. 1923 G HAKE.

A CORNER OF THE POPES' PALACE, AVIGNON.
(From a water-colour sketch by Gordon Hake.)

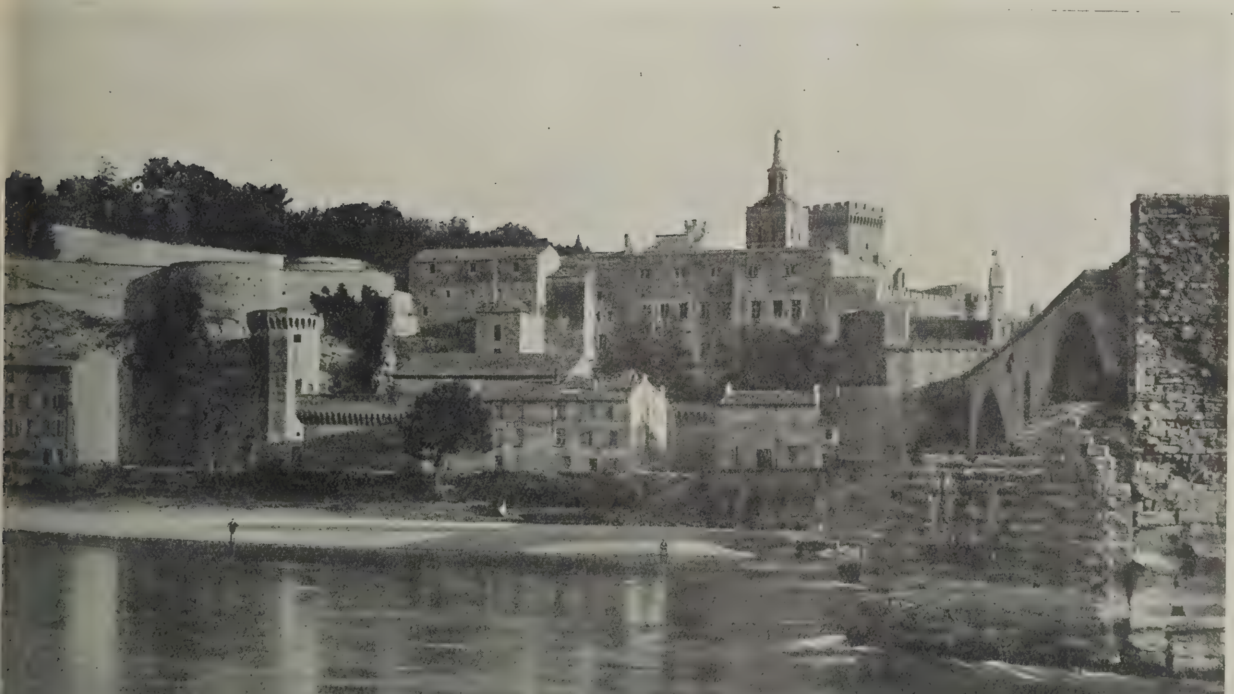
Avignon and Villeneuve-les-Avignon, on the opposite bank of the Rhône, are so full of charm and interest that the whole time might easily have been spent in these two lovely places alone; but the other gems of Provence had to be seen, so five days were occupied in touring by car and returning to Avignon for the evening meal. This left four all-too-short days in which to explore the "City of the Popes."

That wonderful mediæval pile the Palace of the Popes dominates Avignon. Happily it is now open to the public, for since 1911 a very complete restoration has been, and still is, being carried out. For a century the place been used as barracks, when such magnificent room the Chapel and the Salle de l'Audience were subdiv into three stories. A fine doorway leading to the fo from the main staircase is one of the many architect gems discovered since the work was put in hand. sadly damaged, but the central pier, tympanum, and still retain some fine carving.

The Salle de l'Audience is a vaulted apartment a 160 ft. long, with a central row of clustered shafts. T are traces of frescoes on the walls, and one bay o vaulting is highly coloured. The effect at present bare stone everywhere, relieved by delicate orange yellow on the corbels, the whole apartment lit by green rays, is restrained and charming. Elsewhere fine frescoes and painted wooden ceilings have co light, while under the limewash of other walls is the pr of more. The ascent of the main tower, though ar and cramped owing to the stairs occupying the thic of the walls, is well worth the effort; for once on hig gains an amazing panorama of the surrounding di with the encircling walls and tourelles framing the c Avignon. . . . Below, the sea of mellow Roman

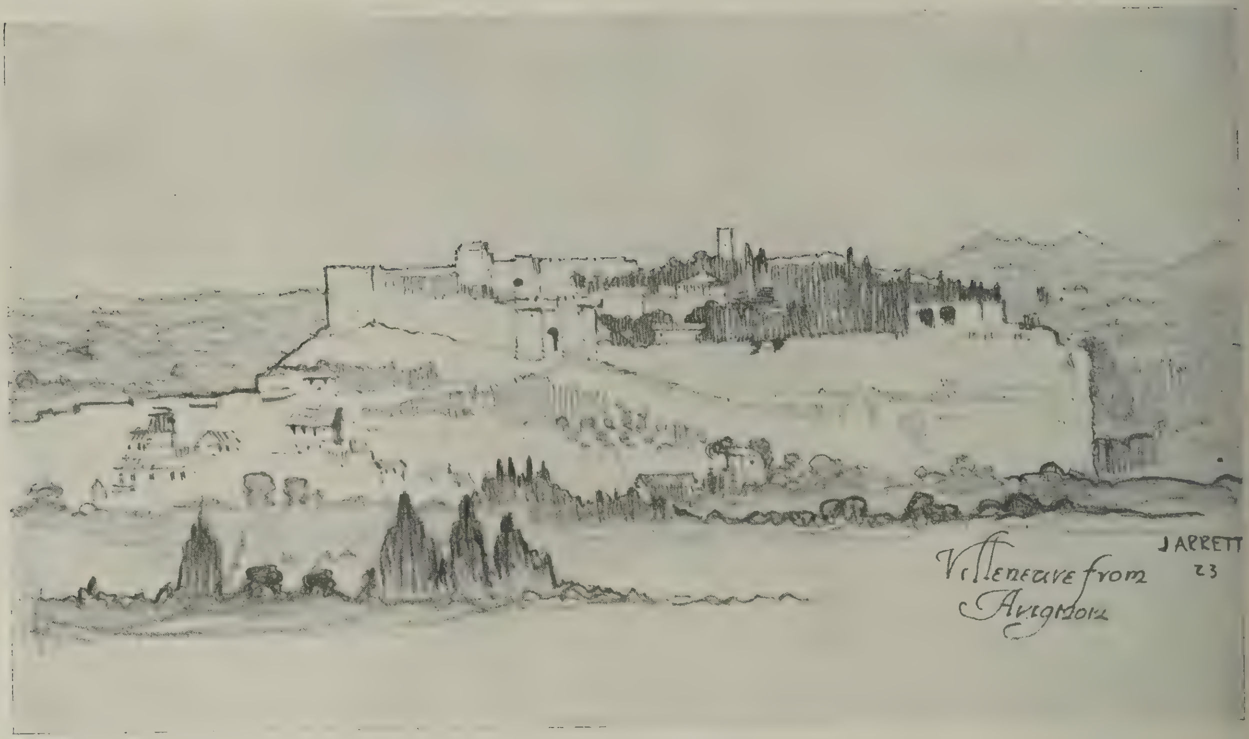


THE PALACE OF THE POPES, AVIGNON.



THE PONT D'AVIGNON AND THE PALACE OF THE POPES.

Photos: F. R. Yerbury.



VILLENEUVE FROM AVIGNON.
(From a pencil drawing by J. S. Jarrett.)

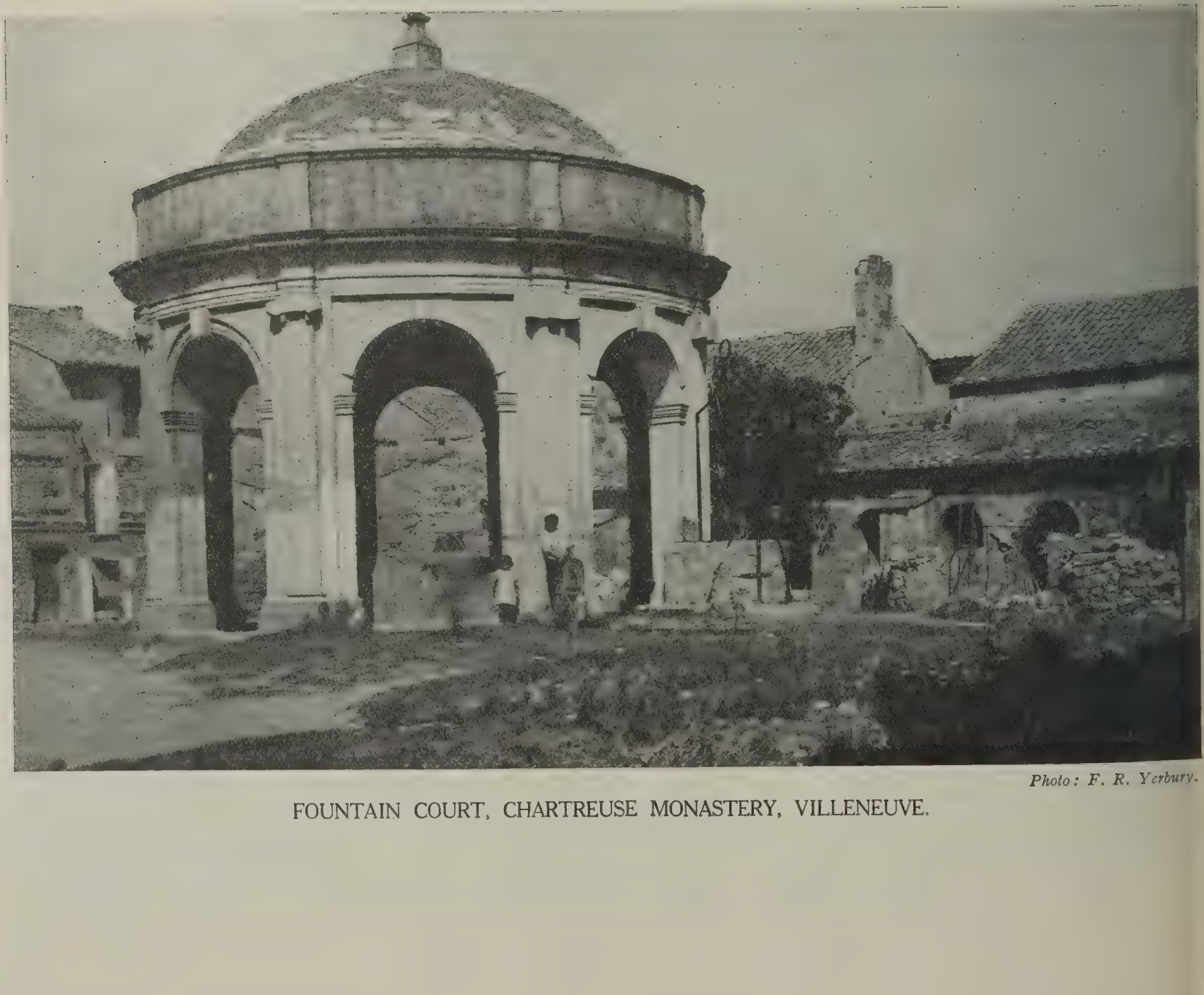
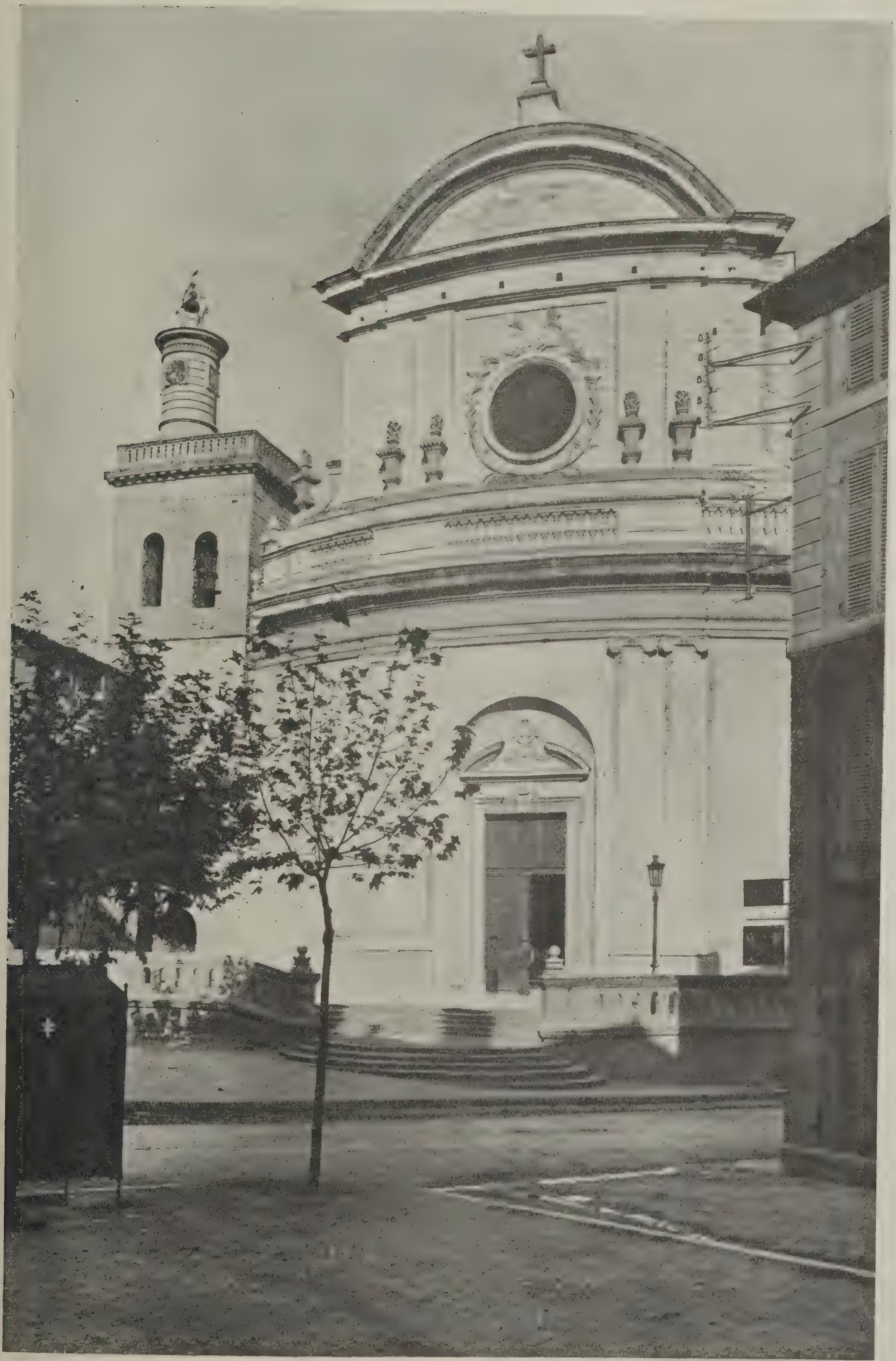


Photo: F. R. Yerbury.

FOUNTAIN COURT, CHARTREUSE MONASTERY, VILLENEUVE.

St. Etienne's Church, Uzés



" . . . Uzés, a fantastic town with an eighteenth-century church whose west front is dramatic and scholarly : a bold intrusion of sophistry into a mediæval setting."

THE LIBRARY
OF THE
UNIVERSITY OF ILLINOIS

ARCADED STREETS IN UZÉS.

roken here and there by tower or spire, and surrounded
y the green and blue of the Rhône valley—above, the blue
ky of Provence. . . . It is hard to realize that October
nearer than August!

It is almost impossible to convey the tremendous effect
scale one gains from the exterior of this building. The
est elevation faces a broad "Place," from which one can
ake a clear survey of the rising groups culminating in the
athedral with its modern gilt figure of the virgin sur-
ounting the tower. From most points of view the juxta-
osition of this tower with the main tower of the Palace
sults in loss of scale and difficult composition.

Above the Cathedral, again, is the rock with its sudden
op of 200 ft. to the river. This spot has been pleasantly
id out as a garden with terraces and seats placed in the
ost commanding positions. The view of Villeneuve from
re is most impressive.

Villeneuve-les-Avignon, which is one and a half miles
m Avignon, was at one time an important port on the
hône, and a frontier fortress. The Fort S. André, com-
etely ramparted, and with a sturdy entrance between
cular towers, is interesting for its mass, and as an
ample of the fortified township. The streets leading up
the fort are wildly picturesque. This fort and the
rtosa below are now taken over as national monuments.
e latter is in a very sad state, but is not too ruined to
w what an entrancing place it must have been. The
in garth, surrounded by the "apartment" cells of this
ler, has an interesting covered circular well-head—rather
ge, perhaps, for so intimate a court. The chapel, which
eing sympathetically restored, has some good vaulting
th large earthenware jars built in for acoustic purposes)
l remains of delicate tracery. The walk back is sheer
, with Avignon across the river flooded in sunset light.

The Roman remains in Provence are in their way
que. They must be seen to be realized. The free
atment of traditional forms and excessive use of orna-
nt, boldly, but often crudely carved, as was seen on the
mphal arch and mausoleum near St. Remy, are two of
characteristics of this provincial work of the Romans.
Pont du Gard and the Maison Carrée, at Nîmes, are so
l known by photograph and description that one
vels, on first seeing them, at the poverty of expression
onvey what the eye and mind see. The amphitheatres
Nîmes, Arles, and Orange show us, each in its way, as
h as Italy can provide. The proscenium at Orange,
n its 300 ft. of screen wall, is extremely interesting.
stage appears to have been roofed. The circus which
placed at the side of the theatre is now being ex-
ated. These two buildings would make a good subject
restoration on paper.

e found that after exploring the antiquities of Nîmes
chief attraction was the splendid garden which occupies
ral acres. Much of the water arrangement is built on
an foundations. A well-preserved relic of Roman work (with an unusual stone-barrel vault) adjoining the spring, probably belonged to the baths which occupied this site. The climax is a hill on which stands the Roman observatory, or tomb, from the top of which one obtains an amazing view. A rushed visit was made from Arles to see the triple porch at St. Gilles—the finest example of Provencal Romanesque.

The surprises of the excursion were, firstly, Uzés, a fantastic town that needs a month of exploration, with a charming old arcaded square and an eighteenth-century church whose west front is dramatic and scholarly: a bold intrusion of sophistry into a mediæval setting. Then Mont Majeure—startling in magnificent ruin—alas, only an hour was spent here instead of a week! One came away with the impression of tremendous scale, security, and romance. Boulbon, with its ruined castle on the hill surrounded by flat-pitched roofs and charming towers—the church used as a stable—was another hour's ecstasy.

At the village of Rochefort we found the public laundry an open-air temple, surrounded by vines, figs, and pomegranates. And Tarascon, with its castle on the plain—river girt on one side and moated on the other—still used as a prison, and therefore inaccessible to the student. Across the river from here is the industrial town of Beaucaire, still dominated by its fine castle above, and full of its mediæval history in its narrow streets. A day was spent at Les Baux, on the Chaines Alpines. This almost deserted village, in the Middle Ages the capital of one of the most powerful countships of Provence, is uncannily impressive. Most of the buildings are rock-hewn. Masonry and rock are so blended that it is difficult to see the junction. The party picnicked in a stone quarry owing to the doubtful weather—the first grey day after a week of sunshine. The effect inside was like some primitive shrine, the fruit and bottles having been cleverly arranged on altar-like shelves.

The road travels took us through much typical Provencal country. Long white roads, mostly shaded by magnificent

Photo: F. R. Yerbury.

OUTSIDE OF RAMPARTS, AVIGNON.

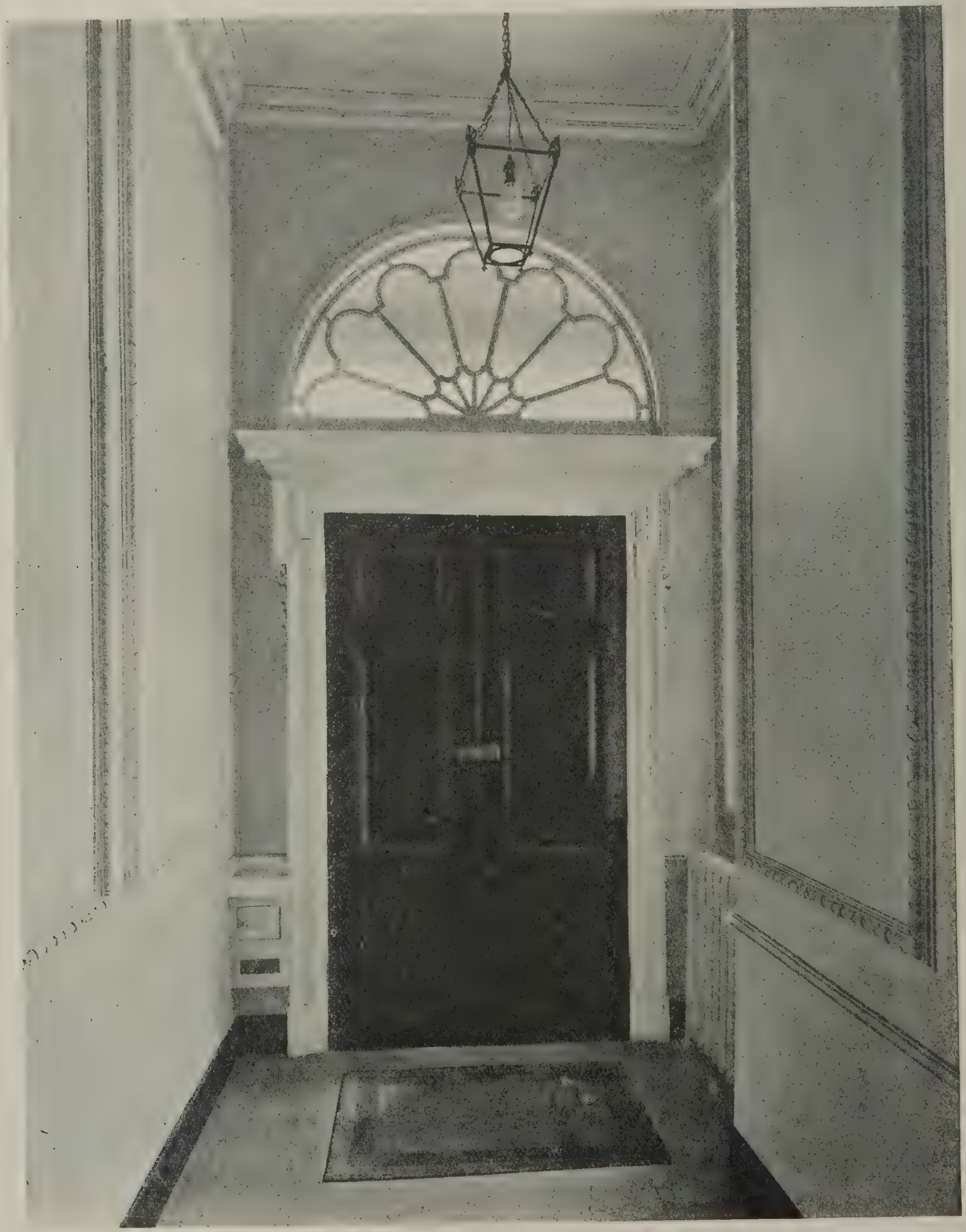
avenues of plane trees, skirted by vineyards, olive groves, and bamboo plantations. The vintage was in full swing, adding further colour to the scene. The colour-washed houses, with their flat-pitched roofs of mellow Roman tiles, the harmonizing net curtains at the doors, the exquisite green-blue of the shutters, and the splash of brilliance from pomegranates or grapes close by, form a splendid background for the picturesque activities of the peasants.

Provence is still unspoilt. If charges are made to visit monuments they are negligible. The people are friendly and care-free. Fruit and wine are plentiful and chea Living is less expensive in proportion than in Italy. I fact, those who visit Provence in autumn for the first tin experience a revelation. The general feeling at the end this delightful visit was, that Provence having been foun its acquaintance must be further developed at the earlie opportunity. Everyone was full of praise and wonder the excellent arrangements made by the secretary of tl A.A., Mr. F. R. Yerbury, some of whose photograpl illustrate this article.

No. 65 Rutland Gate, W.

DARCY BRADDELL, F.R.I.B.A., and HUMPHRY DEANE, Architects

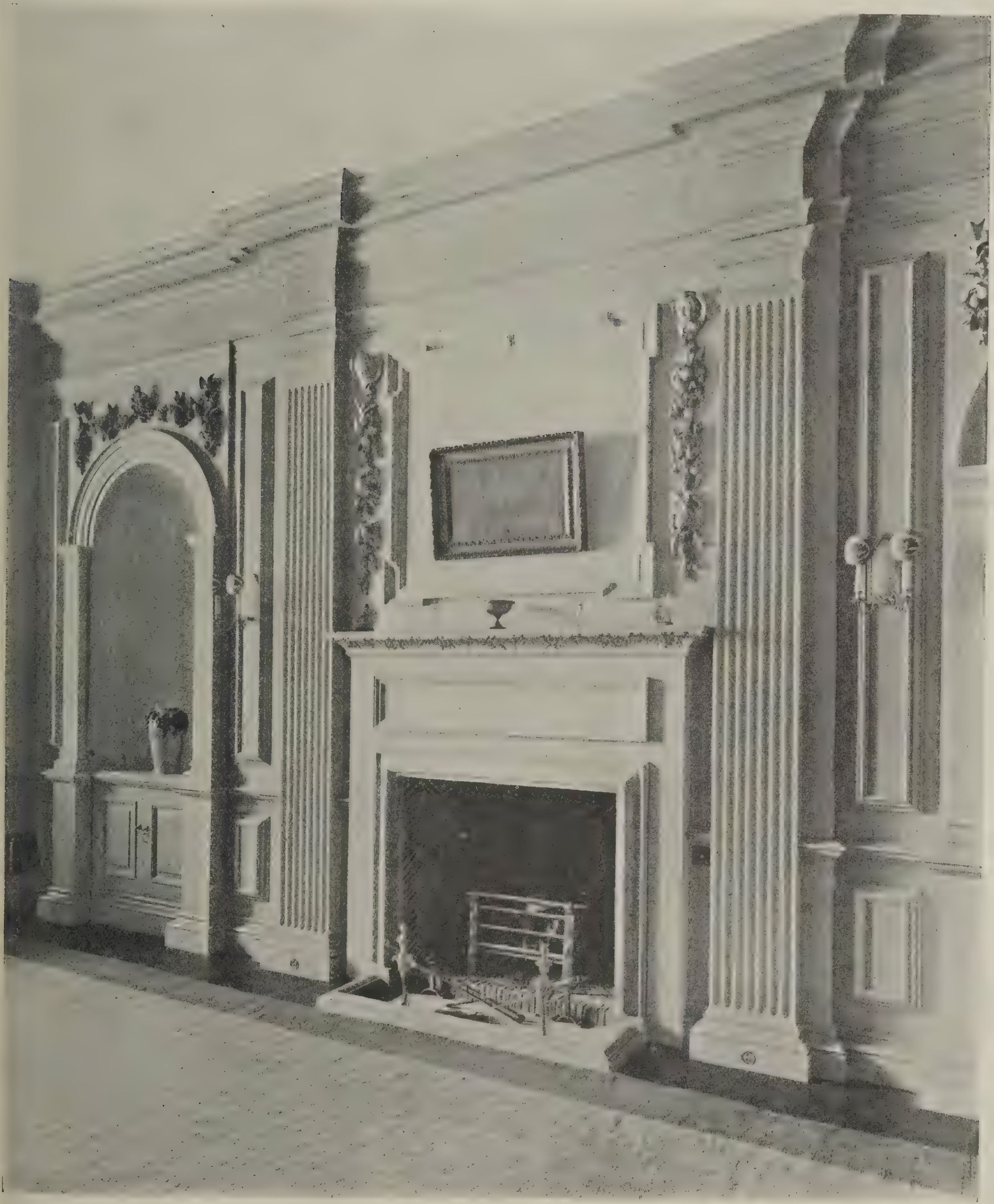
THE accompanying illustrations show parts of a complete scheme of redecoration for Viscount Erleigh's town house, 65 Rutland Gate. The entrance hall illustrated has a front door of mahogany set in a white painted frame with a fanlight above. It took the place of a nondescript door with coloured lead-glazed panels on either side of it. The floor is of Portland stone, waxed and polished, and the walls are set out in large painted panels. Tl other illustration shows Lady Erleigh's boudoir on tl ground floor of the house. This is panelled in the mann of the early eighteenth century, and painted a soft stippl green. All the ornament is carved and the paint on "wiped." The alcoves on either side of the fireplace ha now got two fine white marble urns standing in them, a not the inadequate little pots shown in the illustration.



THE ENTRANCE HALL.

Modern Domestic Architecture. 62.—No. 65 Rutland Gate, W.

Darcy Braddell, F.R.I.B.A., and Humphry Deane, Architects



This illustration shows Lady Erleigh's boudoir, which is situated on the ground floor of the house. The alcoves shown on either side of the fireplace are formed in painted plaster.

THE LIBRARY
OF THE
UNIVERSITY OF ILLINOIS

The Hibernian Branch Bank, Sackville Street, Dublin

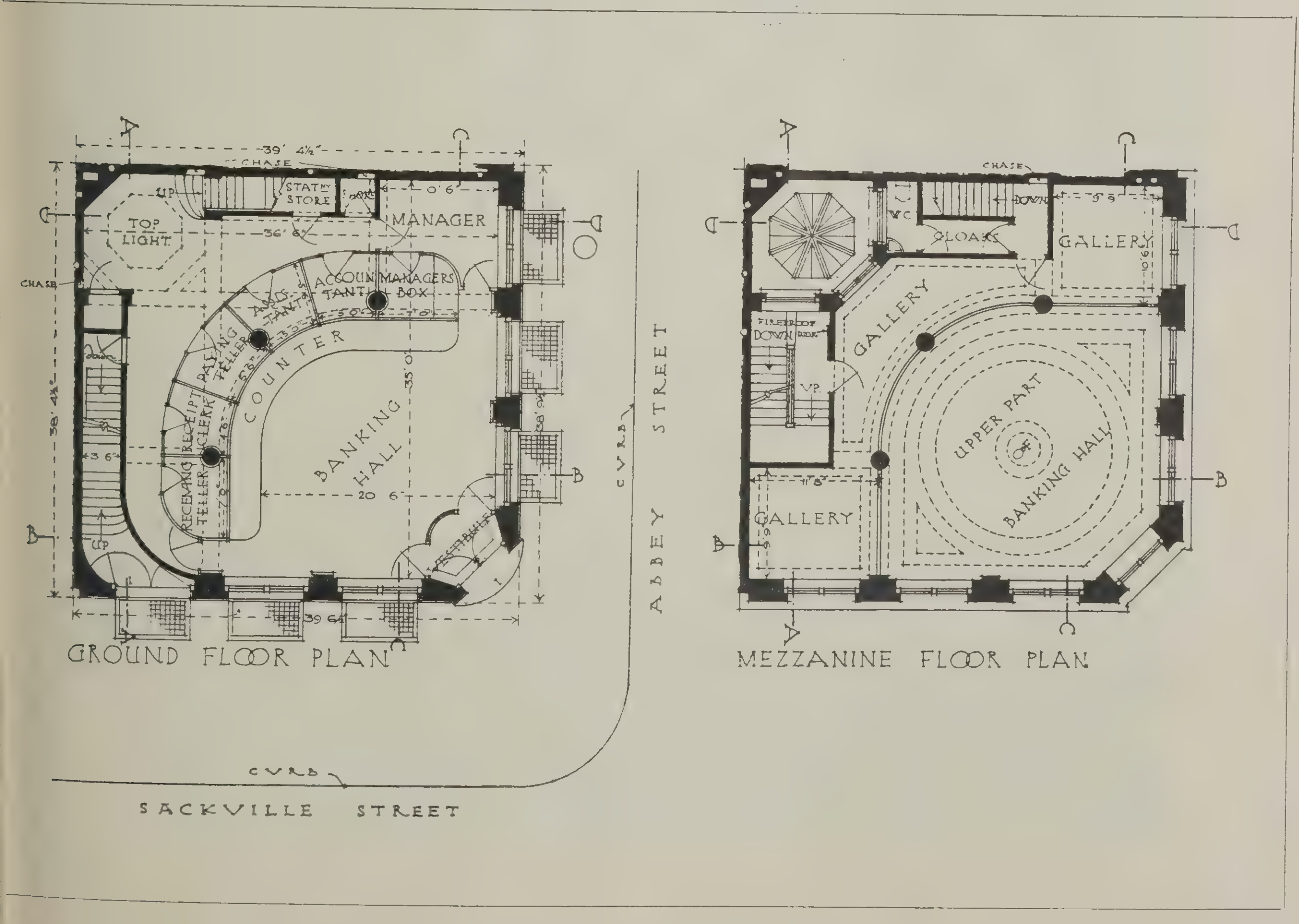
WILLIAM H. BYRNE and Son, Architects

THE Sackville Street branch of the Hibernian Bank, Ltd., has been reconstructed from the designs of Messrs. William H. Byrne and Son, architects. The original building, which had en used for many years as a branch office by the Bank, s completely destroyed during the disturbances which k place in Dublin in the Easter week of 1916. The ilding could not be re-erected on the original lines, owing the fact that during recent years the business carried on d grown to such an extent that greatly increased accomdation was required both for the staff and for the cusners. It was found impossible to increase the area of the to any appreciable extent. The architects, therefore, re confronted with the necessity of providing a mezzae floor, or balcony, for the accommodation of the staff, l more space for the public on the ground floor. introduction of this mezzanine floor presented many iculties with regard to the exterior elevation, but it was ntually decided that a building carried out in the dern French style would provide the best solution. building is faced on two sides in County Dublin granite, l is otherwise constructed of Dublin brick except the ndations and floors which are of reinforced concrete.

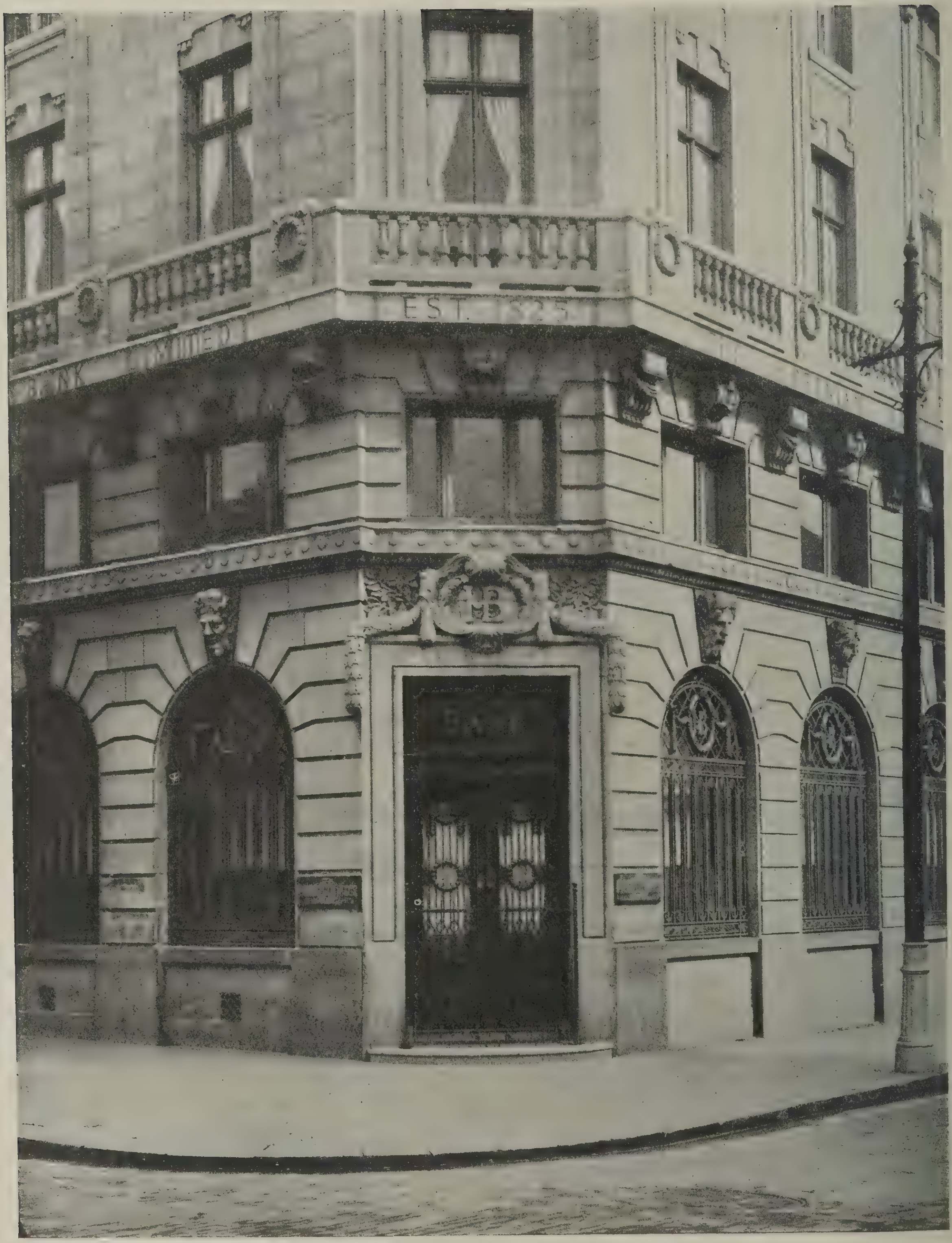
n the basement are two large strong-rooms, a bookm, coal vaults, heating chamber, and lavatories, and ground and mezzanine floors accommodate the staff and public. On the Sackville Street side is the private rance, from which a staircase leads to the manager's quarters, on the three upper floors. On the first floor are the dining-room, drawing-room, kitchen, scullery, stores, and pantries, all of which open off a large central hall; on the second floor are three good family bedrooms, bathroom, and lavatory accommodation, and on the top floor are two good servants' rooms, a large family bedroom, a bathroom, and lavatory.

As the site is only about 40 ft. square, and is hemmed in on two sides by the adjoining buildings, the question of obtaining good light and air to all the rooms and the staircase presented many difficulties which have been overcome satisfactorily.

The late Mr. James Kiernan, of Dublin, was the general contractor, and also executed the special woodwork. The granite was supplied from Messrs. Philip Maguire's quarries, Glencullen. The following other sub-contractors were associated with the work: Messrs. C. W. Harrison and Sons, Brunswick Street, Dublin (carved stone work); The Expanded Metal Co. (reinforced-concrete construction); J. and C. McGloughlin, Ltd., Dublin (steelwork, art metalwork, gates, handrails, etc.); Old Delabole (slates); Henry Hope and Sons, Ltd. (casements and casement fittings); Brookes, Thomas & Co., and Harrison, Dublin (mosaic, marble, and stone flooring); Brookes, Thomas & Co. (electric wiring); Bellman, Ivey and Carter (Scagliola columns and caps); Musgrave & Co., Belfast (heating and ventilating apparatus); Maguire and Gatchell, Ltd., Dublin (strong-room doors, safes, etc.).



PLANS OF GROUND AND MEZZANINE FLOORS.

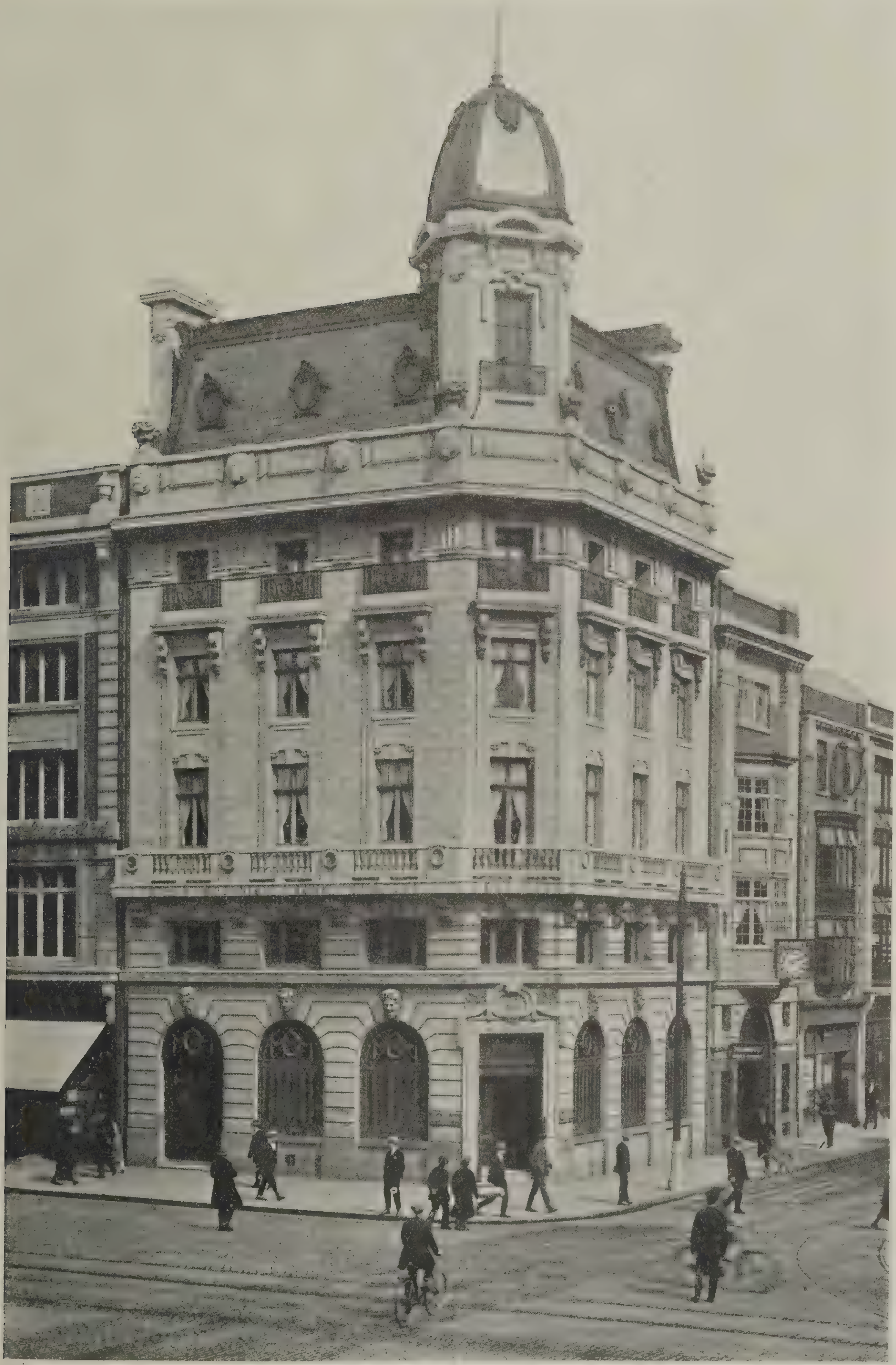


THE HIBERNIAN BRANCH BANK, SACKVILLE STREET, DUBLIN: DETAIL OF CORNER.

WILLIAM H. BYRNE AND SON, ARCHITECTS.

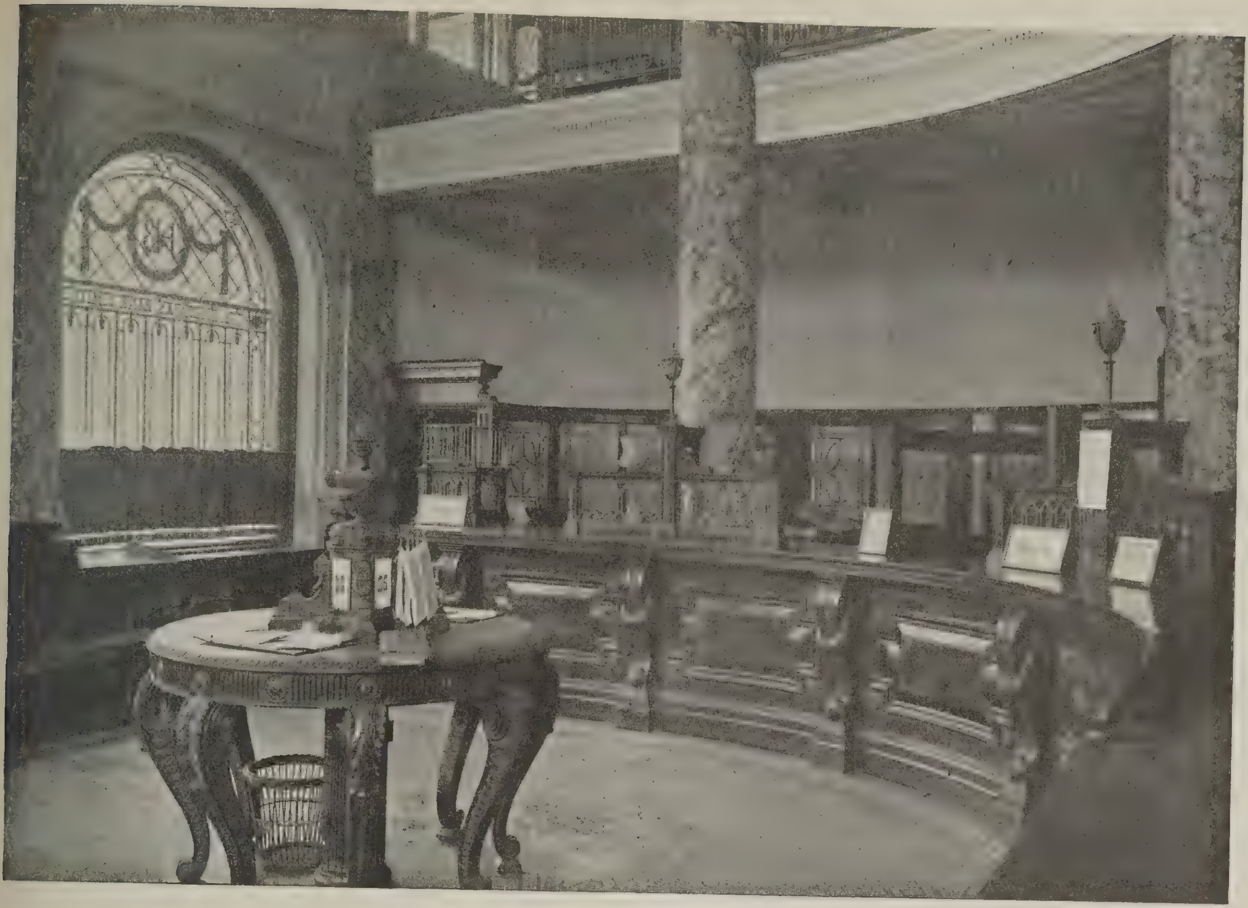
Current Architecture. 201.—The Hibernian Branch Bank, Sackville Street, Dublin

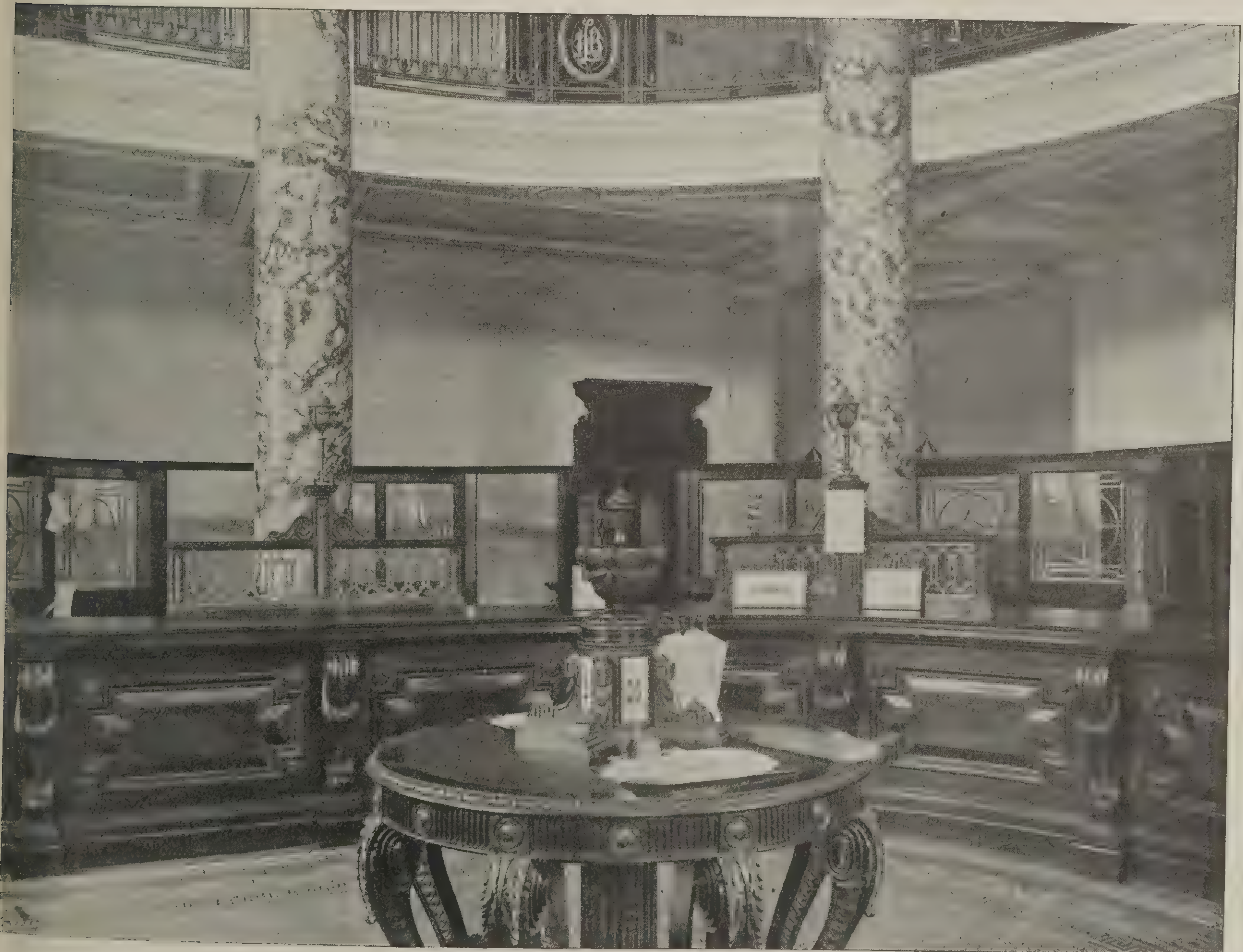
William H. Byrne and Son, Architects



The introduction of a mezzanine floor influenced the architects in their choice of the modern French style for the exterior elevation of this building.

THE LIBRARY
OF THE
UNIVERSITY OF ILLINOIS





THE HIBERNIAN BRANCH BANK, SACKVILLE STREET, DUBLIN: TWO VIEWS OF THE BANKING HALL.
WILLIAM H. BYRNE AND SON, ARCHITECTS.

Contemporary Art

The 68th Annual Exhibition of the Royal Photographic Society

Architecture occupies a prominent place in this admirable and exhaustive show, where most things in the heavens above, on the earth beneath, and in the waters under the earth have afforded material for the minds and lenses of enthusiasts. The results are admirably satisfying from the pictorial, historical, and scientific points of view; as records their value cannot be overestimated, and as pictures most of those which aspire to this form of presentation are entirely successful.

As usual, the fascination of abrupt light and shade is largely exploited, and the President of the society, J. Dudley Johnston, contributes the most striking example in his "Snow Roofs," in which there is a most intriguing treatment of chiaroscuro. Three tones of black, grey, and white are utilized by Lionel Wood in "Sunlight on Barcombe Mill" in a very pleasing way, and the dark stillness of Chaloner Woods' "West Entrance of St. Paul's"; the unostentatious "Corner of Christchurch Priory," by W. R. Heath; the clever treatment of "The Window's Pattern," by J. Van der Pant; and the mottled sunlight of Lewis Banfield's "East of Suez," afford interest as interiors, and "The Font, Winchester," by E. A. Bierman, is also a good specimen in this class.

Outdoor examples are provided by Chris Symes in his effective study of roofs and chimneys "From an Office Window"; by J. McKissack in an "Old Street of Limburg" and in "The Castle Courtyard"; by T. H. B. Scott in his study of "The Apse of Notre Dame at Bruges"; by G. F. Prion in "The Old Gateway"; by Mrs. Ambrose Ralli in "Mistra," an extraordinary study and treatment of a set of curved tiled roofs; by Ernest Tinker in the soft sunlight of "Old Whitby"; by Horace Jackson's brilliant "Fan Street, Tientsin"; by S. Theophilus in his fine view of Westminster, "Evening on the Thames"; by T. H. B. Scott in "Bruges—a Boat Landing"; and by Sydney A. Thomas in his simple but impressive "From the Lock Steps."

"Northbourne Old Mill," by Basil Schon, and the study of cottages by W. Milburn, are pleasing; the brilliant white lights of the roofs of "Arrens," by M. O. Dell, are too high in tone; "Aldwych," by Bertram Cox, too undefined; "The Colonial Office," by H. Y. Sümmons, too like a not very good lithograph; the sunlight effect of A. Langfier's "Montmartre" is very pleasing. These are the works in the pictorial section of the exhibition of an architectural character, but there are two other sections in which the value of photography to the architect is even more pronounced.

The less novel form is found in the extensive series of architectural lantern-slides; the newer and more intriguing, the prints of enlarged aerial photographs provided by the Royal Air Force, and the telephotographs made by Harold Ransom. There are only six of these latter, the subjects of them being St. Paul's, the Tower of the new Port of London Authority buildings, and the south-west corner of Somerset House, taken from Charing Cross Bridge.

The series of aerial prints of the Air Force are extraordinarily interesting. The least effective architecturally, but the most astonishing, is Piccadilly Circus. There was never any doubt as to the extreme ugliness of this hub of London, but no stronger evidence in favour of rebuilding the whole area could be had than is here produced. The most beautiful and instructive aerial photograph is that of Arundel Castle, but competing closely with it are St. Paul's and Windsor Castle, while others only less beautiful are London Bridge and Whitehall, and only less interesting, the House of Lords, the City, Smithfield, and the Khardemain Mosque near Baghdad. For hundreds of years we have talked of the bird's-eye view; never until now have we known quite what a revelation it is. There is a sm
exhibit of colour prints, most of which are not good, b
in "The Harbour," a bromoil transfer, a charming effe
something between a water-colour and a crayon drawi
with good natural colour, has been achieved by Char
Symes.

Modern English Water-colour Society (St. George's Gallery)

No drawing in this exhibition is quite alien from the
tradition, and yet every one is modern in feeling as well
in technique. It is rare indeed to find so consistently hi
a level of draughtsmanship, and the accomplishment is
the highest order, revealing in certain cases a vision of thi
which is not only quite new, but quite convincing.
drawing of "Pump Court," by W. Ratcliffe, is an examp
You feel as you look at it that you have not seen Pu
Court aright before. The same artist has a series of dra
ings of Dieppe which show an altogether better Dieppe th
has ever appeared before in pictorial art; a bright, bre
atmosphere envelops the blocks of picturesque hou
and other buildings, all of which come out definitely
buildings eminently suitable for the colour draughtsma
art. Admirable as Ratcliffe's "Pump Court" is, it is
very close by Charles Ginner's "Fitzwilliam Squa
Dublin," an essay in right-angle lines and rightly appl
colour of the most convincing nature, but in pictures
quality Ginner's "St. Clement Danes" surpasses it. W
have I never seen St. Clement Danes like that? I feel t
my blindness has been rewarded, rather than as it ou
to have been punished, by so fine a revelation, while
particularity of his "Devonshire Country Inn" makes
long to go back there to confirm his pre-Raphaelite vis
of the scene which, however, I know is true. Ethelb
White sees and feels differently, but his "St. Georg
Hanover Square," possesses qualities which place it on
high a level and it would be difficult to find in the work
to-day or, indeed, of yesterday, a more pleasing or m
satisfying architectural drawing, which is not merely th
but an entirely satisfactory piece of pictorial work into
bargain. In fact, of all the drawings that have archit
tural motives, the same thing is true, and half of this exh
tion consists, happily, of such. Francis Unwin's "Crom
is another example; a more challenging one, but not q
so convincing, and the two drawings of the "Place
l'Eglise, Mentone," by Maresco Pearce, produce a curi
effect of representing façades rather than blocks of buildi
John and Paul Nash depart even more from the normal
use buildings less, but the charm of "Dymchurch," and
study of "Trees, with Water Reflections," have gr
charm. Robert Bevan's "Polish Village" and "Lon
Street" take the full value of their subjects in a pecu
and unusual fashion. The fine drawing of Rando
Schwabe is seen in both figure and landscape, but not
architecture. I was glad to see that only very reas
able prices are asked for these very pleasing architectu
pictorial drawings at this new and enterprising St. Geor
Gallery.

Modern French Paintings (Leicester Galleries)

The cult of French art in London has evidently survi
what may be described almost as the glut of the last exh
tion season. Here again, there is a surprising wealth
material, which in several cases rises into mastership.
magnificent "Le Pont Royal et le Pavillon de Flore"
Camille Pissarro is an example. This beautiful archi
tural work dominates the whole gallery, and is an outsta
ing example of the way in which the modernist artist tr
such material. Only less important and essential is Alf
Sisley's "Le Pont de Moret," a large architectural sub
with church and houses painted magnificently in the di

nanner of the more enlightened Impressionists who conerved their sense of the picturesque although they subcribed to the tenets of the advanced masters, thus avoiding he didacticism with which many of those masters nakedly isplayed their æsthetic system.

Even more romantic in intent than Sisley's picture is ieni's "Venice"; a ruddy presentment of well-known uildings, canal, and boats, so well painted and so satisfyig that its lack of modern feeling is easily forgiven. Unrtunately there are but few pictures shown in which rchitecture plays the leading part so far as subject is concerned, but the sequence of styles from the fine naturalism of Boudin in two sea pieces; the magnificent painting, technique, and naturalism of Fantin-Latour's flowers; the richness of the Corot's, Diaz's, and Daubigny's; the romanticism of Monticelli; the old Impressionism of Renoir and Monet; the different aspects of post-Impressionism seen in the works of Jean Marchand and Henri Matisse, and cruel realism of Ganguin make up a demonstration in styles which is seldom seen in a single exhibition. A few bronzes by Frèmiet, Mailloe, Barye, and Rodin are welcome additions to a very fine exhibition. KINETON PARKES.

Durham School War Memorial Competition

The First Premiated Design

WALTER H. BRIERLEY, F.S.A., Architect

SIR CHARLES NICHOLSON, the assessor, has made the following awards in the limited competition for designs for the Durham School Memorial Chapel :—

First (No. 4) : Mr. Walter H. Brierley, F.S.A., of the firm Messrs. Brierley and Rutherford, York.

Second (No. 9) : Mr. H. L. Hicks, of Messrs. Hicks and iarlewood, of Newcastle-on-Tyne.

Third (No. 14) : Mr. W. A. Kellett, of Messrs. Kellett d Clayton, of Bishop Auckland.

Mr. Brierley, the winner, has been asked to carry out his sign, and the work is being proceeded with.

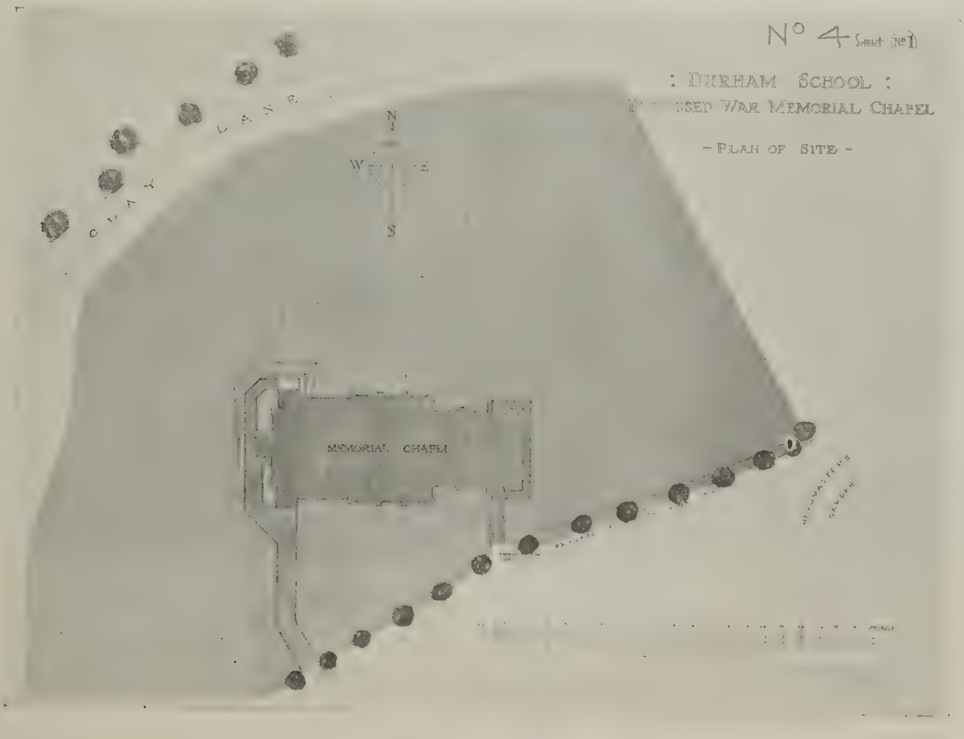
The following report was submitted by the author of the nning design : The site has been carefully inspected and idied from all points of view, and a simple dignified sign on the lines of the college and castle is considered most fitting crown to the top of the fine hill so wisely osen for the School War Memorial.

The plan has been carefully thought out and arranged to et the requirements of a school chapel, and consists of a le nave and chancel under one continuous roof, and short nsepts, which could be used for junior boys or small congregations, a wide open narthex at the west end with an organ gallery over it, and low cloister-like spaces near the entrances for hats and coats. The aisles are planned as passages only, and practically extend all round the chapel.

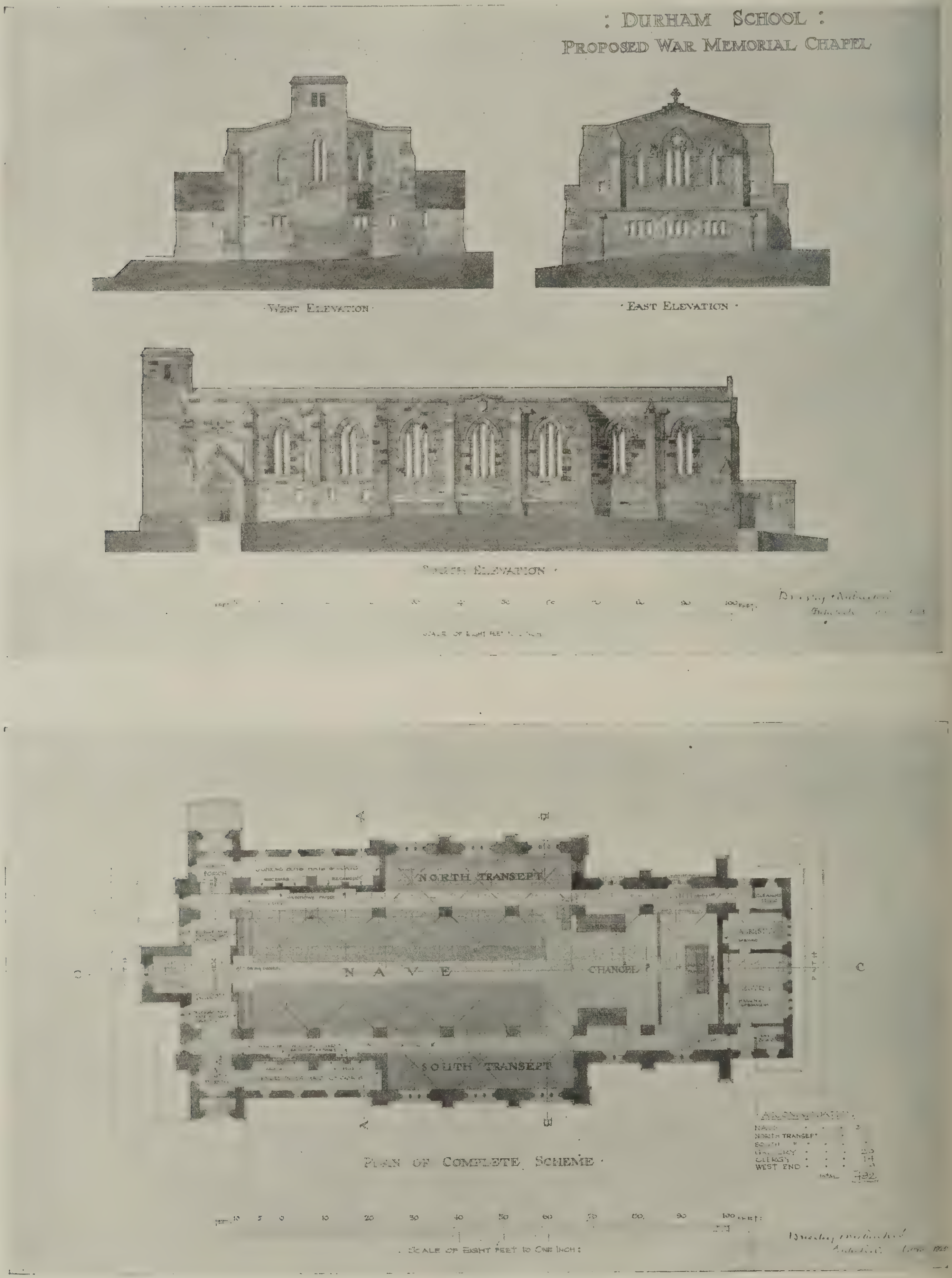
The seating is arranged so that no seat is more than four away from a passage, and the whole of the congregation is under the supervision of the masters, for whom elevated stalls are placed at the west end. It will be seen that the whole of the congregation are in sight of the chancel and pulpit.

It is not clearly understood whether the condition that "ample room must be provided for boys' hats and coats, etc." means that there must practically be a peg or place for each boy attending service, viz., an eventual total of 450, but provision for that number has been made by means of the two low cloister-like spaces opening off the entrances. These could, however, be omitted without interfering with the design, if the recesses also provided for hats and coats in the narthex are considered sufficient.

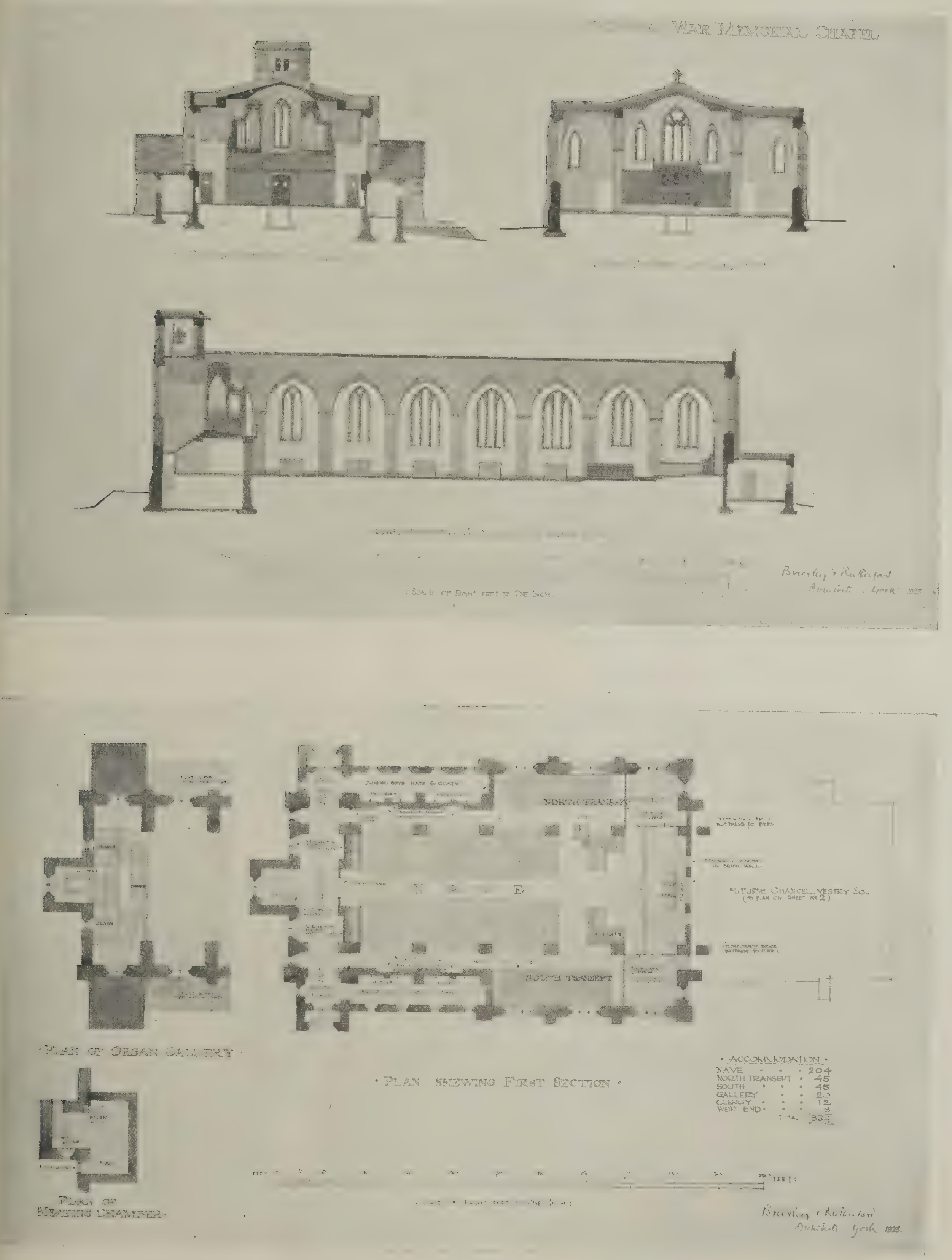
Attention is called to the economical way in which the building is planned to fit the levels of the site, to the convenience and spaciousness of the entrances, and to their



PLAN OF SITE.



DURHAM SCHOOL WAR MEMORIAL COMPETITION: FIRST PREMIATED DESIGN
WALTER H. BRIERLEY, F.S.A., ARCHITECT.


WAR MEMORIAL CHAPEL
Scale of Eight feet to One Inch
Brierley & Rutherford Architects, York 1923
JUNIOR BOYS HATS & COATS
NORTH TRANSEPT
NAVE
SOUTH TRANSEPT
BUTTRESS TO PIER
IN BRICK WALL
FUTURE CHANCEL, VESTRY &c. (AS PLAN ON SHEET Nº 2)
TEMPORARY BRICK BUTTRESS TO PIER
· PLAN OF ORGAN GALLERY ·
· PLAN SHEWING FIRST SECTION ·
PLAN OF HEATING CHAMBER
· ACCOMMODATION ·
NAVE · · · 204
NORTH TRANSEPT · 45
SOUTH · · · 45
GALLERY · · · 20
CLERGY · · · 12
WEST END · · · 8
TOTAL 33
FEET
Brierley & Rutherford Architects York 1923

DURHAM SCHOOL WAR MEMORIAL COMPETITION: FIRST PREMIATED DESIGN.
WALTER H. BRIERLEY, F.S.A., ARCHITECT.

arrangement for the exclusion of the prevailing winds, which are westerly and south-easterly.

The chancel is wide and spacious, with a sanctuary which should be ample for a large gathering of clergy on such occasions as confirmations, speech days, etc. A broad step is arranged at the entrance to the chancel for catechizing, etc.

The vestry and sacristy (containing 310 sq. ft.) are placed at the east end, each in direct communication with the sanctuary and also with the outside.

The chapel is planned so that the erection of the chancel and vestry can be postponed if necessary. A plan is submitted showing how the nave would then be arranged to provide accommodation for 334, including twelve clergy.

The total accommodation provided in the complete scheme is 300 boys in the nave, 140 in the north and south transepts, twenty in the west gallery, eight masters, etc., in the nave, and fourteen clergy in the chancel, a total of 482, the number stipulated being 475.

It is hoped that at any rate the shell of the whole building will be proceeded with at once. A section of a building hardly seems worthy of a public school war memorial.

The plan is arranged for a simple scheme of arched vaulting, which it is proposed to construct of reinforced cement slabs (for colour decoration), which can be executed without any centering.

It is felt that in such a very exposed situation, steep or even pitched slate, tile, or lead roofs would be quite out of place, and the roofs are therefore kept practically flat, and are designed to be constructed of cast reinforced concrete and tile beams floated on the top with cement and finished with Seysell rock asphalt. This construction is silent and durable in a storm, and fireproof, important considerations for such an exposed and inaccessible position.

The internal effect of the vaulting with the deeply-recessed windows will be dignified and pleasing, and will produce good acoustic qualities both for speaking and music.

The chapel will be well lighted throughout, the windows all being large and high up, and there being more than 1 ft. of glass in the windows to every 7 ft. of floor space, will permit of the future insertion of stained glass.

The other materials proposed to be used are cement concrete for all foundations up to the ground level; the walls above ground level to be faced on the inside with common brick (for plastering), and on the outside with local flat-bedded scutch-faced rubble masonry of a warm and broken colour (of yellows, reds, and browns, such as can be seen at the cathedral and college), and the core to be filled in with cement concrete, the whole being well tied and bonded together with galvanized hoop iron kept 6 in. back from the faces of the walls.

The stone for all dressings such as plinths, sills, strings, windows, doors, copings, etc., to be from Dunhouse or Black Pasture quarries. The steps to be of hard York or Craigleith stone.

The internal walls to be plastered (for colour decoration) with a dado of panelled wood or cement up to the window sill level.

The floors under the seats to be of wood blocks, and for the narthex, hat spaces, and passages artificial stone in squares is proposed.

The floor and steps of the chancel and sanctuary to be of hard cream and blue rubbed Yorkshire stone laid to a geometrical pattern.

The organ gallery floor to be of cast tile and reinforced concrete beams to form panels on the underside and cemented and stepped on the top and laid with wood blocks.

The heating chamber is placed under the narthex, the flue from it being carried up the corner of the bell tower, and the steps to it being from outside under the steps to the gallery.

The chapel would be entirely warmed from a low-pressure boiler in the heating chamber, by a combination of pipes and radiators. A subway is arranged for the main circulation along the centre aisle with radiators or coils under the floor, and radiators in recesses in the side aisles and transep served by pipes running to them through the coat lobbie It is also proposed to run a circuit of hot-water pipes roun the chapel at the window sill level to warm the upper air the building and counteract the cooling surface of the glas

Electric lighting would be by pendants in the nave an transepts and by shaded brackets in the chancel.

The cubic contents and estimated cost of the buildin now and before the war, are as follows :—

	Rate per cub. ft.	At Pre-War Rates.	Rate per cub. ft.	At Presen Prices.
Basement and foundation of nave, etc., up to nave floor level, 28,140 cu. ft.	4d.	£469	8d.	£93
Nave, aisles, transepts, with narthex and hat spaces measured from floor level to wall head, 129,073 cu.ft.	7d.	3,765	1 3	8,06
Heating and lighting of above section	—	300	—	50
Fees, etc., of ditto ..	—	500	—	80
Total for first section ..	—	£5,034	—	£10,30
Chancel, vestry, etc., foundations measured up to aisle and vestry floor level, 7,550 cu. ft.	4d.	126	8d.	25
Superstructure of chancel measured from aisle and vestry floor to wall head, 40,500 cu. ft.	8d.	1,350	1 6	3,03
Heating and lighting of this section	—	100	—	20
Architects' and Surveyors' charges and other overhead costs	—	250	—	35
Totals for complete fabric ..	—	£6,860	—	£14,14

By reducing the height of the building 2 ft. the cub contents of the superstructure of the nave would be brough down 9,030 cub. ft., which, at the rates calculated, viz 1s. 3d. per cub. ft. is £565, making the estimated cost of th first section £9,740. This modification will not materiall interfere with the design, or spoil the proportions of th building.

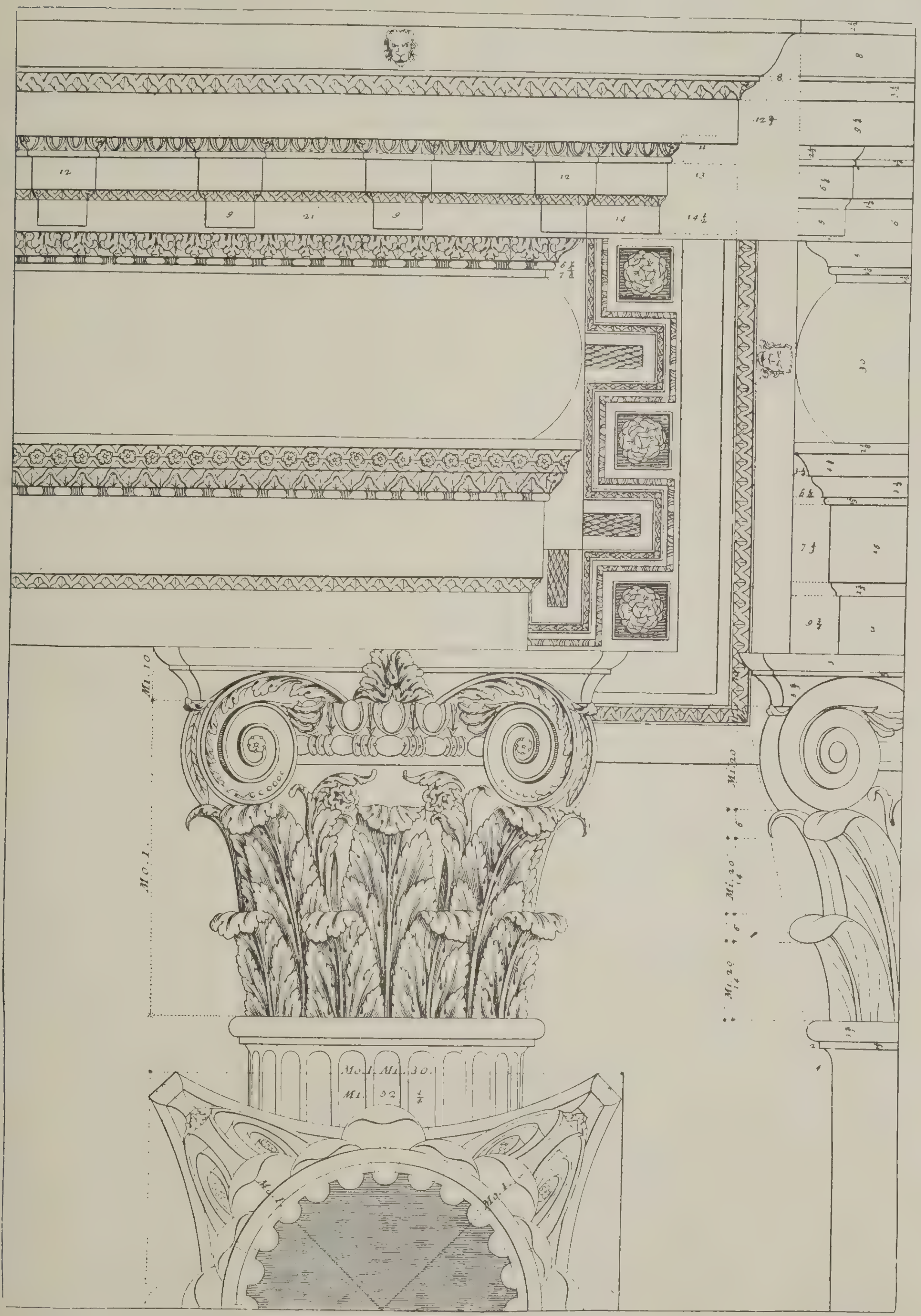
Landscape Gardens at Wembley

Mr. Edward White, who is responsible for the gard grounds which are to surround the buildings at next year British Empire Exhibition, gave some particulars last wee of the progress of the works.

"Before Wembley Park was pulled to pieces," he sai "it was rich in natural beauty, and the architects arrang the lay-out with the idea of preserving, as far as possibl the best of the old trees. There will consequently be suggestion of maturity unusual in an exhibition. Mar trees, of course, had either to be destroyed or transplante and last spring we moved a large number of trees 40 f high, weighing up to six or seven tons. We have secur about 700 forest trees up to 30 ft. in height, and have pr pared for transplanting many large evergreen trees an shrubs, especially rhododendrons." The general garden apart from those of the Dominions and Colonies, and tho of the horticultural exhibitors, will extend to about 30 acre The main central avenue has altogether about 600 yar run of flower beds and borders, fronting the chief exhibitic buildings. The new lake is crossed by four bridges, an contains several islands. The banks are treated in orn mental fashion; a big rock garden has been made, and cascade in the rock work is crossed by a section of Ol London Bridge, which has been presented to the exhibitic by the contractors.

Architectural Details. 47.—A Composite Capital

Measured by Andrea Palladio



In explaining the making of the Composite Capital, Palladio says : "I have seen one of this sort at Rome, from which I have drawn all these measures, because it appeared to me very beautiful and well-contrived."

THE LIBRARY
OF THE
UNIVERSITY OF ILLINOIS

Book Reviews

Sir John Soane and his Pupils

An addition has been made to the publications of the r John Soane Museum. The twelfth of such publications, is entitled "Architectural Education a Century Ago," d gives an account of Sir John Soane's pupils and assistants the later half of the eighteenth and the first quarter of e nineteenth centuries. The author is Mr. Arthur T. lton, curator of the Museum, who has been directly ncerned with most of the previous eleven publications.

To illustrate the education of the young men in the office the architect of the Bank of England, Mr. Bolton notes ecially the career of George Basevi, who died in 1845, d is best remembered as the architect of the Fitzwilliam useum at Cambridge.

Basevi Junior first appears in the Office Day Book quite ddenly, on December 19, 1810.

Soane's pupils, says Mr. Bolton, seem to have visited rks in hand, in pairs, and had to take sketches, which re then entered in a book recording the visible progress the work. They must in this way have acquired an cellent idea of the construction actually in execution. May, 1811, Basevi is able to undertake a perspective w of the famous Triumphal Bridge design of 1776, of ich composition there are so many versions in the Soane, rly three weeks being thus occupied. All the time sevi was with Soane diagrams for the Royal Academy tures were being made, and at times the entire staff of en seems to have been concentrated on a particular ject requiring several sheets of plans, sections, elevations l views.

hese diagrams, accurately drawn and elaborately oured, were further required to be reduced to a small le, as illustrations to the MS. original folios of the Soane tures. The number of great examples of historical hitecture at home and abroad thus drawn by the pupil emarkable, but a list of them would occupy too much ce. They practically cover every class of building, and work of nearly all the famous architects. Of Robert am's buildings, for instance, Basevi draws the Admiralty een, the Record Office of Scotland, and 20 St. James's are; of James Wyatt, the Cobham Mausoleum; of Sir . Chambers, Carrington House staircase, etc.

he last entry of Basevi in the Office Day Book is June 12, 6, exactly four months after the expiry of his articles, ing five and a half years in all.

f this formative period of his life some fifty of the wings then made have now been presented to the Sir n Soane Museum by his grandson. Basevi deliberately royed while still abroad his earlier drawings, and it ns certain that there were originally many more in his folio when he returned.

n an appendix particulars are tabulated of the lives and ks of fifty-five occupants of Sir John Soane's office— eful record of the transitional period during and after wars of the Revolution.

rchitectural Education a Century Ago," by Arthur T. Bolton, F.S.A., B.A., Curator of the Soane Museum. Price 1s. net The Soane Museum, 13 n's Inn Fields, W.C. 2.

Joinery and Carpentry

l the difficulties with which the apprentice is likely to eset in learning the craft of joinery and carpentry are come in Mr. Greenhalgh's book. First, the author s him expert guidance of the use, setting, and testing ols, and then gives him authoritative instruction in all sual aspects of the trade. In each case the description nfined to the most common type of work. For example, e chapter on doors and frames the author describes the making of a common panel door, rightly assuming if the joiner can do that efficiently he can tackle any type with confidence. One of the most important of the book is that devoted to the method of using tools. Every precaution has been taken by the use of illustrations and clear instructions to avoid bad habits, which, if once contracted, may take years to eradicate. The aim of the author to produce at a reasonable cost a book that a foreman or teacher can confidently place in the hands of the average apprentice and say: "Read that and you have all the essentials of the trade," has been fully realized. It should also be found useful for candidates preparing for the examinations of the City and Guild's Institute, the British Institute of Certified Carpenters, and the Worshipful Company of Carpenters. The book is full of valuable information, presented in the most simple manner, and contains 486 illustrations drawn in line for clearness. The author holds first-class honours in carpentry and joinery, and was chief lecturer in building at Halifax Technical College.

E. R.

"Practical Joinery and Carpentry," by R. Greenhalgh. Price 6s. net. George Routledge and Sons, Ltd., Broadway House, 68–74 Carter Lane, London, E.C. 4.

Masters of Architecture

Messrs. Ernest Benn, Ltd., have in preparation a series of monographs on "Masters of Architecture" under the general editorship of Mr. Stanley C. Ramsey, F.R.I.B.A. The growing public interest in architecture has created a demand which it is hoped this series of books will help to meet. Although the subjects of the different books will be very diverse in character, the various authors will all have the same object in view—which is to present a living and modern view of their subject; in a word, to make it vital and to relate it to the problems of our own time. The first six volumes (which will be uniform with the same publishers' well-known "Contemporary British Artists" series, and will consist of an introductory essay and some thirty-five plates) will be: Inigo Jones, by Stanley C. Ramsey, F.R.I.B.A.; Hawksmoor, by H. S. Goodhart-Rendel; Vanbrugh, by Christian Barman, editor of "Architecture"; Chambers, by Trystan Edwards, M.A. (Oxon.), A.R.I.B.A; Bentley, by W. W. Scott-Moncrieff, M.C., F.R.I.B.A.; and McKim, by C. H. Reilly, O.B.E., M.A. (Cantab.), F.R.I.B.A., professor of architecture, Liverpool University.

Publications Received

"The Builders' History." By R. W. Postgate. Price 12s. 6d. net. Published for the National Federation of Building Trade Operatives by the Labour Publishing Company, Ltd., 38 Great Ormond Street, London, W.C.1.

"The British Acetylene and Welding Handbook." Prepared by a Committee of the British Acetylene and Welding Association. Price 7s. 6d. net. "The Acetylene and Welding Journal," 30 Red Lion Square, W.C.1.

"The Church and Parish of St. Dunstan in the East, Great Tower Street, E.C. (formerly known as St. Dunstan by the Tower): Some Account of its Origin, History, and Monuments." By Arthur G. B. West, M.A., rector. Price 2s. 6d. net. Simpkin, Marshall, Hamilton, Kent & Co., Ltd., 4 Stationers' Hall Court, London, E.C.

"The Modern Signwriter." Edited by W. G. Sutherland. Price 12s. 6d. net. The Decorative Art Journals Co., Ltd., 9 Albert Square, Manchester.

'Stratford-upon-Avon: Report on Future Development." Prepared by Patrick Abercrombie and Lascelles Abercrombie. Price 7s. 6d. net. Hodder and Stoughton, Ltd., Warwick Square, London, E.C.4.

"Merseyside: A Handbook to Liverpool and District." Edited by Alfred Holt, M.A., D.Sc. Price 3s. 6d. net. Hodder and Stoughton, Ltd., Warwick Square, London, E.C.4.

"Applied Sanitary Science: Model Answers and Groundwork for the Examination of the Royal Sanitary Institute, the Incorporated Sanitary Institute of Scotland, the Diploma of Public Health, and other Examining Bodies." By Robert Keeley, M.R.San.I., County Sanitary Officer, Lancashire County Council. Price 5s. (by post 5s. 6d.). The Sanitary Publishing Co., Ltd., 8 Breams Buildings, Chancery Lane, London, E.C.4.

A Bungalow at Maldon, Essex

BASIL OLIVER, F.R.I.B.A., Architect

THIS bungalow was built to serve as a lodge for Captain and Mrs. Long-Price's chauffeur, at "Rosmeade," Ulting, Maldon, Essex. As will be seen from the accompanying plan the main entrance to the bungalow is through an open lobby into the parlour hall, from which easy access is obtained by means of a corridor to the other accommodation. On the right of the parlour hall are the two principal bedrooms, in front a spare bedroom, and on the left the bathroom, and a step farther on the living-room, behind which are the scullery, larder, w.c., and coals. There is also a subsidiary entrance, through an open lobby direct into the scullery.

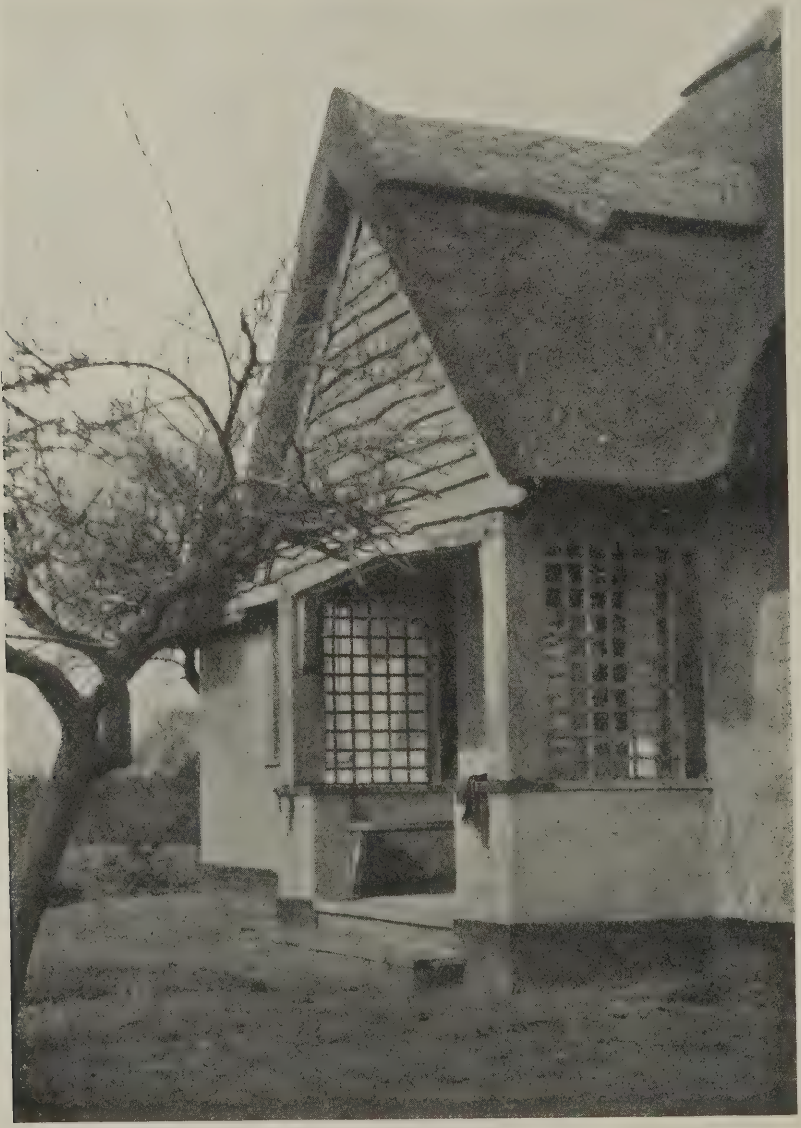
It will be seen that in planning the building the architect has arranged the fireplaces so that the flues meet in one stack in the roof and immediately over the ridge of the main porch. All the sanitary arrangements are confined to one corner of the building.

The charm of the building externally lies chiefly in the simplicity with which it has been designed. Architectur effect has been secured by a delightful emphasis of th main porch, the symmetrical placing of the two window and the use of a particularly interesting roof line. Colo plays an important part in the design, and a pleasa contrast has been secured by a careful selection of th various materials.

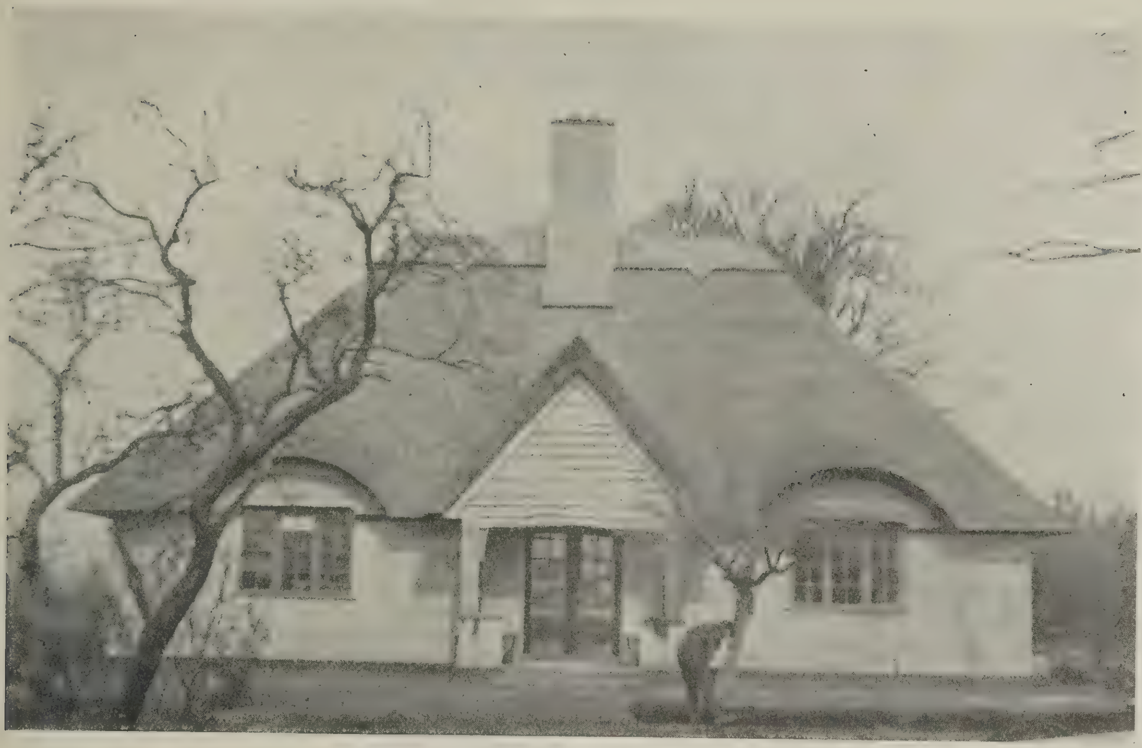
Oak frames for the windows were used in all cases, th two three-light windows on the south front having oa mullions as well. The porch and its seats and trellis we also of oak.

Rough elm-boarding was used in the gable over th porch, above the south windows, and to the roof dormer the north.

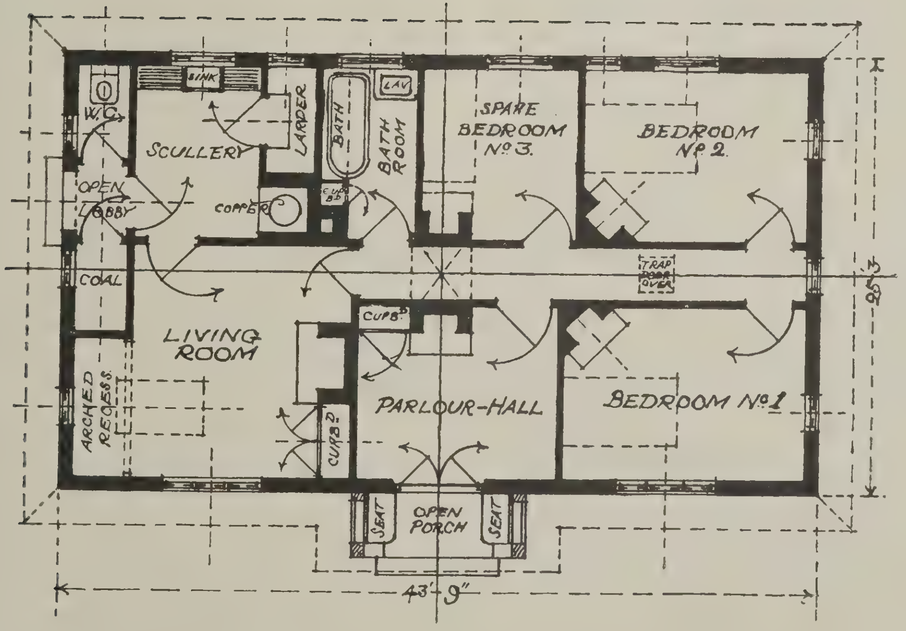
The walls of the building are of 9 in. brickwork, lim plastered externally, and scratched with an "S" patte in the local traditional Essex manner. The low bri plinth is tarred.



A DETAIL OF THE PORCH



THE ENTRANCE FRONT.



PLAN.

A BUNGALOW AT MALDON, ESSEX. BASIL OLIVER, F.R.I.B.A., ARCHITECT.

The Planning of Hotels and Licensed Houses

(Concluded.)

By ALEXANDER F. PART

(Author of "The Art and Practice of Innkeeping," etc.)

IN America hotels are usually built on straight lines, and great care is taken to avoid alteration of levels on any floor. One of the chief advantages of this is that it permits the use of a wheeled trolley for the carriage of all goods between rooms on the same floor, thus avoiding breakages and hard work, and enabling a child to do the work of two grown men in half the time. Greater care is also taken in America to avoid excrescences and corners (which serve no useful purpose) where dust may congregate.

Far greater attention is given to standardization. For example, the drawers of a plate-service pantry might be so designed that they were interchangeable with those of the sideboard or dinner wagons, thus avoiding individual handling. A large proportion of the furnishings of a bedroom are fixed, and form part of the construction. This avoids loss of space and saves cost and labour. Standardization, therefore, ensures interchangeability. The European standard of comfort in first-class hotels is far ahead of the American as regards service, but the mechanical perfection of devices which enable the guest to "do" for himself in American hotels is so strikingly practical and complete that it goes far to offset the loss of personal service.

Obviously the planning of hotels must differ in almost each individual case, but certain first general principles usually apply.

For example, in planning a seaside hotel, the best accommodation is that which provides a sea-view. If, then, the site is of considerable size, and the building not one of a row, the frontage should obviously be of "E" shaped formation, as a flat-fronted house would decrease its revenue possibilities. The corridors, bathrooms, and water closets, housemaids' rooms, cupboards, and linen-rooms, would give way to bedrooms in point of outlook. One of the most appreciated features of a seaside hotel which faces south is a wide, glass-enclosed veranda. It should be well heated, have sliding glass windows, as large as the wind pressure permits, and inner windows if the house is to be designed for a winter season.

In the commercial hotel the architect's problem is totally different, and unless the trade is very large the food percentage of profit will not be very substantial. It follows, therefore, that the bulk of the profits must flow from the bar and the bedrooms. It is, therefore, to the bedroom accommodation chiefly that the proprietor must look. The problem, then, for the architect is to extract revenue from every available inch of cubic space. In such a house the number of single rooms should be about nine out of every ten, and the number of bathrooms need not exceed one to every twelve bedrooms. Downstairs the feeding accommodation need not exceed two-thirds of the capacity of the sleeping accommodation.

Commercials appreciate the exclusive use of a coffee-room, and, above all, that of a writing-room. In some places a billiard room also is needed. Two billiard tables, or possibly more, may be required, but it will be found that a billiard room with two tables can be made to pay by means of the tables alone.

Since the tariff charged for the "gentlemen of the road" is extremely moderate, it is obvious that every device capable of saving labour and expense, consistent with the size of the house, should be installed. This applies not only in bedrooms, where all excrescences and corners and lodgments for dust should be taboo, but also in the kitchen, which, if the hotel is a purely commercial one, need not be large or elaborately fitted. Good grilling arrangements should be made, and if the dining-room allotted for "commercials" can be contrived back to back with a "chance grill room, with adequate service between, the grill ma profitably be placed *in situ*, since guests like to choose an see their chop or steak being prepared. This arrangemen may also, if the trade is sufficiently large, result in a savin of staff. Kitchens of this kind should be arranged so tha everything is to hand, and so that long and tiring walk with heavy loads may be avoided. It will often be advantageous to place the sinks in the kitchen instead of in th scullery. The range should be well lighted by day and b night. Sinks and hot and cold water should be in clos proximity. The rubber-wheeled trolley may well be use in this department as well as elsewhere, so that equalit of floor levels is of the utmost importance.

With regard to the accommodation for the staff, it wi be found that cubicles, however small, will be more popula than dormitories. If a coterie of cubicles can be arrange and the male and female staff completely cut off from on another, much labour will be saved by forming a commo lavatory, including a bathroom and water closet for eac sex. The clerical staff will, however, require separat accommodation. If the partitions of the cubicles ar arranged so that they leave a space from, say, 7 ft. to th height of the ceiling, there will be no difficulty in regard t ventilation, and central heating may be installed. Ver considerable economy of space can be effected by th arrangement.

The ventilation, cosiness, and warmth of the bar, an more particularly, of the smoking-room, are matters of th highest importance for the retention of custom. Grea importance also attaches to the accommodation provide for stock-rooms in a commercial hotel, and the archite should bear in mind that they will be frequented by wome customers as well as men. The revenue arising from th hire of stock-rooms is miserably inadequate, and, therefor the proprietor must endeavour to obtain all the benefit h can from the commercial travellers customers. For th reason the approaches to the stock-rooms should be attra tive, and should, as a rule, be through the licensed premise

One or more of the stock-rooms may be adapted for us on occasion, for dancing or banqueting, or for the meetin of friendly societies, business or sporting associations. Th difficulty of preserving the flooring may be overcome b providing a removable dancing floor in sections, which ca be so arranged that it can be stowed away under a platfor or stage, for use when required. If this plan is adopted th position of the room in regard to the service of meals ar drinks must be taken into account.

The accommodation and the arrangements for handlin the skips for the commercial hotel should be ample, saf and dry. The skips should never be taken through th main entrance. The entrance allotted as the approach the stock-rooms may be used for this purpose, and plent of space should be given to it. Where it is necessary convey the skips upstairs a hoist inside or outside the pr mises is necessary. The corridors and doorways of th stock-rooms should be of extraordinary width. Th material of which the walls of, and corridors leading t the stock-rooms is composed is also of importance.

Almost every manager will agree that a hotel should b planned so that the room clerk, the cashier, and the b clerk, or, in a large hotel, the reception office, the cash offic and the bill office are in close juxtaposition. The telepho and information departments should adjoin one anothe Abroad the letters for guests are generally arrang under the counter, so that the concierge can attend inquiries or sort letters without turning his back to th ounter. The back or screen of the reception office should e only a step away from the counter, so that keys can be aken from the rack without a walk. There are many kinds room-racks, and one, for use in large hotels, is described y the Americans as fool-proof. So it is, if used aright, and any case it is good. The ledger filing-cards require a osition on the left of the bill clerk beneath or sunk in the ounter. The architect must bear in mind here, as elsehere, such factors as full control, speed, and economy of umbers in staff, and fatigue. This is essentially a departent upon which an expert adviser should express an inion.

With regard to the entrances and exits, these should be as w as possible, in order to save the employment of door-epers, and to reduce the opportunities for leakages and eft to the minimum.

It is very difficult in connection with an hotel to divorce e work of the architect from that of the hotel engineer, d it will be economical in the long run for the client to rmit the collaboration of both at the very outset. The gineer should be not merely the professional assistant the architect in regard to engineering, but should be on rms of equality with him as regards the lay client. Unless e client is himself in possession of the widest experience d qualifications, he will do well to employ an expert lviser in addition. This may appear to be an expensive oceeding, but upon a contract of considerable magnitude, e saving will be worth while, not only in prime cost, but in tras and economy of labour.

The expert adviser would, for example, always endeaur to secure an alternative use for all parts of the ilding, in case alterations of policy were ultimately cided upon. He would know where hot water or steam pes could be most advantageously led, and where their esence would be fatal. He would help to show the best sition for the various services, including lifts, etc. He ould be in a position, if the estimated cost of the building furnished to him, to give an approximate estimate of the timate expenses, including wages.

If the hotel is large a linen-room will be essential on each or. In that case it will be wise to place it near the goods service lift, so as to avoid unnecessary transit and weard-tear. The house- and chambermaid's floor rooms should o be planned close to the passenger-lift entrance, so that ey may be at hand when guests arrive or depart.

Similar conditions apply in the construction or alteration public-houses, but here the limitations of the site are ually the determining factors. The elevations of some of latest public-houses show considerable improvements style, but in the bars the window ventilation consists ually of a miserable fanlight. Again, to construct a dern bar without a well-placed, open fireplace, as well central heating, is a foolish omission. The supervision the bars from a central position and the screening of the rs one from another also need careful consideration. e screening should not be done by the antiquated method counter screens, which make the dispensing of hospitality d drinks as uncordial and uncongenial as the purchase stamps in a post-office.

One of the most difficult matters to control is the separate ssage (if such exists) to the dining-room, if it is at the r of the premises. Speaking generally it is wise to ange that the counter should extend so that a view of whole length of it can be obtained from behind the bar. the accommodation situated over a bar is to be rendered ful and comfortable the flooring above should be y thoroughly pugged with silicate cotton or some other nd-deadening and fire-proof material, not omitting the sts.

The outside lavatory should never be built in close ximity or adjacent to the main building, and the entrance st be screened, well-lighted, and convenient.

n considering the purchase of several houses with a view connecting them up to form an hotel or any place of ort for the public it is essential that an architect should consulted well versed in the London Building Acts, the regulations thereunder, and in the interpretation put upon them by the officials of the L.C.C., before the contract is signed. If this essential is neglected he may find, too late, that the cost of undertaking the work and meeting the Council's requirements render the plan uneconomical. There is an even deeper pitfall : an hotel or restaurant which, in the hands of the seller, was carried on without objection, may, in the hands of a new proprietor, be objected to by the London County Council as not conforming to their requirements. It is a very common occurrence, when an application is made to that body for a minor alteration, to find a long list of requisitions involving great expense served upon a new owner. Nor is the London County Council the only body to be appeased, the city or borough council has to be satisfied in its turn, and woe betide the client whose architect is wanting in knowledge and tact.

It would be safe to say that to run a cheap boarding-house containing less than twenty bedrooms would either be tantamount to slavery or commercial suicide. To buy or take a country mansion, even if there is a certainty of its being always full, at good hotel prices, would generally result in a loss, if less than forty bedrooms were available, particularly if the grounds are large. And I care not in either case how cheaply the premises are purchased. The prospective buyer of any such places should consult the best hotel man he can find before he deals. Another important element to be taken into account in building halls for banquets and public meetings is the acoustic properties. The planning and construction of the safes and strong-rooms are also important.

The large kitchens in the mammoth American hotels are food manufactories rather than kitchens as we understand the term in ordinary domestic parlance, as will be seen by the example accompanying the first instalment of this article. The main object I have in view in showing this plan is to indicate, more by the necessary inference, which any sensible man will be able to draw, than by any actual demonstration, the vast gain that would result from the institution of a large central kitchen in breweries, which would feed hundreds of houses by means of fast insulated delivery motors, or even by means of the ordinary brewery transport delivery. A fortune awaits the first of our unconscious somnambulists, and the dreamer of to-day will be regarded as the most wideawake personality of to-morrow. The plan is of one of the best-planned kitchens in America, and a key is added to explain the position of the various sections and appliances.

This was one of the first great modern hotels to locate the kitchen on what may be called the parlour floor (far removed from the basement), where the working conditions are of the most wholesome type, the mechanical ventilation thorough, and the facilities for service to the dining-rooms greatly improved over those of kitchens located in the basement. It was a daring departure to appropriate such valuable space for the kitchen, but the owners considered that it was the best policy to devote this valuable space to this department, for the kitchen is, in many respects, the most important part of an hotel.

It should be safeguarded with every feature making for wholesome and sanitary conditions, both as to the cooks, the supplies, and all that goes to make up the dining-room service. It deserves much larger space and better location, drainage, and ventilation than the average architect plans for it. In the kitchen of which I write it has been given the position it deserves, and the result is that the cuisine is unsurpassed anywhere.

The kitchen floor is paved with 9 in. by 9 in. English red tiles pitched to drains. The ventilation is by ducts inside the floor above. All joints are kept in ovens over the range, and the cooks do the carving from the range. The ranges, boilers, and soup kettles stand on special raised foundations. Especial pains have been taken to have the pantries provided with every convenience for promoting quick, correct, and dainty service. The five service counters are topped with white Carrara glass, 1 in. thick ; the refrigerators are of ample capacity ; the protected shelves for china and silver are kept at desired temperatures; and the department for cereals is especially elaborate, insuring the sending to table of these foods in perfect form. The service of hot and cold milk, chocolate, etc., is from porcelain receptacles under German silver covers. The service of tea, etc., is elaborate: silver tray, silver sugar bowl and cream pitcher, and glasses for lemon and ice. The tea is sent to the table in a separate envelope with the kind marked. Waffle irons are a special design of the *chef* at this hotel, and the Curtis egg-boiler is used. The oyster pantry has special bins for the different kinds of oysters, a slate counter top, and chipped ice compartments. All refrigerators stand 4 in. from the floor, each on insulated block cement. Every box has an outside drain. All the refrigerators in the pantries have German silver tops. The refrigerators in the service rooms all have the pull-out shelves for the convenience of resting, assorting, etc.

A feature of the kitchen tables is the legs, which are of sheridized iron, and look like nickel. The sheridized iron will not flake off or rust; and on the foot of each leg is a brass cap to protect the floor. This sheridized iron was, when the kitchen was constructed, something new. The iron is heated, then rolled in to a powder of zinc, which is amalgamated with the iron and, in the finish, gives a nickel appearance. It is very hard and can be roughly handled without showing a scratch.

The dishwashing machine is a No. 7 Blakeslee, with one rinse and three sud tanks, capacity 12,000 pieces per hour, occupying floor space less than 3 ft. by 9 ft., and is operated with $1\frac{1}{2}$ h.p. motor. The Blakeslee Company also installed a silver washing machine similar to the dishwasher, but smaller; also an ice chipper and ice cuber, both these machines of the latest improved type. The ice cuber is operated with 1 h.p. motor.

A feature in this kitchen service is an automatic dish elevator, by which dishes are carried in wooden trays on an endless chain to and from the dishwashing department. The Dilg knife-polisher is installed; and the kettles and steamers are out of sight, at the back of the kitchen proper, all ranged in a row. There is a battery of seven copper kettles, composed of three stock kettles containing 70 galls. each, two 50 galls. each, one 70 galls., used as consommé cooler, and one 60 galls. for grease. Each kettle and steamer has direct ventilation to the stack. The kitchen plan shows the location of steamers, vegetable boxes, and pot sinks in the kettles' corridor. There is a separate service kitchen on the ball and banquet room floor especially for banquet service.

The refrigeration, by Kroeschell machines, is in two units, one of 120 tons for air cooling; the other of 50 tons for general refrigerating. The capacity for ice making is 8 tons daily, and for this purpose the Jewell system is installed. It freezes the ice in cans from the pure water. In the freezing process the water is agitated with air jet, which throws out all impurities. The ice tanks are in brine. The ice is made by this process much quicker than by other methods. Alongside the refrigerating plant is a condensing coil, composed of a mile of pipe.

In the American inn the plan of which is given below, the kitchen has a wrought-iron Range Company equipment, and the fuel used is coal and gas. The kitchen is located directly between the main dining-room and the lunch-room, and its arrangement, to serve this purpose, is clearly shown in the plan. The pantry and dishwashing departments are most convenient to the dining-room entrance; the lunch-room is practically self-contained as to its operating features, having urns and cream cabinet within the room, and there is a small kitchen for 24-hour work, independent of the main kitchen. The main kitchen has a Bromley-Merseles dishwashing machine, Blakeslee knife-cleaner, Elgin butter-cutter, and mechanical devices for egg boiling, vegetable paring, roll warming, ice chipping, and the like.

A few particulars relating to a mammoth American establishment may be added here:—

The dishwashing machines alone are capable of dealing with 15,000 pieces per hour, and all dirty plates go dir
to this department, which is over the kitchen.

Coffee is made by a process discovered in Vienna.
device consists of a bowl, elevated about 6 ft., for steeping
freshly-ground coffee in boiling water. The bowl is so s
pended that its contents are tipped into another bowl bel

This second bowl stands over a third receptacle, separa
from it by a straining felt and connected with the low
container is a vacuum pump, operated by hand, for draw
off the made coffee, which is kept hot in stone jars, and
distributed to the different still-rooms.

It requires five minutes to brew 15 galls. of coffee,
which time three minutes are taken up by the boiling
two minutes by the straining.

The straining cloth is very frequently renewed.

The stockpots in this hotel are of German manufact
made of nickel, and require no retinning.

The main kitchen is the distributing point for all
other kitchens, and the accounts and reports of the s
kitchens are all rendered to the main kitchens, in the f
place, and controlled there.

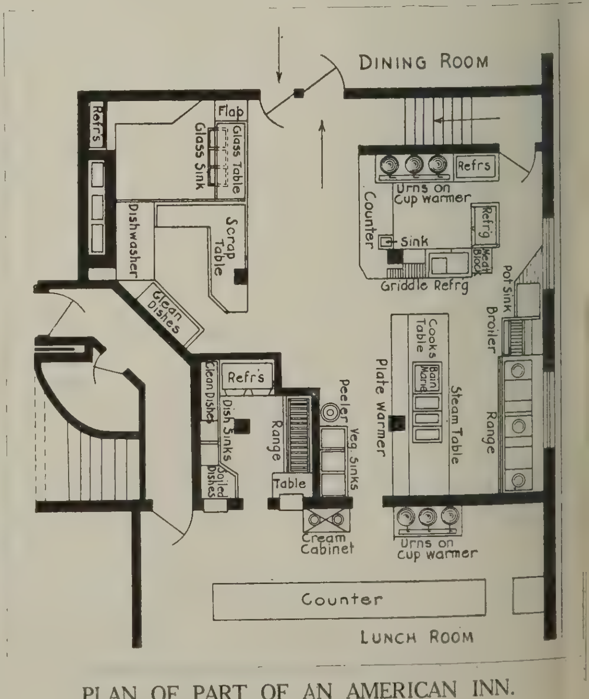
The main kitchen measures 150 ft. by 60 ft., and
garde manger is the largest in the world.

The following additional brief notes on the construct
of kitchens, for use either as central or manufactur
kitchens, may be of interest.

A means of obviating the troubles arising from a mu
plicity of pipes, e.g., accumulation of dust, drips, etc.,
the ceiling of large kitchens is effected by building a f
ceiling to the kitchen, above which will be a low room (s
6 ft. 6 in. high, so that a man can walk upright), thro
which all the pipes will be led. In this way repairs can
easily effected, and pipes examined without causing
disturbance or inconvenience. The floor of this room sho
be rendered waterproof, and be provided with a w
adequate to take off flood water in the event of a burst

The following specification for pot-sinks seems to
commendable from utility and humanitarian standpoi
Each sink is 8 ft. by 30 in. wide, by 20 in. deep, and on
arranged about 2 in. below the other, so that a continu
supply of water in the rinse tank overflows into the wash
tank, and from there into the grease compartment, 9 ft.
30 in., with grease trap below. The sinks are of
boiler plate heavily tinned. The sections have a 6
working ledge for resting the pots on when cleaning. T
are emptied by a lever connected with a throttle va
which saves a great deal of time.

The draining-boards are 7 ft. by 40 in. wide, flushed



PLAN OF PART OF AN AMERICAN INN.

at back 8 in., and with a 2 in. fall. Over are two 20-in. shelves and one shelf under. An alternative to pan-racks over a range is a contrivance resembling a tree, with pot-racks spreading from a central trunk at intervals, on ball-bearings. The capacity is twenty hooks to the rack.

In the planning of a large kitchen it is important to provide that one or more whole sections can easily be supervised by one person during slack hours, and for that reason I prefer the large open spaces customary in American and some European hotels, to the partitioned places generlly found in England. In America and Europe the art of rrangement and of ventilation of kitchens has been so well tudied that the smells that we have almost become accusomed to associate with every kitchen, so as to necessitate hat it shall be tucked away in some inconvenient corner, ave been eliminated. For example, one of the largest itchens in the Hotel Biltmore is on the twenty-second tory. In the Blackstone Hotel, Chicago, which claimed t the time of its erection to have the most perfectly quipped and situated kitchen in the world, the place hosen was the story between the main restaurant (below) nd the banqueting hall (above).

The arrangement of large kitchens necessarily depends pon many factors. That illustrated works economically nd smoothly. The walls are of white glazed tile, the floors osaic (in my view a tile floor would have been preferable); ll corners are of rounded tile, and every appliance is well p off the floor, so that the whole room can be flooded with e hose.

The whole space of 170 ft. by 76 ft. is controlled by the eward's office, and especially the entrances to the store-oms, refrigerators, and cellars, or rather dispenses. The aiters' entrance is on the floor level from the grill, and by partitioned stairway from the restaurant and banqueting oms. Note the service lifts for carrying waiters and loaded ays to the banqueting rooms. The checker's stand conols all the waiters' entrances and exits and the service bar. he service pantry or still-room contains urns, roll-warmers, and refrigerators for cold plates, salads, etc. Across the corridor is the oyster pantry, an unfailing item in an American kitchen lay-out. Nearby is a double-deck rack for aluminium trays, warmers, and the automatic egg boilers.

In the kitchen itself we find grouped together the dish, glass, and silver washing departments respectively, and, nearby, the receiving counters for soiled dishes and the cleaned and warmed dishes. At the back of the silver washing department we find the silver storage, cleaning, buffing, and knife-cleaning departments. In the kitchen the broilers and ranges, with carving tables, cooks' tables, and *bain marie*, and the vegetable room beyond the ranges are all on the right; in the centre is the plate warmer with service top. On the left the ice-cream, sugar, and pastry rooms, the bake-shop, with double-deck oven, the *garde mange* department, with refrigerators, and, at the back, the butcher's shop, with work-bench, meat cutter, and meat, fish, game, and poultry refrigerators, and the fish boxes.

Passing through the butcher's shop, on the right are the scullery and soup-rooms, partitioned off from the kitchen, and self-contained as they should be. Returning to the main service corridor on the right, beyond the service lifts, is the steward's corridor, with the steward's office.

Across the corridor are the china and glass-ware storage rooms. Note the position off the steward's corridor of the various refrigerators for vegetables, butter, eggs, and fruit. Further along the steward's corridor are two large store-rooms, connected by a doorway, and at the far end a wine dispense or store, near to which are the cigar and beer stores.

This kitchen will well repay study, for, though not ideal in every respect—no kitchen is—every item has been planned, obviously with intention, after careful consideration. Other and later kitchens contain even more up-to-date labour-saving appliances in larger numbers. I have selected this one because the why and wherefore of its planning are more easy to follow than some of the larger ones.

[The first part of this article appeared in our issue for September 19.]

Greenwich Baths and Washhouses Competition

The Winning Design

THE following awards have been made by the assessor, Mr. H. V. Ashley, F.R.I.B.A., in the competition promoted by the Greenwich Borough Council for designs for new public swimming ths and washhouses at East Greenwich :—

First—Design No. 28: Messrs. F. J. Horth and Andrew, Custom House Buildings, Whitefriar Gate, Hull.

Second—Design No. 3: Messrs. H. Field and H. D. arson, 5 Gower Street, W.C.1.

Third—Design No. 19: Messrs. F. B. Mennie and C. D. ith, 11 New Court, Lincoln's Inn, W.C.

The design placed first is illustrated on the following pages. emiums of £300, £200, and £100 respectively were offered the designs placed first, second, and third.

In the conditions it was stated that the Council were xious to secure a building which should not only be roughly adapted for its special purpose but should also ssess distinct architectural merit both internally and ernally, not elaborate in detail but of good proportion l satisfactory grouping. Competitors were reminded of several fine buildings in close proximity to the site. onomy of plan and section was of the utmost importance view of high building cost. While the Council desired establishment complete in every respect, they attached utmost importance to simple and direct planning and the buildings being soundly constructed with a view to nomy of upkeep, and well lighted and ventilated.

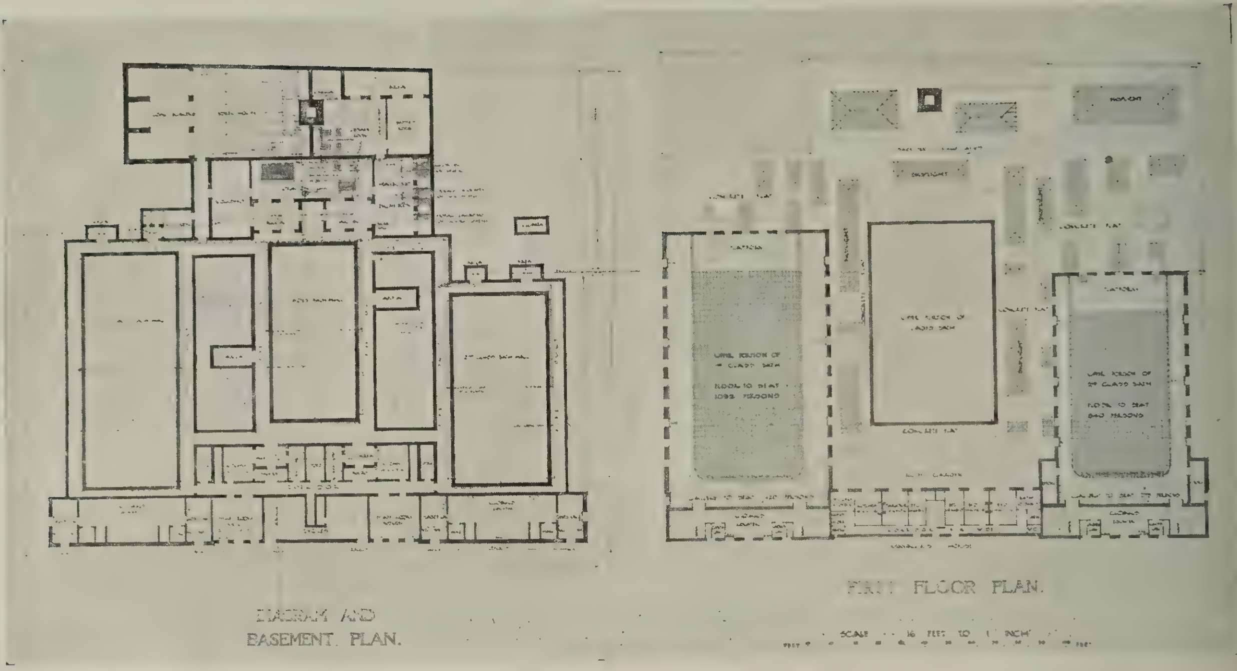
The accommodation required included first- and second-s bath halls for men, a ladies' bath hall, slipper baths, ces, committee rooms, a service room, an establishment laundry, a public washhouse, boiler house, engine and pump room, and superintendent's quarters.

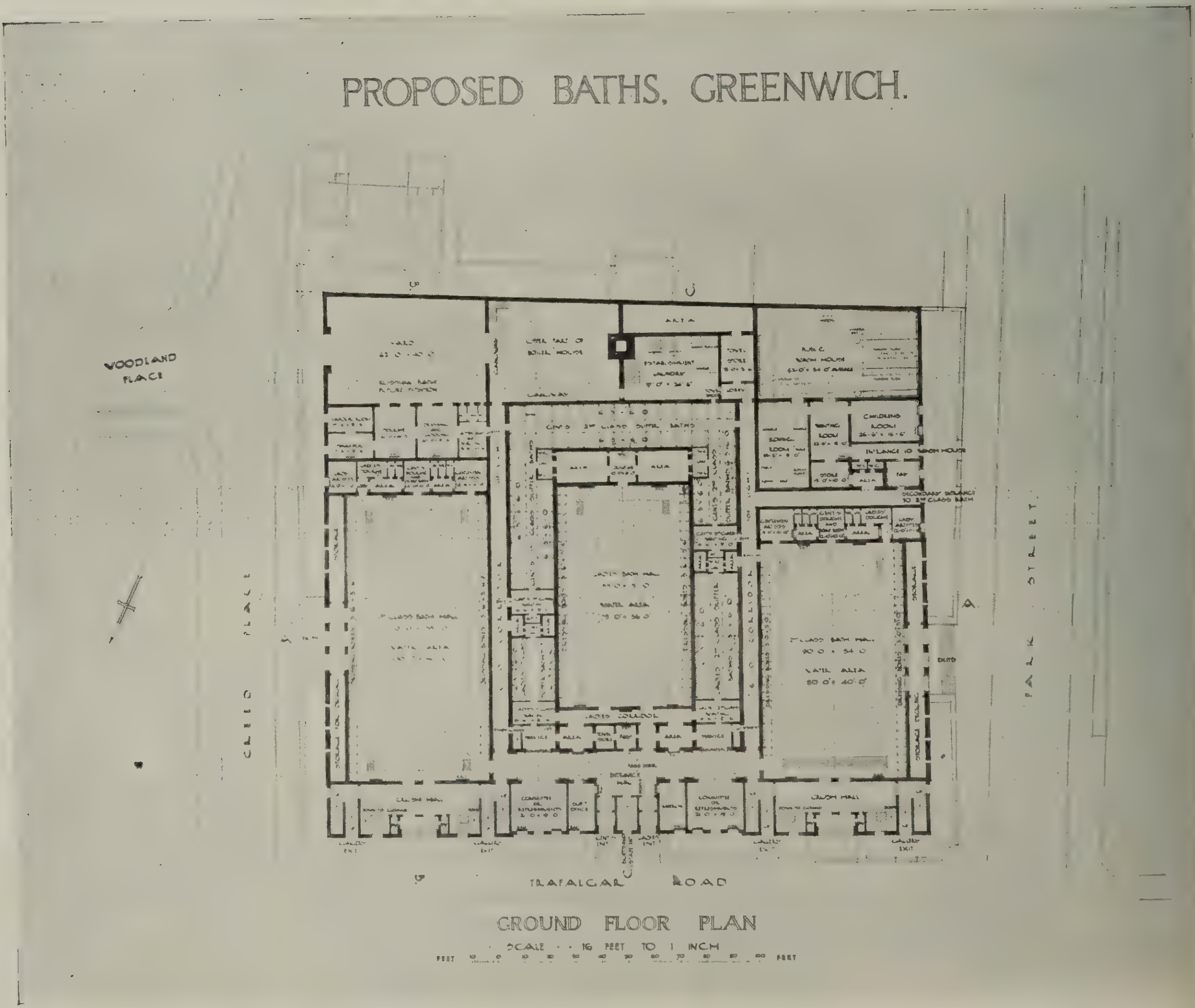
The buildings generally were to be constructed of fire-resisting materials. The internal finishings to be plain and simple but of first quality, with special regard to durability and to minimizing the cost of periodical repairs.

Otherwise the internal design of the two large halls and other public parts of the building required dignified and effective treatment suited to their purpose, but not over-elaborated with fussy detail for ornament; the same also applied to the external treatment.

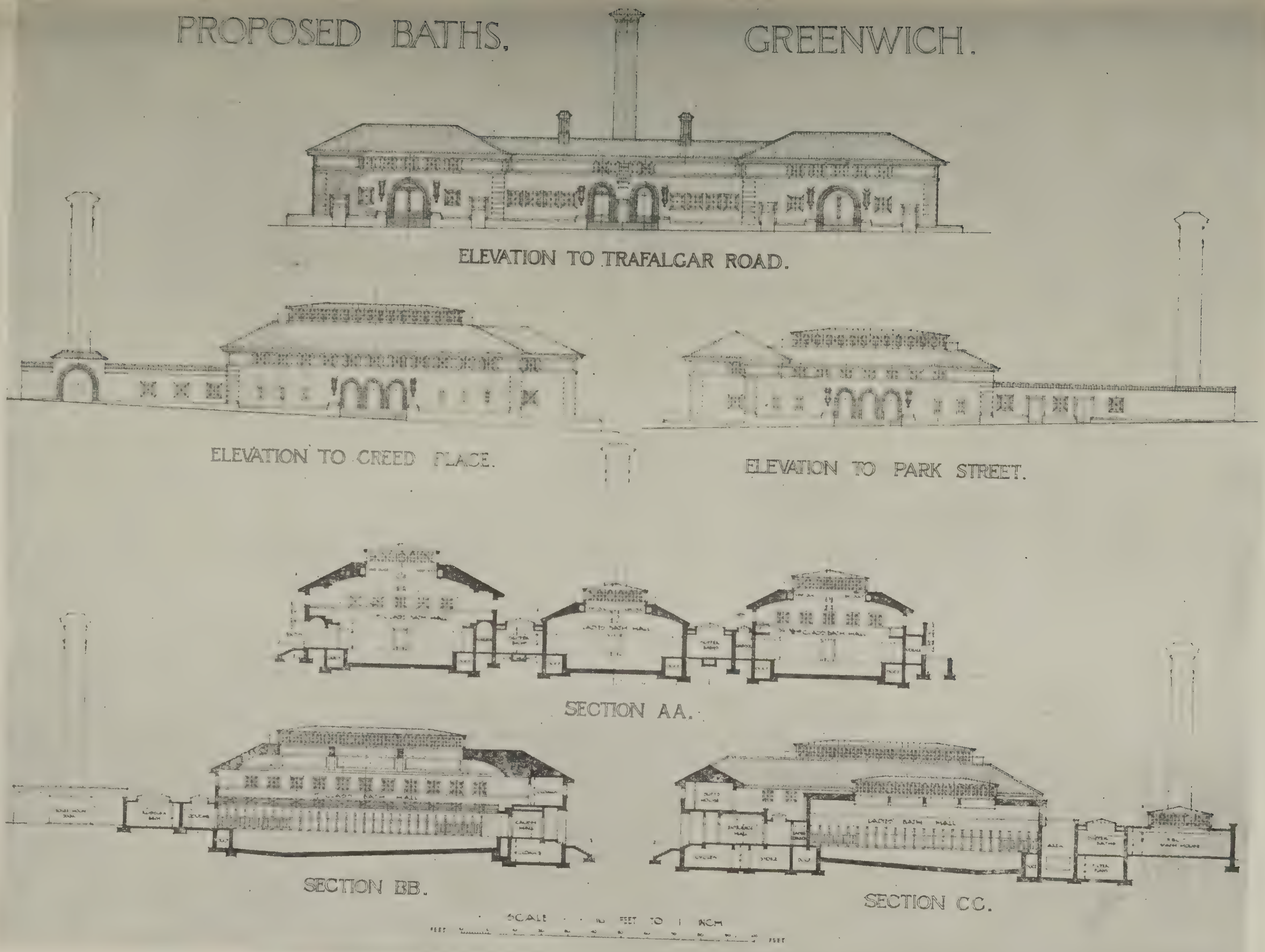
In his report the assessor stated that he had given very careful consideration to each one of the designs, and had selected ten for a closer study. He was satisfied that, with strict economy, the design placed first could be carried out for a sum within the stipulated margin of the expenditure stated in the conditions. The scheme was excellently planned, and the elevations were effectively treated; the engineering services also were well designed and sufficient to their purpose, while the whole scheme was economical in construction, maintenance and administration. The defects, such as they were, were of a minor character, and could be remedied in the working out of the scheme. Mr. Ashley congratulated the Council on the excellent response from architects to the invitation; the subject was a specialist one, and many of the designs exhibited excellent qualities.

The recommendation of the Adoptive Acts Committee that design 28 should be accepted has been adopted by the Borough Council, and Messrs. Horth and Andrew have been appointed architects and asked to prepare plans for the foundations.





GREENWICH PUBLIC BATHS AND WASHHOUSES COMPETITION: THE WINNING DESIGN.
F. J. HORTH AND H. ANDREW, ARCHITECTS.


PROPOSED BATHS, GREENWICH.
ELEVATION TO TRAFALGAR ROAD.
ELEVATION TO CREED PLACE.
ELEVATION TO PARK STREET.
SECTION AA.
SECTION BB.
SECTION CC.
SCALE 16 FEET TO 1 INCH
LADIES' BATH HALL

GREENWICH PUBLIC BATHS AND WASHHOUSES COMPETITION: THE WINNING DESIGN.
F. J. HORTH AND H. ANDREW, ARCHITECTS.

Competition News

Manchester Masonic Temple.

The design of Messrs. Thomas Worthington and Sons has been placed first in the Manchester Masonic Temple competition.

Holmside and South Moor Collieries : Cottage Hospital.

The President of the Royal Institute of British Architects has nominated Mr. T. R. Milburn, F.R.I.B.A., as assessor in this competition.

Northampton Church and Schools.

Messrs. George Baines and Son, F.R.I.B.A., F.S.Arc., of Westminster, have been awarded first place in the competition for designs for the Park Avenue Church and Schools, Northampton.

The R.I.B.A. Alfred Bossom Travelling Studentship Medal.

Mr. Alfred Bossom, the New York architect, has decided to offer £100 for the best design for the medal to be awarded in connection with the R.I.B.A. Alfred Bossom Travelling Studentship. The medal is to be symbolical of the relation between art, architecture, and economics, and of the friendship between this country and the United States. Mr. Bossom hopes that Sir Aston Webb, P.R.A., Mr. J. Alfred Gotch, P.R.I.B.A., and Sir Edwin Lutyens, R.A., will act as assessors. Particulars of the scholarship which has been formulated to "induce the study by younger architects of the economics of architecture and to promote a good relationship between England and America," were published in the JOURNAL for August 8.

A Correction.

In Mr. Lionel Budden's article, which appeared in the last issue of the JOURNAL, several paragraphs were in their wrong sequence, and were not written in the sequence in which they were printed.

List of Competitions Open

Date of Delivery.	COMPETITION.
Oct 15 *	Lay-out of a river embankment promenade, adjoining the River Thames below Barnes Bridge, for the Chiswick Urban District Council. Premiums: £105, £52 10s., and £26 5s. Apply Mr. E. F. Collins, Clerk, Town Hall, Chiswick, W.4. Deposit £1 1s.
Oct. 22	Bridge over the River Medlock, Limehurst. Designs are invited by the Rural District Council for a bridge over the River Medlock. Apply Mr. R. Thompson, Council Offices, Ashton-under-Lyne.
Nov. 5	Art Gallery for Hull. Assessor, Mr. John W Simpson, PP.R.I.B.A. Apply, with cheque for £2 2s., to Mr. H. A. Learoyd, Town Clerk, Guildhall, Hull.
Dec. 10	The War Memorial Committee of the Burgh of Coatbridge invite designs for the erection of a War Memorial on a site in the West End Park. The estimated cost of the work amounts to £3,000, and premiums of £75, £50, and £25 are offered for designs placed first, second, and third respectively. Assessor is Mr. James Lochhead, F.R.I.B.A., Hamilton. Apply Town Clerk. Deposit £1 1s.
Jan. 1	The Imperial War Graves Commission invite architects who served during the war as members of the Military, Naval, or Air Forces raised in any part of the British Empire to send in their names for admission to a competition for the designing of memorials to the missing to be erected by the Imperial War Graves Commission at Bethune, Armentières, Cambrai, and Soissons. Applications for particulars of premiums and other regulations from those desiring to compete are to be addressed to the Secretary (Works Branch), Imperial War Graves Commission, 82 Baker Street, London, W.1, and must be received there not later than January 1, 1924, and must be accompanied by a statement giving particulars of the war service and professional career of the applicant and clearly stating which of the memorials it is desired to compete for. Deposit, two guineas for each set of plans. The Assessor is Sir Aston Webb, K.C.V.O., P.R.A.
Jan. 5	Memorial Building and Tower, Dudley. The Council of the County Borough of Dudley invite Competitive Designs from duly qualified Architects for the "Brooke Robinson Memorial" Building and War Memorial Tower comprising a Public Hall, Coroner's Court, small museum, and a new sessions court. Premiums £300, £200, and £100. Mr. W. Curtis Green, A.R.A., F.R.I.B.A., Assessor. Conditions of competition, together with a copy of the site plan, can be obtained on application to E. W. Tame, Town Clerk, Town Clerk's Office, Dudley, with deposit of £2 2s.
No date *	The Eastleigh and Bishopstoke Urban District Council invite designs for the extension of their existing Council buildings, and the erection of an assembly hall, on the site adjacent. Premiums: 50, 30, and 20 guineas. Apply, with deposit of £1, to Mr. J. Lawrence, Clerk to the Council, Council Offices, Eastleigh.
No Date	Taunton School War Memorial. The Council of the Taunton School invite designs for a War Memorial, consisting of an Art and Science Block, the cost of the building to be approximately £10,000. The Assessor is Mr. Robert Atkinson, F.R.I.B.A., who will have the power to nominate a second Assessor if desirable. Premiums first, £100; second, £50. The first premium will merge in the architect's commission. Particulars, together with photograph of the present buildings, may be obtained from the Secretary of the School, H. J. Pollard, F.C.A., 3 Hammet Street, Taunton, in return for a cheque for £2 2s.

* Indicates Competitions whose conditions are not in accordance with those laid down by the R.I.B.A. and the Society of Architects.

Coming Events

Wednesday, October 10.

L.C.C. Central School of Arts and Crafts.—Lecture "Egyptian Architecture (5000 B.C.; 100 B.C.)." 6 p.m.

Thursday, October 11.

British Museum.—"Discoveries at Mippur," dating fr Fourth Millennium B.C. 4.30 p.m.

Friday, October 12.

Royal Sanitary Institute.—"Some Aspects of Housing Carlisle." 7.30 p.m.

Saturday, October 13.

Institution of Structural Engineers.—Visit to British Em Exhibition.

Friday, October 19.

L.C.C. School of Building, Clapham, S.W.4.—"The Manuf ture and Uses of Portland Cement." By Mr. K. G. Bam F.C.S., M.Inst.Struct.E. 7.30 p.m.

The Week's News

Sir John Soane's Museum.

Sir John Soane's Museum, 13 Lincoln's Inn Fields, W. will be open free on Thursdays and Fridays during Octo from 10.30 a.m. to 5 p.m., and during November fr 10.30 a.m. to 4 p.m.

R.I.B.A. Intermediate Examination, November.

The centres for this examination will be London and Le At both centres the examination will be held from Novem 23 to 27, 1923, inclusive. At the London centre the Examination will be held on November 29; at the Le centre on November 28.

A.A. Exhibition of Holiday Sketches.

All members of the A.A. are invited to send sketches, e for the Annual Exhibition of Members' Holiday Sketc to be held between October 29 and November 22. All sketc which should be framed and labelled, must be delivered 35 Bedford Square, by October 15.

The late Mr. James A. M. Baxter, A.R.I.B.A.

We regret to record the death of Mr. James A. M. Bax A.R.I.B.A., of Edinburgh, at the age of forty-three. He lecturer on fireproof construction and plan-drawing at Heriot-Watt College (the technical school of Edinburgh) chief assistant in the honours and advanced class of buil construction in the same place, and was head draughts with Mr. F. W. Deas, F.R.I.B.A., in whose office he had for twenty-four years.

The Policy of the R.I.B.A.

The Council have appointed a Charter and By-laws C mittee for the purpose of considering and advising the Cou upon the revision of the Charter and By-laws. This Commi has also been directed to consider the question of the gen policy of the R.I.B.A., to explore the existing situation, to submit a report to the Council upon it at the earl practicable date. The Committee consists of the follow members: Mr. J. Alfred Gotch, President; Major Ha Barnes, Messrs. H. T. Buckland, E. Guy Dawber, W. Cu Green, A.R.A., Vice-Presidents; Mr. Arthur Keen, H Secretary; and Mr. Herbert A. Welch, A.R.I.B.A.

The Honan Scholarship.

The Honan Travelling Scholarship for 1924 will be awar for the best design submitted for an entrance to a road-tr tunnel under the Mersey, connecting Liverpool and Birkenh The scholarship, of the value of £50, for one year, is open members of the Liverpool Architectural Society (Incorpora under the age of thirty years. Competitions marked "Ho Scholarship" are to be delivered at the Society's Rooms, Harrington Street, on January 1, 1924. The winner of Scholarship will be announced on "Honan Night," Ja ary 22, 1924. Candidates for the 1924 Scholarship m have been Associates or Students of the Society on Decem 31, 1923.

(*Continued on page* xxv.)

The Week's News—*continued.*

F.B.I. and Inter-Imperial Trade.

The third and final report of the Committee set up by the deration of British Industries to examine the question of ter-Imperial trade has been issued. This report deals with stoms formalities throughout the Empire, and is, therefore, ncerned rather with points of detail, which in themselves ay appear insignificant. Many of these points, however, present a distinct source of annoyance and hindrance to iders and are at the same time comparatively easy of justment. This is especially the case with regard to the mission of catalogues and printed advertising matter into untries throughout the Empire. Two other points of the most importance referred to in the report are the questions a standard customs classification and valuation.

The British Industries Fair.

The Department of Overseas Trade have issued the following nmunication: "In connection with notices recently pubed in certain daily papers, the Department of Overseas ade states that the voluntary liquidation of the British lustries Fair (Birmingham), Incorporated, in no way affects London British Industries Fair, organized by that Departnt. Nor will the liquidation of this Association and the nsfer of the responsibility for the management of the itish Industries Fair (Birmingham) to the Birmingham amber of Commerce prevent the holding of the 1924 British lustries Fair at London and Birmingham as usual. The ndon section will be open at the White City, from April 28 May 9, and the Birmingham section follows on May 12 23."

Spitalfields Market Improvements.

The long-delayed improvements in and around Spitalfields rket will shortly be put in hand. The plan is an extensive , and is estimated to cost £2,000,000. The extension of market to the west will give an additional area of about 500 ft. super., making the total area of the market about ,000 ft. super., or over four acres. The improvement eme provides that Lamb Street, on the north side, and ishfield Street, on the south, shall both be widened to 60 ft., the road suggested for the western side of the new market is be 80 ft. in width. Altogether there will be an area of some 500 ft. super. available for use by market carts in delivering taking away goods. To meet the requirements for reusing people displaced by the new scheme, the Corporation e acquired sites in Stepney for six hundred people, and one ck of buildings that has just been completed is in High eet, Shadwell.

posed New Hospital and Other Buildings for Nottingham.

number of important building and other schemes are ore the Nottingham City Council. It is proposed by the eral Purposes Committee to convey to the General Hospital horities, as a free gift, the freehold of the Park Row reser- as a site for the new out-patients' and X-ray departments. Housing Committee propose to make an order for the pulsory purchase of Lund's Allotments, Colwick Road, the purpose of erecting houses. The Finance Committee e agreed to buy Portland House, Portland Road, Notting-, for £1,780 to provide more suitable premises (to take the e of the Leen Side property) for persons under the care he Probation Committee of the Nottingham magistrates. sum of £200 would have to be spent on adapting the nises. A scheme for providing a nurses' home (costing 000), a residence for the senior assistant medical officer 250), and the installation of electric light (£3,000), at the Asylum (now styled the City Mental Hospital) is outlined the Asylum Visiting and Mental Deficiency Committee. ommodation would be provided for fifty-seven nurses, a ron, two assistant matrons, a night sister, a home sister, eation room, study, sick room, etc.

Trade and Craft

New Premises.

. J. Starkie Gardner announces that he has acquired more nodious workshops at 2a Merrival Road, Putney, S.W.

"The Roadmaker."

e September issue of "The Roadmaker," the magazine e British Reinforced Concrete Engineering Company, Ltd., particularly interesting and instructive one. There is a contribution on "The Wayside Inn" from the pen of Charles G. Harper, and instructive articles on the effect of motorways on the amenities of the ordinary roads; on the reconstruction of the Bradley Road Bridge, Wrexham, by John England, M.Inst. M. and Cy. E., engineer and surveyor to the Borough of Wrexham; on Longhoughton Quarry Road, by Nicholas Bean, highway surveyor to the Alnwick Rural District Council, and one dealing with the career of Mr. W. Harold A. Court, A.M.I.C.E., city engineer, surveyor, and waterworks engineer, Peterborough. The magazine is profusely illustrated.

A Test Laboratory for Manufacturers.

Changes in methods of manufacture involving large capital outlay cannot lightly be undertaken nowadays in view of the high cost of materials and labour. Manufacturers must be reasonably assured beforehand that the outlay will in time be fully justified by the improved results. The gas industry is now providing laboratories in various parts of the country in which manufacturers may test the capacity and cost of gas to meet their particular requirements before they scrap any of their existing plant. One of the finest laboratories of this kind is to be found at Birmingham, and an interesting description of the valuable service it places at the disposal of local manufacturers is contained in the current issue (No. 115) of "A Thousand and One Uses for Gas." This publication also contains many excellent photographs of industrial installations in Birmingham. Manufacturers can obtain a copy of this issue on application to the Secretary, the British Commercial Gas Association, 30 Grosvenor Gardens, S.W.1.

The Use of Waterproof Sandpaper.

It is understood that legislation will be introduced to give effect, either in whole or in part, to the proposals of the Geneva International Labour Conference of 1921 in regard to the use of white lead in painting. The Government have not yet announced their decision as to whether this legislation will include any degree of prohibition of the use of white lead for the painting of interiors, but it is extremely likely that it will include regulations for the use of white lead wherever it is not prohibited.

These regulations may be expected to comprise the set of regulations drawn up at the conferences of the Painters' and Decorators' Industrial Joint Council of Great Britain and representatives of the Home Office. One of these (regulation 3 of the draft code) provides that "surfaces painted with lead paint shall not be rubbed down or scraped by a dry process."

In view of the change of practice which will, in some cases, be necessitated, and in view of the well-known disadvantages of using ordinary sandpaper or glasspaper with water, the Painting Trade Materials Committee of Great Britain and Ireland think it right to call the attention of members of the trade to the introduction of waterproof sandpaper, of which more than one satisfactory make is on the market.

While the chief merit of waterproof sandpaper in regard to the regulations is that it enables water to be used so as to avoid the creation of harmful lead dust, the use of waterproof sandpaper has the advantages that when clogged by the particles of paint it can be made effective by wiping or rinsing in water, and that the scratching of the surface by detached particles of abrasive is avoided. The lubricant action of the water also promotes smoothness of surface, and rapidity of working.

It appears to the committee to be in the interests of the draft that members should acquaint themselves with waterproof sandpaper, in order that they may have formed their own opinion as to its practicability for the purpose of their particular requirements before the regulations come into operation, and they will also doubtless form their own opinion as to the relative merits of the different makes of waterproof sandpaper now on the market.

Electric Lighting Service.

The value of good artificial illumination as an aid to production and safety in the factory, health and comfort in the home, prevention of accidents in the street, and in assisting to increase efficiency in commercial life, is in many cases very little appreciated. Although in recent years rapid strides have been made in the development of electric lamps and fittings, their correct application in practice is comparatively slow, and the general standard of illumination in many cases much lower than can be justified. Adequate lighting is something more than providing accessories, such as switches, cable, lamp-holders, and lamps, conveniently placed so that the lamps can be lighted on dark or dull days. Modern lighting means that the lamps and equipment must satisfy certain definite requirements, not only as far as the operating characteristics of the system are concerned, but the resultant effects on the user must be considered. The Lighting Service Department of The British Thomson-Houston Co., Ltd., has been organized to give assistance and advice on all phases of the subject, and the company's experts and demonstration studios are at the service of anyone interested.

In a booklet just issued by the company is shown the application of general information and data to the design of lighting systems for factories. The booklet is intended for the use of architects, engineers, manufacturers, and others who are responsible for the installation and maintenance of, and extensions to, electric lighting systems in factories. Good lighting, to meet industrial requirements, can only be obtained after the very careful consideration of essential factors which, combined, necessitate numerous intricate calculations. Among these factors the height of workshop, the size of bays, and the spacing of units are a few of the most important. The designs in this booklet have been carefully compiled and are presented in such a manner that tedious calculations are entirely eliminated. One can obtain at a glance, given the height of workshop, size of bays, and the amount of illumination required, the exact spacing and type of units necessary to produce the best results. It will be found that a suitable design is available to meet the requirements of any workshop or factory with little or no alteration.

"Rok" Roofing.

Messrs. D. Anderson & Son, Ltd., a firm with seventy years' experience in the felt trade—have issued a new catalogue dealing with "Rok" roofing. "Rok" is composed of a strong and carefully prepared sheet of fibre saturated with an elastic waterproofing compound, which, it is claimed, does not dry out or evaporate in any climate, as it contains no oils or volatile matter, and is coated on the surface with a permanent composition of natural bitumens of very high melting point. Among the many advantages claimed for the material are that "it is acid and alkali proof, that white ants won't attack it; that rain water from roofs covered with it can be used for domestic purposes, and that being an excellent non-conductor it ensures an even temperature, and is, therefore, an ideal roofing for hot climates." The many illustrations in the catalogue giv excellent idea of the variety of buildings for which "Rok adapted, including, as they do, shipyards, aerodromes, railw iron and chemical works, bungalows and farm buildings, even railway coach roofs. Some of the pictures show "Rokal (asbestos-faced "Rok") and "Ferro-Rok" (reinforced co gated sheets). These roofings are later developments of "R It is pointed out that "Rok" is suitable for either pitc flat, or circular ("Belfast") roofs, and that it is emine suitable for waterproofing reinforced concrete roofs. The are contractors to the Admiralty and War Office. Copies of catalogue can be obtained from Park Road Works, Stretf Manchester.

New Inventions

Latest Patent Application.

23630.—Green, W.—Wall tie. September 21.

Specifications Published.

203088.—Kirton, R. G.—Mould-board apparatus for conc structures.

203390.—International One-pipe Heater, Ltd.—Heatin houses, factories, halls, and other buildings.

203528.—McLean, D.—Ventilation of cavity walls and b ings, structures.

203636.—Francis, J. H. E.—Vitreous enamelled tiles, br and the like.

Abstract Published.

201867.—Floors.—Dickinson, A. W., 55b Portsdown R Maida Vale, London.—Joist floors with block fil —Rows of hollow blocks of symmetrical but irreg hexagonal or octagonal shape are spaced apar temporary centering, and reinforced-concrete j are cast between. To economize concrete, som the end blocks in each row are inverted. The bl may have an internal partition.

The above particulars are specially prepared for the "Architects' Journa Messrs. Rayner & Co., registered patent agents, of 5 Chancery Lane, L W.C.2, who will give all information free on matters relating to patents, trade and designs. Messrs. Rayner & Co. will obtain printed copies of the pu specifications and abstract only, and forward on post free for the price of 1/6 ea

ADELAIDE HOUSE
LONDON BRIDGE.
THE WHOLE OF THE GRANITE WORK IN THIS BUILDIN
IS BEING SUPPLIED AND FIXED BY
BROOKES LIMITED
Head Offices & Quarries: HALIFAX, Yorks.
London Offices: 65 VICTORIA ST., WESTMINSTER.
Manchester: 8 EXCHANGE STREE

SUSPENDED SCAFFOLDING | TUBULAR SCAFFOLDING | "SCAFFIXER" SCAFFOLD TIES
AND CRANE STAGINGS.
(For Sale) BUILDERS' PLANT (For Hire)
SCAFFOLDING (GREAT BRITAIN) LT
Incorporating—
The Tubular Scaffolding Co., Ltd., and The Patent Rapid Scaffold Tie Co., Ltd.
Telegrams: "Scaffixer, Claproad, London."
43 LANSDOWNE ROAD, STOCKWELL, LONDON, S.W.8.
Telephones: London—Brixton Birmingham—Victo

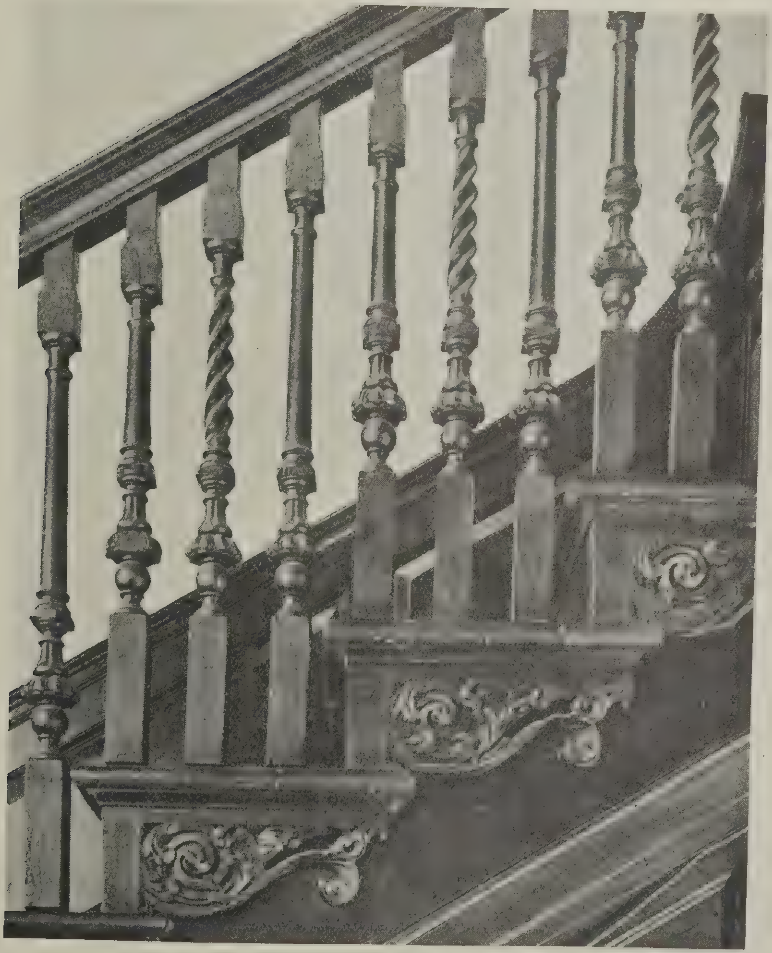
G. JACKSON & SONS, Ltd.,
49 RATHBONE PLACE, LONDON, W. 1.
FIBROUS PLASTER,
FRENCH "STUC," CARTON-PIERRE, WOODWORK, &c.

ednesday, October 17, 1923.

Vol. LVIII. No. 1502.

THE ARCHITECTS' JOURNAL & Architectural Engineer

With which is incorporated "The Builders' Journal."

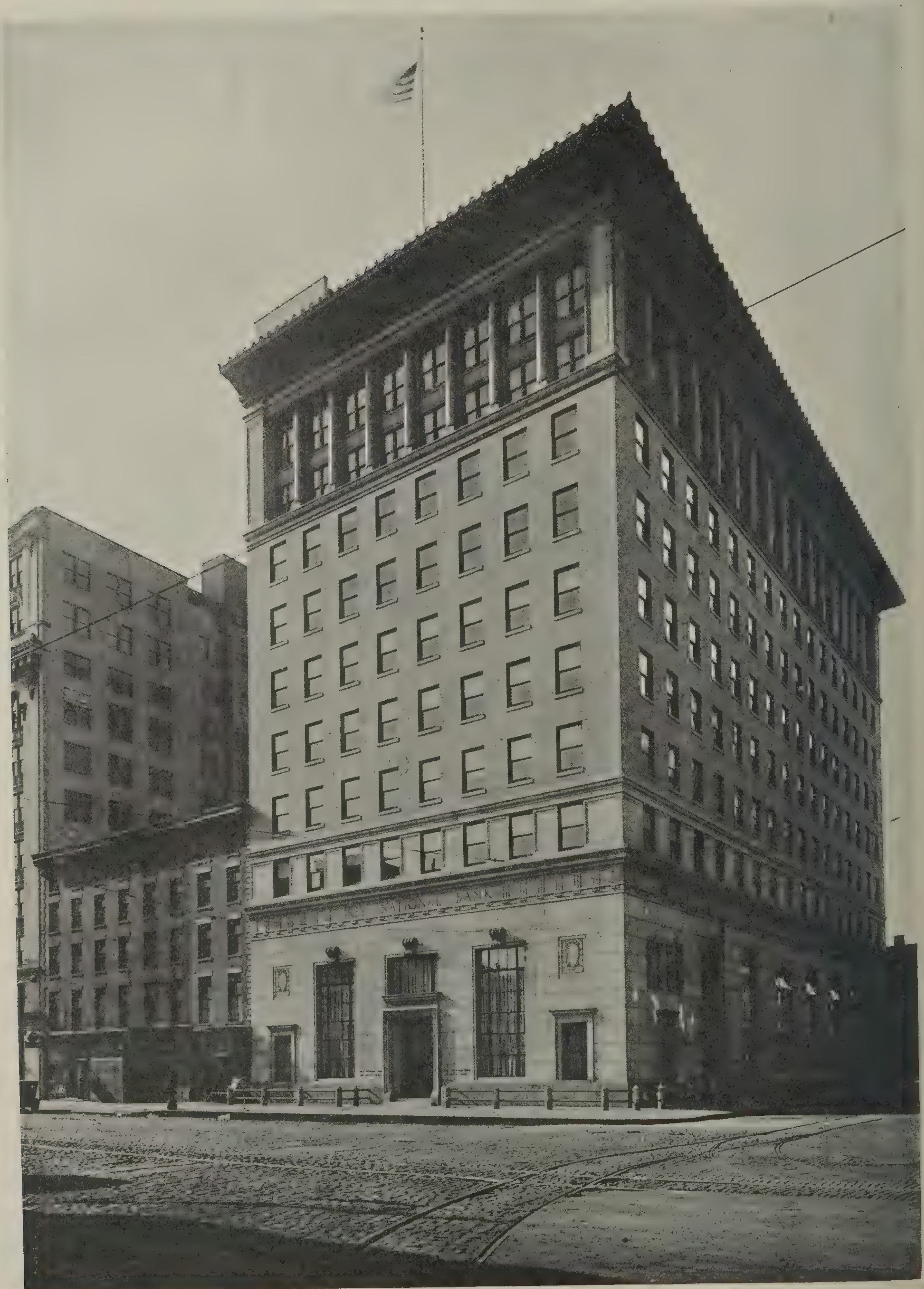


DETAIL OF STAIRCASE, 15 QUEEN SQUARE, BRISTOL.

27-29 Tothill Street, Westminster, S.W.1.

Modern American Architecture. 41.—The First National Bank of Jersey Cit

Alfred C. Bossom, Architect



The First National Bank of Jersey City, N.J., is nine stories high, and has an altitude of 120 ft. above the street. It has a frontage of 80 ft. on Exchange Place, and 162 ft. on Hudson Street.

THE

ARCHITECTS' JOURNAL

27-29 Tothill Street, Westminster, S.W.1.

Vednesday, October 17, 1923

Volume LVIII. No. 1502

Makeshift Architecture

THERE are many who are prepared to explain at great length why it is impossible for private enterprise to get into its stride in cottage building. So far as working-class accommodation is concerned such pessimism may be justified, but the average citizen whose business or pleasure takes him about the country, whether by rail or car, cannot fail to be astonished at the gratifyingly large amount of private work appearing on all sides. Practically all this new building consists of small houses or bungalows with four or five bedrooms, which can best be described as middle-class.

The influence of the State-aided housing schemes is clearly visible in present-day work, and the simplicity and sense of proportion in the majority of the brick, stone, and concrete houses leads one to hope that the monotony of he Victorian terrace and the disjointed individualism expressed in Edwardian frills and trappings have finally been abandoned. No doubt much of the commendable implicity in the middle-class cottage is due to economic pressure, but it must have its effect upon our architectural uture. Indeed, it is probable that, quite apart from the ecessity of strict economy, the man in the street is already eginning to realize that there is such a thing as the archi-ecture of the small house.

These signs of an improving public taste may be the arbingers of a new era when the architecture of the cottage will everywhere be recognized, and when the countryside will be improved and not disfigured by our new houses. ut, while fully recognizing this pleasing reformation in the olidly-built modern house, we cannot blind ourselves to ie serious menace that lies in the increasing popularity of imsy makeshifts which one can see being pushed up on very side, and in the most unsuitable places.

Before the war it had always been the practice in England build houses to last, and although builders were some-mes driven to poor materials and indifferent construc-on, yet on the whole houses were, or at least purported to e, solidly built of reasonably durable materials, even ough their architecture may have been deplorable. The ar introduced us to the army hut, corrugated iron, tarred lt, and the Belfast truss; and whether we liked it or not cumstances forced us to employ makeshifts and sub-tutes. Now everyone will admit that there is plenty of om for the legitimate use of the materials and con-vances we have mentioned, but we suggest that it is or economy to build a dwelling-house with a life compar-le with that of the standard army hut.

Ugly as it is we do not regard the army hut type of shanty itself a serious threat to the architecture of the country ce, however much it may be propped and patched, it ll have disappeared in less than a generation. The danger s rather in getting into slipshod and slovenly ways, and decreasing the sense of personal responsibility for the pearance and permanent wellbeing of the neighbourhood. is when they arrive at a prematurely decrepit old age that the active evil effects of these buildings will begin to be felt, and it must be obvious that their useful lifetime cannot much exceed fifteen years. Now, it is exceedingly unlikely that in ten or fifteen years' time the housing problem will have been finally solved and that, in addition to building the 100,000 houses needed annually to cope with the housing requirements of the population, we shall have a surplus of labour and materials sufficient to place us in a position to start rebuilding decaying post-war dwellings. It is far more probable that the comparatively well-off man who now lives fairly comfortably in a temporary shanty will leave it when he finds it deteriorating and that it will get into the hands of some unfortunate who has nowhere else to go; these same houses may thus well degenerate into miniature slums, lived in, but unfit for human habitation.

We have placed it to the credit of the Government housing schemes that their influence has in large measure been responsible for the increased architectural simplicity and for the improved standard in design and proportion of the present-day well-built house, but, in another direction Government work has set a bad example. Many Government houses that are otherwise admirable are marred by flimsy fittings, by the omission of virtually essential adjuncts, and by other utterly foolish "economies," and this example is unfortunately being followed, not only in the ramshackle house, but in others that are of solid and creditable construction and appearance. A favourite "economy" practised by the Government was to leave out underlining in roofs, even when such a precaution was clearly required if the roofs were to remain watertight. It is hard to imagine anything more unsatisfactory than a roof that leaks, not in this or that spot, but all over, and that (being a cave of the winds) possesses none of the warmth associated with a reasonably airtight roof space. The man who builds to sell has to attract occupants, and the speculative builder is, therefore, usually too good a man of business to indulge in such unbusinesslike methods; it is rather the enterprising gentleman who makes his own motor cycle apparently out of hairpins and tobacco tins who builds his house on the same "economical" principles. It is not uncommon to pass a row of perhaps a dozen good sound houses and, planted among them, to find a bungalow that is out of keeping with anything but a hencoop or a rabbit hutch.

While it is all to the good that a man should not mind living in a house that derives its inspiration from a hencoop, it is, for various reasons that we have already mentioned, unfortunate that he should actually erect it. The disappearance of the hide-bound gentility of pre-war days renders possible the flimsy house, but we would rather see the ingenuity expended upon building new houses of inadequate materials used on the ingenious adaptation of old ones. It is now rather the thing to live in an old mews, in a converted windmill, or over a dentist's, and the class distinctions of districts are consequently tending to diminish. The charm of the old English village is largely due to the mixture of buildings, all, perhaps, of one general architectural type, but of different sizes and intended for a variety of uses.

Much as we may admire some of the best of the great modern housing schemes, there is always a sense of sameness in a new suburb consisting entirely of A.3 and B.3 houses, be they ever so well designed and grouped; and the present-day movement towards a more Spartan existence will be a blessing if it leads to a less rigid class segregation and towards a sympathetic adaptation of old structures; but we must guard against the fallacy that a ramshackle hut or bungalow is good enough to build as a dwelling-house. It may be good enough for ourselves at the moment, but it cannot fail to be an incubus, if not a danger, in the near future.

Human Proportions and the New Architecture

Architecture as a background for the human figure is a fascinating subject for philosophical musing and speculation. Buildings, we like to think, should be human in their proportions; and we deplore the fact that often they now are not. One of the most frequent criticisms of modern commercial architecture is that it takes no account whatsoever of the human scale of things; seems, indeed, to have been conceived as a setting for a race of giants. Some critics there are who would like us to think that this is entirely a modern failing, when, as a matter of fact, architectural history shows that it is one of goodly antiquity. The pyramids certainly take no account of human proportions; and in the classic temples and the Gothic cathedrals the scale is sufficient to reduce the human figure to insignificance. These are instances, however, in which great size serves a definite and perfectly understood purpose. But can the same be said of some of the Italian Renaissance palaces?—the Palazzo Albergati, for example, which one might easily take for a building about the size of the Travellers' Club in Pall Mall, were it not for the comparatively minute sentry boxes that show the vast scale of the façade. Or take the Casa del Diavolo, at Vicenza, that fragment of Palladio's scheme for a palace: the immense scale of the order is entirely unappreciated until one notes against it the pygmies, which are men. Then, to come nearer to the domestic hearth, what of Raynham Hall, with its enormous doorway and windows sadly reducing the apparent stature of man; and what of the Brobdingnagian proportions of Blenheim or Castle Howard? This fashion of architecture overawing humanity is certainly not new, so Kingsway and Regent Street may take heart again if to know this is any consolation.

Unsightly Advertisements

The Ministry of Transport has lately circularized all the County Councils, drawing attention to "the increasing extent to which the countryside is becoming disfigured by the erection of unsightly hoardings and advertisements." The immediate cause of this very welcome official action is the fact that already hoardings are springing up along the new arterial roads, some, indeed, having been erected before the roads were open for traffic. County Councils are asked whether they cannot take useful action under the Act of 1907, which provides for local option in the regulation of advertisements. It is sincerely to be hoped that they can, for the advertisement nuisance has become intolerable. It is positively scandalous that one can look in hardly any direction nowadays, either in town or country, without being confronted with blatant advertisements of somebody's pickles or soap or jam. Such advertising surely would not be persisted in if those who pay for it had any grasp of elementary psychology; for the one thing that is certain about these unsightly hoardings is that by disgusting the traveller they defeat the very ends they are designed to serve. No one enjoys being commanded to appreciate anything; it is only an independent and voluntary appreci tion that is of any value, and the sooner commercial adve tisers realize this simple fact and cease to force their war in unsightly fashion upon the attention of the outdo community, the better will it be for their own interests well as for the amenities of the countryside.

First and Second Thoughts

Mr. Arthur Davis, in his criticism of the designs for t Victory Scholarship, commented upon the marked tenden of competitors to depart from their preliminary sketch in their final designs. It is a very human failing— "failing" is the right word for something akin to virtue and draws attention to a real weakness in the competiti system as at present established. It is hardly fair to a co petitor to ask him when he comes to work out his design adhere to ideas jotted down in a frenzy of spontaneous i vention—ideas that, on reflection, are sure to be found f of weaknesses. There are two ways out of this difficult (1) To allow the competitor more time to prepare his p liminary sketch; or (2) to allow him more latitude in t subsequent development of his ideas. Too strict an enfor ment of the regulations, by depriving competitors of init tive, can only stultify competitions, the object of which surely to get from a man the best work of which he capable. "To change opinion may be but to say: I more wise to-day than yesterday."

Chimney Pots and the New Era

Sir William Lancaster has lately said some hard things London chimney-pots, and with good cause, for they ma a very unattractive spectacle, especially when viewed fr the roof of some high building. If they all conformed t decent standard the effect might not be so objectiona but they do not; and there is the further complication of zinc atrocity with its multiplicity of bends and hide cowl. While we continue to consume raw coal in open fi and find no sightly solution of the down-draught proble these things must be. In the "all-gas" or "all-electricit era we shall not require chimney-pots. Nor shall we requ chimney-stacks, which, perhaps, is matter for regret, the chimney-stack may be made a very effective feature an architectural composition, though it often is n especially in the case of city buildings which, with t flat roofs, do not lend themselves to this kind of adornme appropriate though it may be in the case of dome buildings. Central heating, gas, and electricity will comb to make the open fire and the chimney-stack as much anachronism in buildings as in ocean liners. The appearance is thus decreed of the conventional chimn piece—that one opportunity that the architect has letting himself go in the design of modern domestic inter What can he do without it? Clearly we are entering u a period that promises interesting architectural devel ments.

Historic Monuments for the Nation

The passing of great buildings from private to pu ownership continues. In recent years the process has b greatly accelerated, Stonehenge, Dryburgh, Melrose, the walls of Carnarvon being among the more not instances of places of national interest being made by their owners to the nation. To these have now t added Fountains Abbey, given by Lord Ripon, and historic Jacobean mansion, Temple Newsam, which been handed over, on very generous terms, to the L Corporation by the Hon. Edward Wood, Minister of Ed tion. The only unhappy aspect of this last transferen that the owner is unable to retain the estate owing to heavy burden of taxation. He will have the sympath all good citizens in this matter, and at the same time t thanks for a generous and public-spirited action. W the mansion Mr. Wood has allowed to remain a quan of valuable pictures, books, and antique furniture, w must add enormously to its educational interest and va

The New Regent Street

By MAJOR HARRY BARNES, V.P.R.I.B.A., F.S.I.

This is the third and last of Major Barnes's broadcast talks on architecture. The other two appeared in our issues for August 15 *and September* 12.

THE last time I talked about London's architecture my theme was that great twentieth-century improvement known as "Kingsway." To-night I have something to say about the "New Regent Street." It is a delicate topic, for no building operations ave been carried on in London for many a year which ave been the subject of so much controversy. To many eople the "New Regent Street" is hardly less than an rchitectural calamity. To others it is the supreme evidence f the vitality and progressive character of London's commerce. Pages of criticism have overwhelmed it in the rtistic Press of the country, while in its defence the advertising pages of the daily papers have been lavishly drawn upon. It is a lively dispute with many interesting phases.

Why should it take thirty years to build up Kingsway and only three years to turn the old Regent Street into the new ? Before we answer that question let us look for a moment or wo at the place of Regent Street in the architectural history of London. It will be for ever associated with the name of one architect. Some people think that when architecture became linked with the names of architects it ceased to be. Without taking up that interesting challenge, what is enerally true, namely, that since the Renaissance, art and he artist have been linked together in a way that did not xist before, is particularly true of architecture in London.

There have been many considerable architects in its istory, but there are three names which outstand, as those f men who have left a broad and general mark upon the ity. One, of course, overtops them all. In the seventeenth entury Sir Christopher Wren got his chance—the man and e hour came together in the way that makes history in rt as well as government. In the eighteenth century the dam Brothers left us not only the Adelphi (soon, I suppose, to disappear), but also an impress on architectural yle which will remain long after the buildings they them-lves erected have dissolved in dust.

The early years of the nineteenth century gave us John ash, and with him the Regent Street that is passing before ur eyes. A remarkable man, John Nash. Not, of course, be named in the same breath with Wren, he left no dividual work which we would retain, as we would that the Adam Brothers, but collectively he gave us in the egent Street which begins in the Mall and ends at Regent's rk, one of the finest street improvements of London or, deed, any other city. A man of extraordinary vitality, could handle a big scheme in a big way, how big is shown the fact that now, when at the end of a century we are ulling down the buildings that line his great street, the reet itself will retain its course unaltered in direction and width. It is this fact that marks the change between at is taking place in Regent Street and the work in ingsway.

Kingsway added a great new artery through which the affic of London might pulse. The New Regent Street es nothing of this—it adds nothing to the collective con-nience and comfort of the citizens of London. It fills e coffers of the Crown, and is expected no doubt to add to e opulence of those who have erected the new buildings ich line it.

Never was there raised in more striking fashion the whole estion of street architecture. Is a street a unit in itself, nething which should be considered as a whole, which m one end to the other should be marked by unity of sign and conformity of treatment, or is it merely an portunity for collecting a number of buildings together, f-regarding and disregarding ? Someone has said that have lost Regent Street and gained a new Tottenham Court Road. I do not think that is a fair criticism of those in whose hands lay the general control of the reconstruction. It is certainly not fair if it is directed at the designers of the new buildings which have taken the place of John Nash's work. Viewed individually there is no one of them without merit, and in some cases the merit is of a very high order. If there is anything to be thankful about in the rebuilding of Regent Street it is that it did not take place, say, fifty years ago. One shudders at the thought of what it would be now. As it is one can only look helplessly at it and say, "It's nobody's fault, everybody has done their best under the circumstances." It is the circumstances which are to blame. Let us look at these for a moment and see what they are.

In a very thoughtful article on this subject, written some little while ago, the writer said that Regent Street owed much of its pleasantness to the fact that the buildings were low in proportion to the width of the streets. That fact is very true, but unhappily, low buildings can only exist where there are low ground rents. One of the defenders of the New Regent Street has said, "High ground rentals mean that every inch of space is worth pounds a year to the tenant." That is the misfortune of Regent Street—if it had remained poor it would have remained untouched, but it became prosperous, and John Nash's buildings could not yield the rental which the situation could afford. The revenues of Regent Street are public revenues, and in these days, when debt runs into thousands of millions, public revenues I suppose cannot be sacrificed for the sake of art. No one, I am sure, more regrets the task of reconstruction which has fallen to him than the amiable Surveyor of Woods and Forests whose duty it has been to secure the highest possible rent for the Crown.

A great effort was made to save the unified conception of Regent Street when the Piccadilly Hotel frontage was built to the design of Mr. Norman Shaw. Though I do not know that I would have regarded Regent Street even rebuilt to that design as compensation for the loss of Nash's pleasantly treated sequence of classical buildings, at least the new street would have been impressive and monumental. The shopkeepers were, however, too much for Shaw, but again we must not blame the shopkeepers, for they in turn were overborne by the economic pressure of the ground rents which the situation justified. The curious result is that it may perhaps be said, Shaw's efforts to save Regent Street really gave it its death blow. After the Piccadilly Hotel had been built and after its extension was denied, such a rent was made in Regent Street that the old garment had to go.

One wishes it had been possible to impose a self-denying ordinance upon the Exchequer and have retained Regent Street for those businesses which can still be carried on in comparatively small and modest premises, leaving the great stores to develop along Oxford Street. One imagines that is what would have taken place if London had been town planned. Regent Street would have been zoned for the small business and would have remained the pleasant lounge it was. Here it is, however, and it is no use crying over spilt milk—it is all very brisk, very busy, and very bouncing, and those of us who care for quieter things must seek them elsewhere. After the last returns the first, and we may perhaps hope that in the future generations will not ask for square miles of plate glass and a chaotic whirl of electric signs.

Great architecture can only arise out of great purposes, and the display of goods can hardly be classed amongst these. The little shops of a country town, the bazaars of an Eastern city, are pleasant places to potter through, but hardly instruments for getting rich quick.

The old Regent Street had something of leisure about it, and leisure is too great a luxury for modern days. There are some streets in Edinburgh that breathe it, and some in Bath. Stratford Place still remains in Oxford Street, but that leads nowhere. At least let us be thankful for this, that if no single architect has had the opportunity in this twentieth century that was given to John Nash a hundre years ago, of designing the New Regent Street as a whol those architects to whom has been entrusted the task o designing the individual buildings of which it is now compose have discharged that task in such a way as to make us realiz that almost any one of them, given the opportunity, coul have handed on to the generations to come an architectur legacy not less pleasing than that which John Nash left to u

The Liverpool Shipping Office Competitio

The Winning Design

We published in our issue for October 3 a review, by Mr. Lionel B. Budden, M.A., A.R.I.B.A., of the designs submitted in the limited competition for a new building for the Ocean Steamship Co., Ltd. (Messrs. Alfred Holt & Co.), Liverpool, to be erected at a cost of over a million pounds. This week we are able to publish reproductions of the drawings of the winning design, by Messrs. Arnold Thornely, F.R.I.B.A., and Herbert J. Rowse, A.R.I.B.A. The other competitors were Sir Edwin Cooper, F.R.I.B.A., Mr. Curtis Green, A.R.A., F.R.I.B.A., Messrs. Willink and Dod, FF.R.I.B.A., and Messrs. Mewès and Davis. The assessor was Mr. Gilbert Scott, A.R.A.

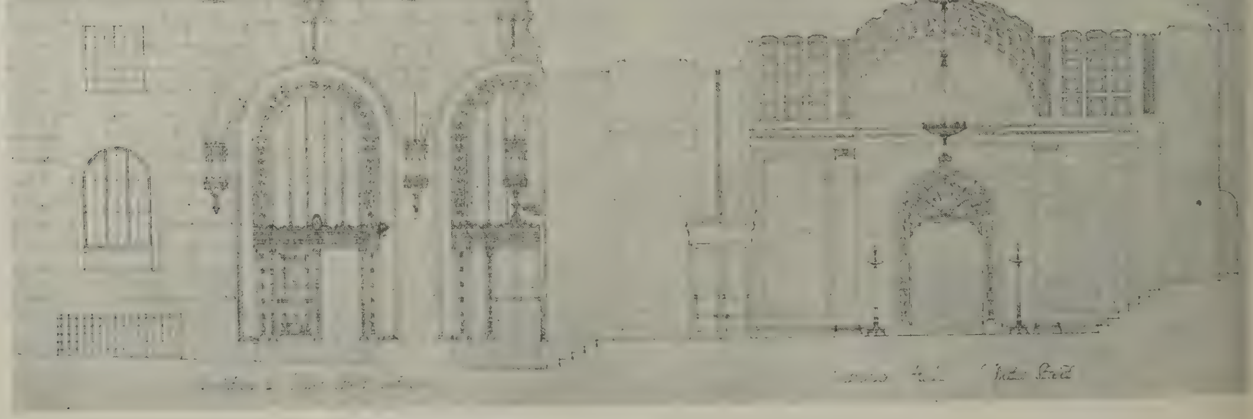
We reprint herewith some extracts from Mr. Budden's article, together with his criticism of the winning design.

The site of the building is an island one, bounded by four existing streets. Of these, Water Street is the most important; and it, together with Fenwick Street and Drury Lane, will be widened by the setting-back of the building line. An agreement has further been made with the Corporation that when rebuilding takes place on the other side of Drury Lane, the building line will be set back on that side also, making the street eventually 36 ft. wide. Brunswick Street alone is to remain unchanged in width. Both Water Street and Brunswick Street fall about 10 ft. from north-east to south-west in the length of the building. The ground floor will thus be about 3 ft. above the pavement level at the corner of Fenwick Street and Water Street, and about 13 ft. at the Water Street end of Drury Lane. Chorley Street, an existing alley running across the centre of the site, is to be closed and built over.

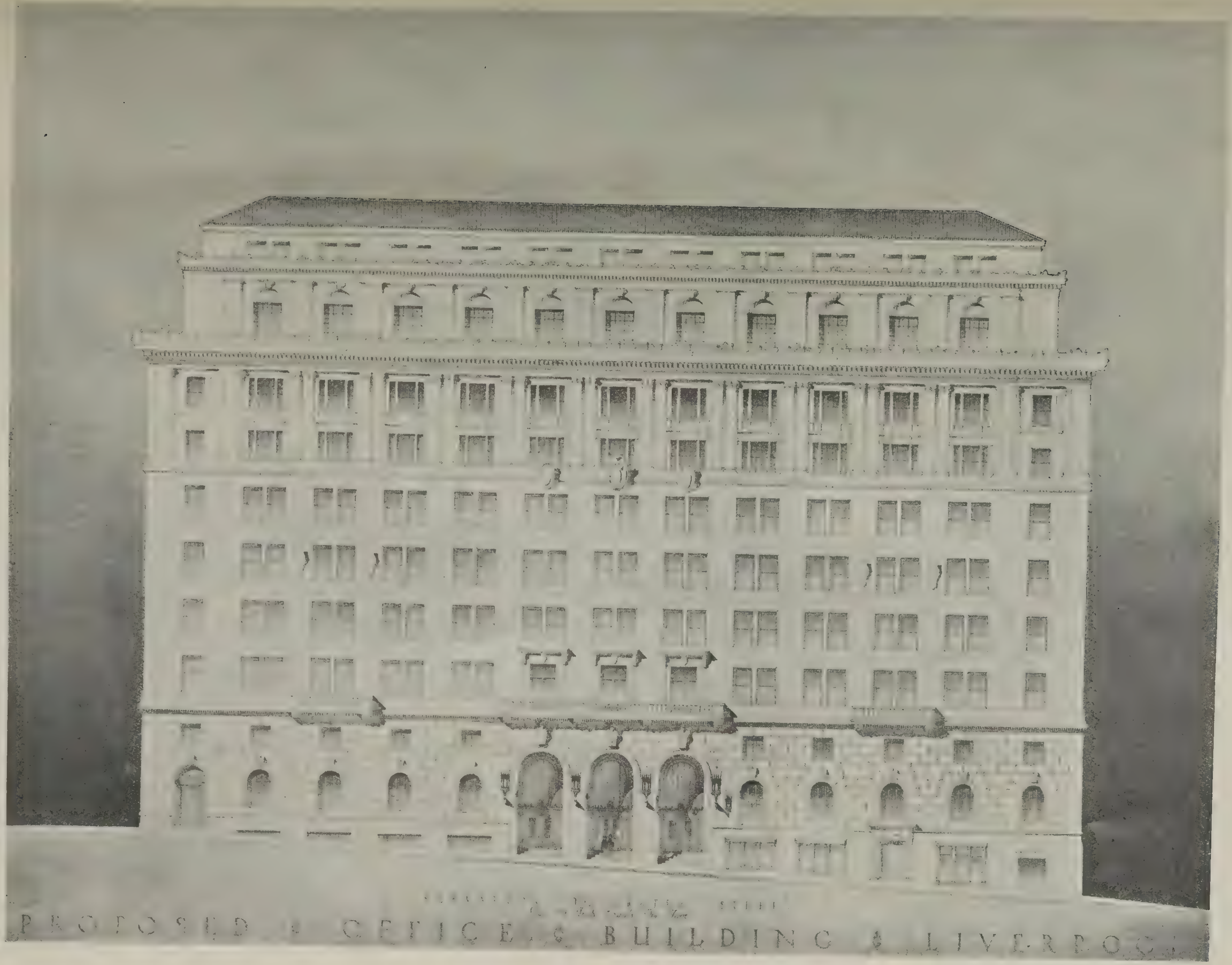
It was stipulated in the conditions that it should b possible to construct the building in two halves by succe sive operations. The south-west half was to be built firs in such a way as not to involve pulling down the block offices north-east of Chorley Street—at present occupi by Messrs. Alfred Holt & Co.—until after the new porti was ready for occupation.

Above the ground floor the whole building was to ha seven stories on the face. Above these again two more we to be set back from the main cornice; and the height the latter from the lowest point at the street level was n to exceed 120 ft. Thus the building was to consist of basement and nine stories above it. It was to be assum that bank premises would occupy the whole north-east h of the ground floor and that an insurance or other compa would become the tenants of the remainder. An impressi appearance was thus required for this accommodation, a a height of 23 ft. was allowed for it. The main fronta facing on to Water Street was to have a principal cent entrance; another general entrance was to be placed at t centre of the Brunswick Street façade; and private ba entrances at both the Fenwick Street corners of Wa Street and Brunswick Street. The suggestion was a made that it would be desirable to provide direct acc from the street to the insurance or other accommodat on the south-west half of the ground floor. At the cor of Water Street and Drury Lane provision was to be m in the base of the building for an entrance to the subw which forms one approach to the James Street Station the Underground Mersey Railway.

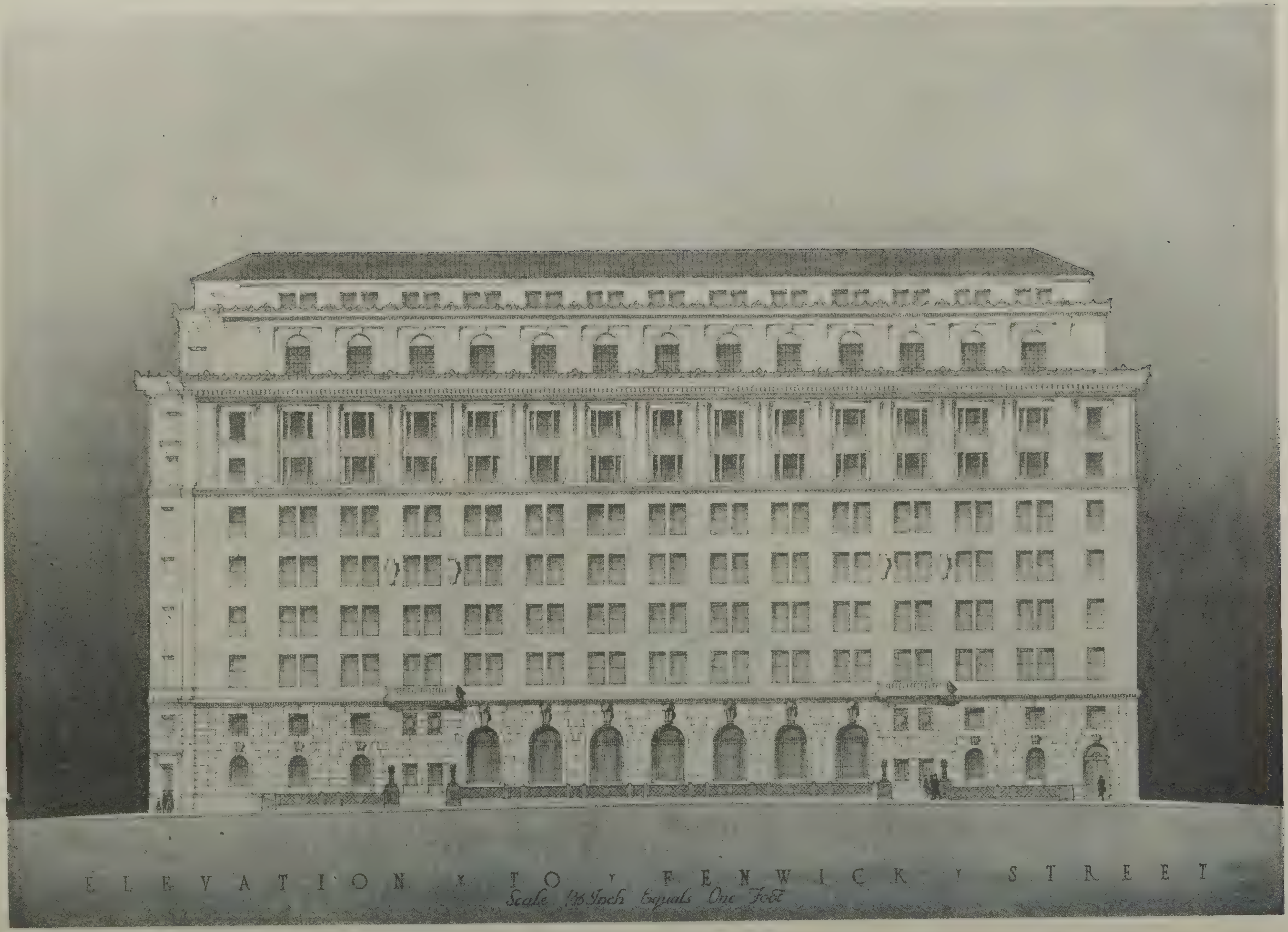
The basement frontages on to Drury Lane, the lo ends of the Water Street and Brunswick Street faces,



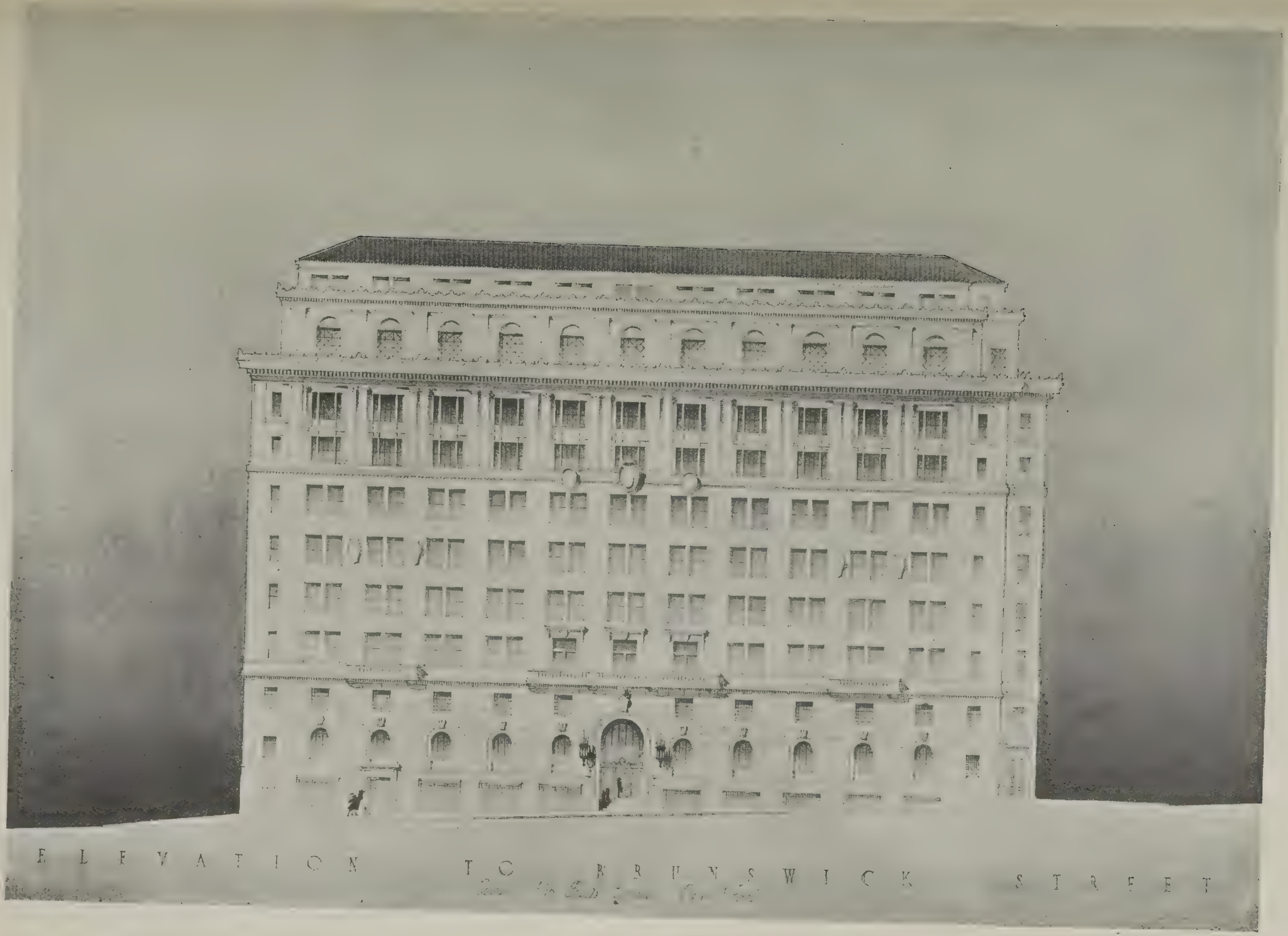
A DETAIL OF THE ENTRANCE AND ENTRANCE HALL.



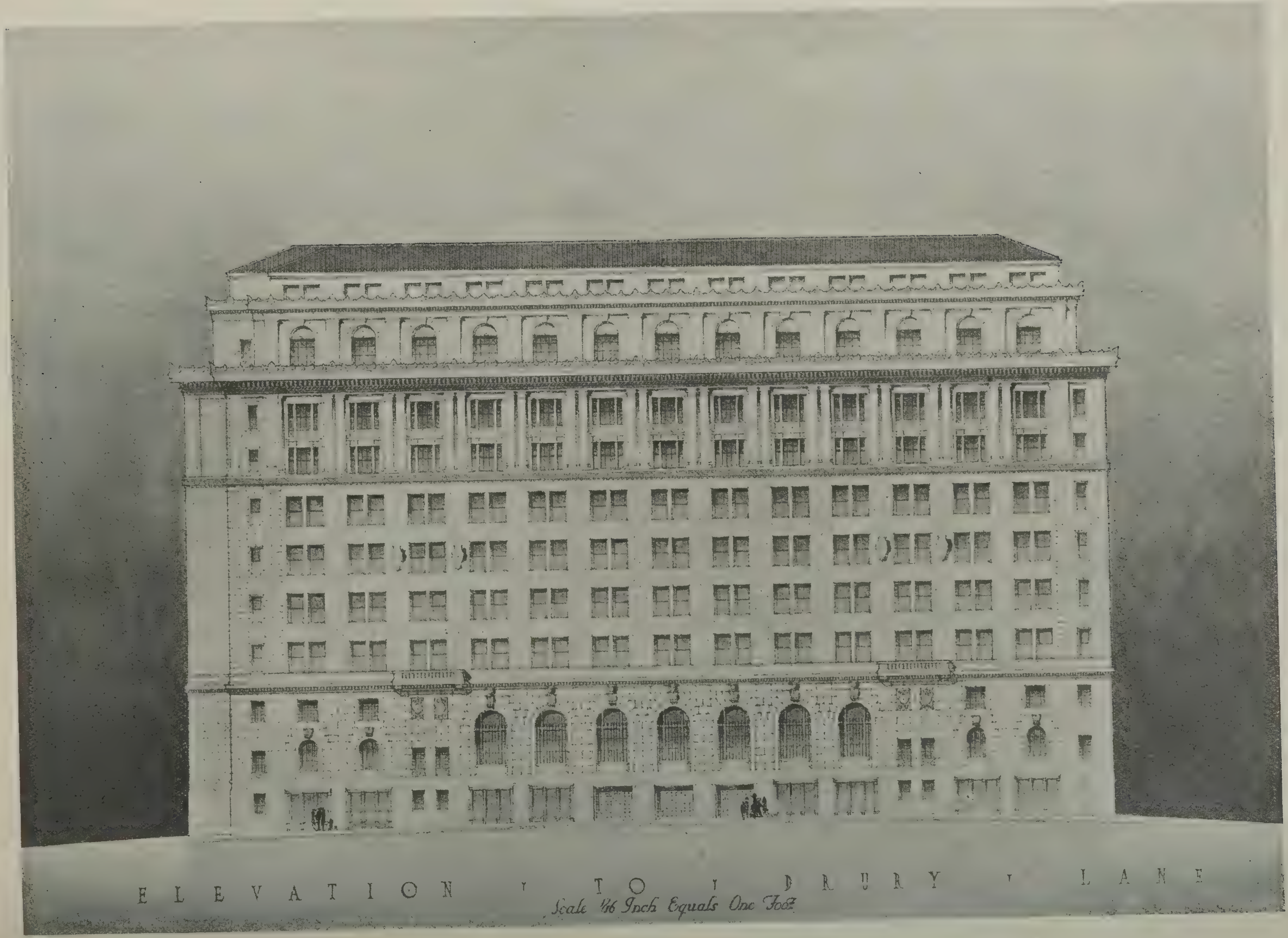
THE LIVERPOOL SHIPPING OFFICE COMPETITION: WINNING DESIGN
ARNOLD THORNELY, F.R.I.B.A., AND HERBERT J. ROWSE, A.R.I.B.A., ARCHITECTS.



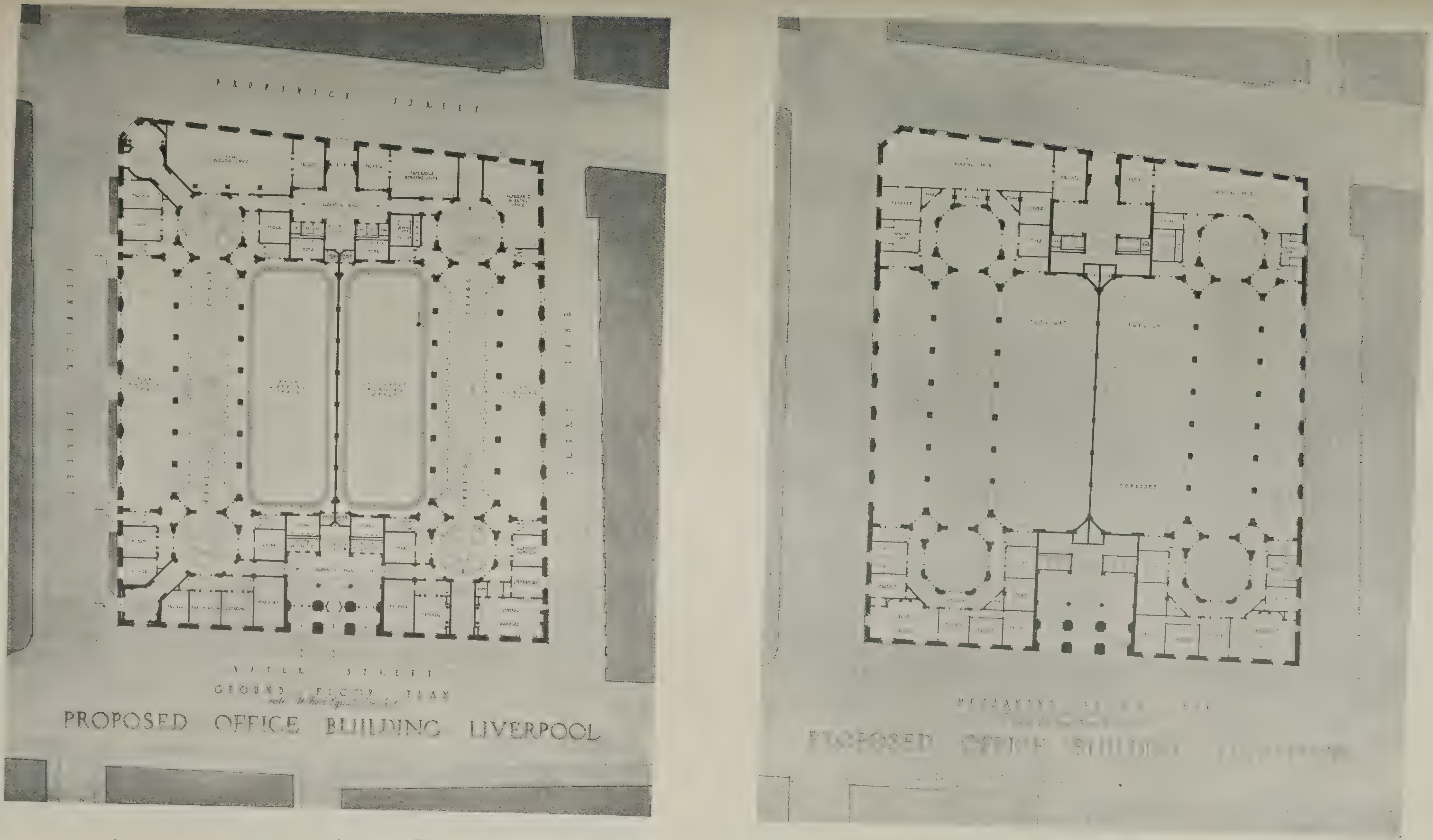
THE LIVERPOOL SHIPPING OFFICE COMPETITION: WINNING DESIGN.
ARNOLD THORNELY, F.R.I.B.A., AND HERBERT J. ROWSE, A.R.I.B.A., ARCHITECTS.



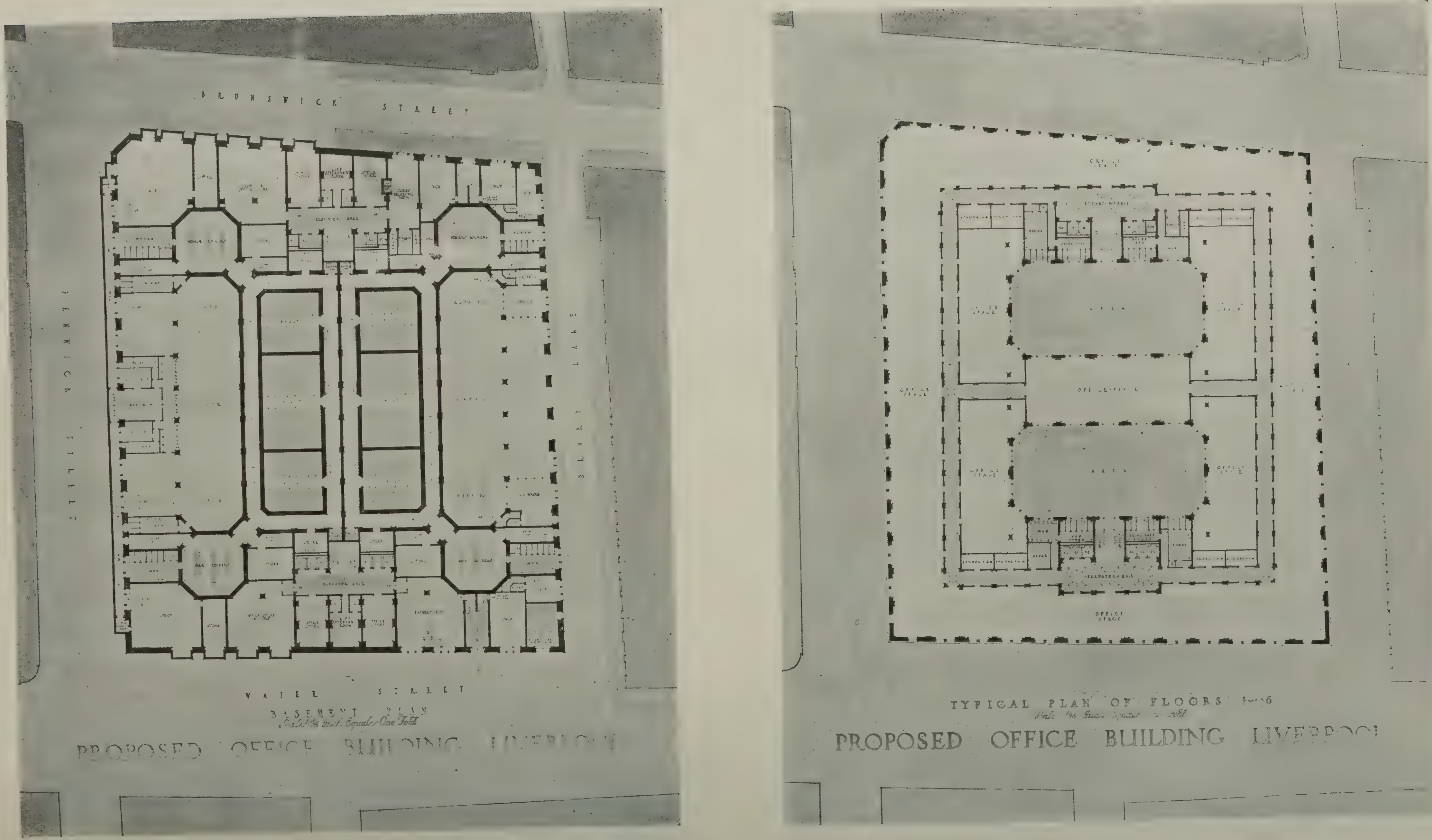
THE LIVERPOOL SHIPPING OFFICE COMPETITION: WINNING DESIGN.
ARNOLD THORNELY, F.R.I.B.A., AND HERBERT J. ROWSE, A.R.I.B.A., ARCHITECTS.



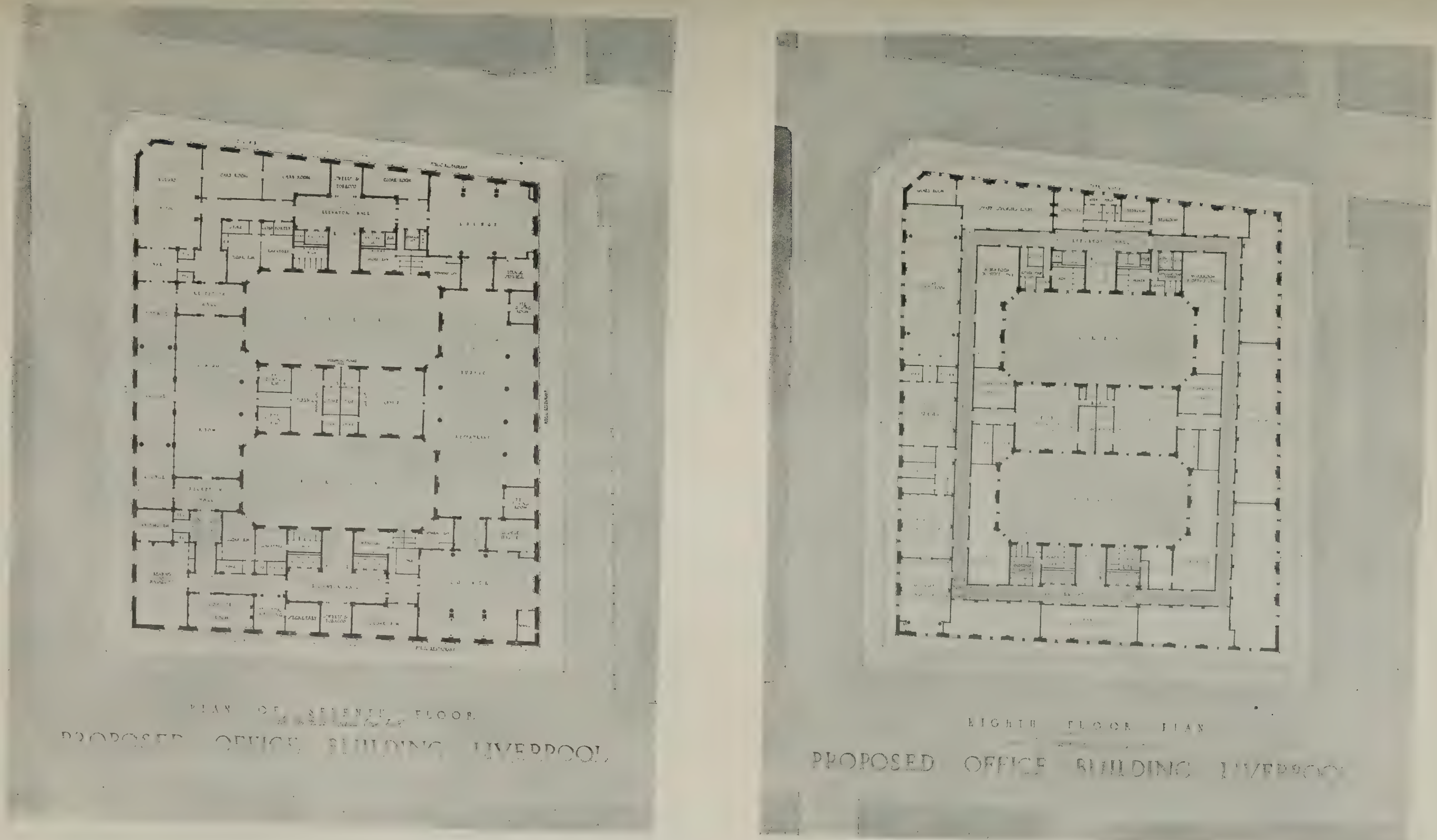
THE LIVERPCOL SHIPPING OFFICE COMPETITION: WINNING DESIGN.
ARNOLD THORNELY, F.R.I.B.A., AND HERBERT J. ROWSE, A.R.I.B.A., ARCHITECTS.


BRUNSWICK STREET
FENWICK STREET
WATER STREET
GROUND FLOOR PLAN
PROPOSED OFFICE BUILDING LIVERPOOL
PROPOSED OFFICE BUILDING LIVERPOOL

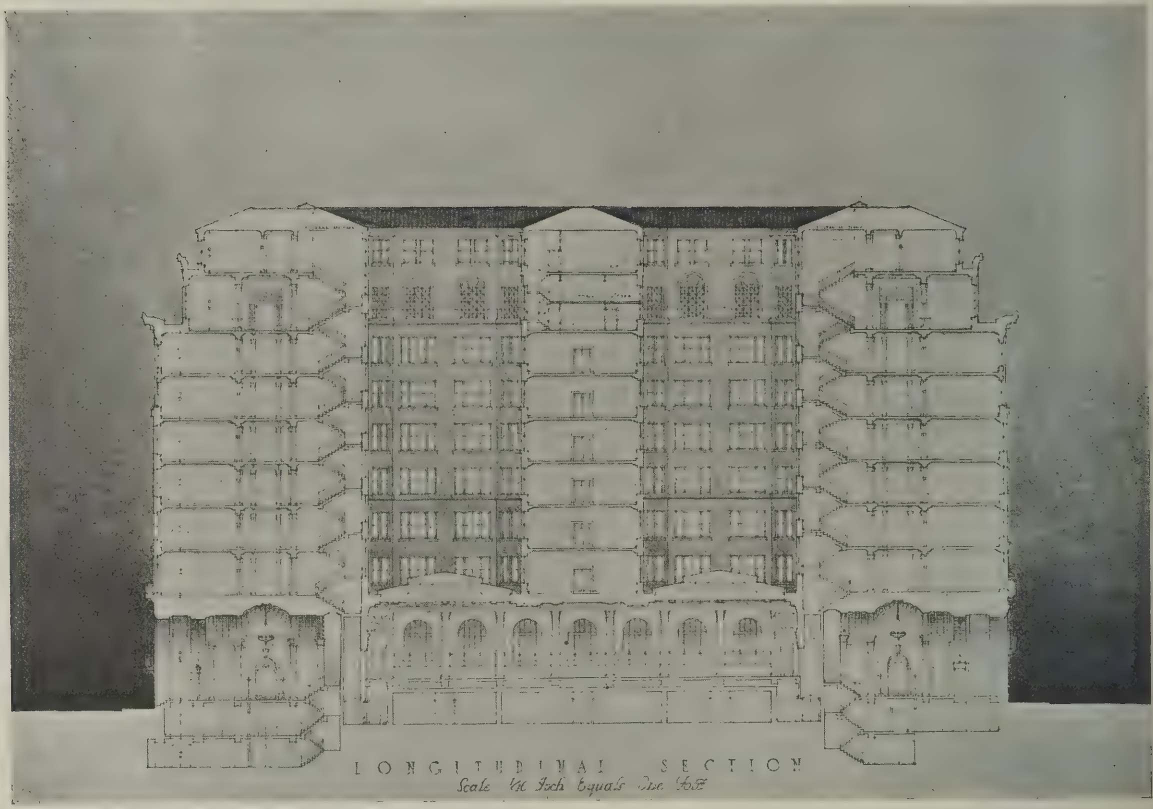
THE LIVERPOOL SHIPPING OFFICE COMPETITION: WINNING DESIGN.
ARNOLD THORNELY, F.R.I.B.A., AND HERBERT J. ROWSE, A.R.I.B.A., ARCHITECTS.

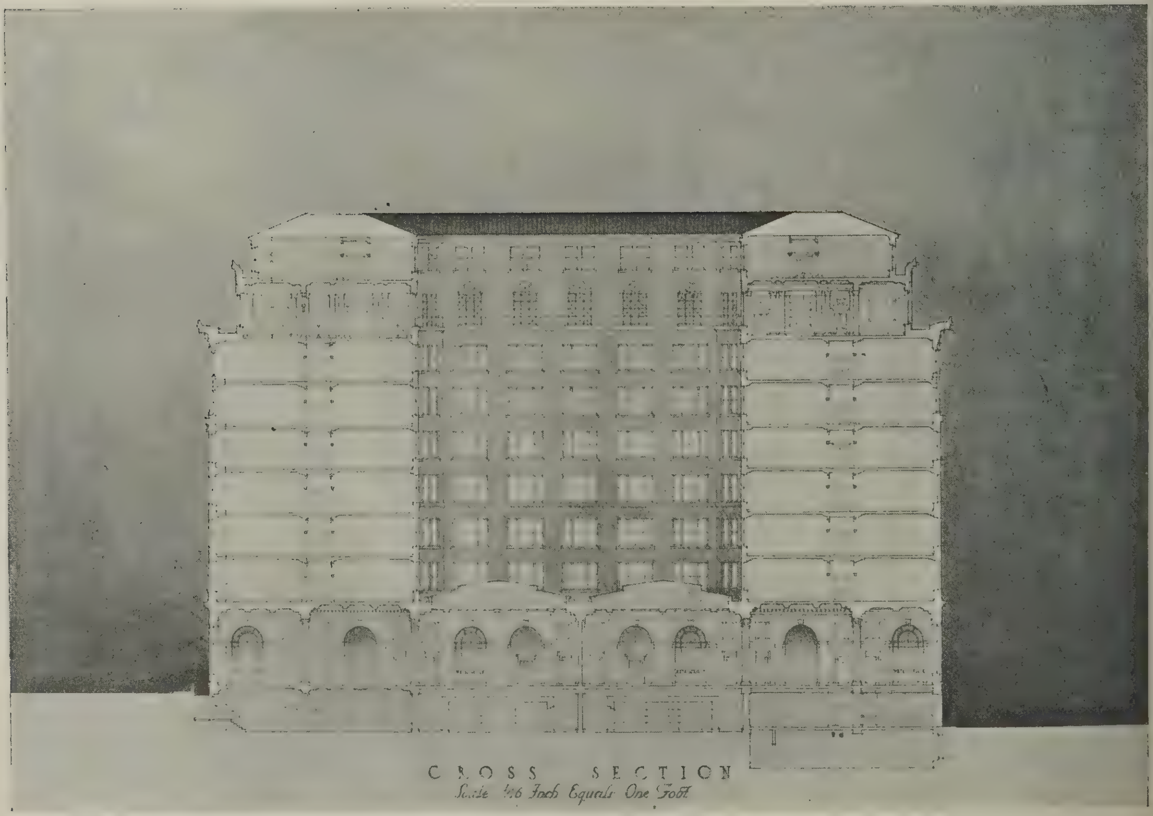

BRUNSWICK STREET
FENWICK STREET
DRURY LANE
WATER STREET
BASEMENT PLAN
Scale 1/16 inch Equals One Foot
PROPOSED OFFICE BUILDING LIVERPOOL
TYPICAL PLAN OF FLOORS 1-6
AREA
AREA
OFFICE SPACE
ELEVATOR HALL
PROPOSED OFFICE BUILDING LIVERPOOL

THE LIVERPOOL SHIPPING OFFICE COMPETITION: WINNING DESIGN.
ARNOLD THORNELY, F.R.I.B.A., AND HERBERT J. ROWSE A.R.I.B.A., ARCHITECTS.


PLAN OF SEVENTH FLOOR
PROPOSED OFFICE BUILDING LIVERPOOL
EIGHTH FLOOR PLAN
PROPOSED OFFICE BUILDING LIVERPOOL

THE LIVERPOOL SHIPPING OFFICE COMPETITION: WINNING DESIGN.
ARNOLD THORNELY, F.R.I.B.A., AND HERBERT J. ROWSE, A.R.I.B.A., ARCHITECTS.





THE LIVERPOOL SHIPPING OFFICE COMPETITION: WINNING DESIGN.
ARNOLD THORNELY, F.R.I.B.A., AND HERBERT J. ROWSE, A.R.I.B.A., ARCHITECTS.

on to Fenwick Street (where an open area 4 ft. 6 in. wide was to be formed outside the building line) were to be let for shops, cafés, etc., and a garage might be comprised in he basement accommodation facing Drury Lane. General office accommodation was to be assumed for the seven loors above the bank and insurance premises. In the eighth and ninth stories quarters for a club, a public restaurant, staff, dining, and workrooms for Messrs. Alfred Holt & Co., stores, kitchen, and service rooms, and caretaker's quarters were to be located.

To come now to the actual designs. About the results of a number of competitions recently there seems to have been considerable dissatisfaction. But in the present case the assessor's award is not likely to be questioned by any mpartial critic. Messrs. Thornely and Rowse have won handsomely. They have beaten their competitors on every ssue. Their design is better conceived, better worked out, nd better presented than any other in the competition. n the first place they have scored over all their rivals by howing exactly how each of the special problems in the programme—the bank, the insurance office, the club, the restaurant, etc.—could be solved. In so doing they have given themselves infinitely more trouble than might have been thought to be necessary; but the result has justified their attitude. And, indeed, it would seem reasonable to suppose that the whole object the owners must have had in mind when they initiated this competition was to discover precisely what could be done to meet each of the requirements they specified. All the other competitors ave taken a different view and have trusted to their *partis* nd elevational drawings to do all that was necessary—and ave suffered for it by comparison.

The merits of Messrs. Thornely and Rowse's scheme are ufficiently evident from the drawings and need very little mplification. They have so designed their building that he south-west portion, which is to be erected first, is a self-ontained whole, and yet takes its place as a complementary art of the final structure. The main halls, traffic corridors, nd light wells, are disposed on axes that run at right angles o each other. As the bounding lines of the site are not in ectangular relationship, a problem of adjustment has been volved. The solution that is presented consists in laying own the principal axes of circulation on lines which run ther parallel with or at right angles to the axis of Chorley treet. From this solution the following advantages accrue: he most important office accommodation on the Water treet and Fenwick Street fronts runs virtually parallel ith those streets. Offices having the least average depth an be disposed along the minor cross street, Drury Lane. the event of a building of equal height being erected the opposite side of Drury Lane, the lighting of those ffices would not be unduly restricted.

In a building of the type under consideration the floors evoted to office accommodation are of critical importance. essrs. Thornely and Rowse have succeeded in evolving typical office-floor plan that gives a maximum rentable pace, well lighted at all points, and so formed that the reatest elasticity is possible in the method of its subvisions. Second only in importance to the collective alue of the office accommodation is the floor on which the nk and insurance premises are placed. Because that oor, properly developed, must very largely affect the ublic estimate of the building, it should not only be efficient arrangement and adequately lighted, but it should be pressive in effect. These considerations have clearly termined Messrs. Thornely and Rowse's treatment of the oject. It appears to have been assumed by them that a nk or insurance office occupying premises of this magnide would necessarily comprise several departments, which ould be more or less self-contained. On that account it been considered desirable to place the public space in entral position between the two main working-spaces. e latter areas then occupy the best-lighted positions, and ceiling of the public portion of the banking or insurance is not interrupted by top-lights. In addition, from central disposition of the public space it is possible to obtain a double range of counters for the transaction of various types of business, and to secure an interesting and impressive architectural effect.

The entrances serving the building as a whole are more reasonably proportioned in relation to its size than those of the other competitors, which are all either too small or too large. Grouped immediately within them the elevators and staircases are in the most accessible positions. No axial communication has been provided on the ground floor between these entrances; and this is a considerable gain in itself. For, as the London schemes show, any plan establishing such communication sacrifices much valuable floor space without securing compensating advantages.

Though the banking and insurance accommodation on the ground floor and the floors of offices above are in themselves separate problems and may require for practical purposes no very elaborate or extensive connections, they are yet in the present case integral parts of the same building, and ought to be logically related in the organic conception of it. That relationship has been secured by Messrs. Thornely and Rowse by developments on the ground floor that are the direct outcome of the planning of the typical office floor.

In order that the lighting requirements of the typical office floor plan may be satisfied two light wells are provided, the major axes of which are at right angles to the axis of Chorley Street. By splaying the re-entrant angles of these wells, light is brought into all four corners of the office floor plan enclosing each well; and the plan is in consequence fully lighted at points which have not usually this advantage. The splayed angles of the light wells are carried down to the ground floor, where those that are nearest the outer angles of the building form each a side of the vestibules attached to the four octagonal halls serving the special traffic needs of the ground floor. A definite connection is thus established between the form of the upper and ground floors, and coherence is given to the plan as a whole.

We have not the space to analyse in detail the basement and other floors of Messrs. Thornely and Rowse's design. We would only say that they are models of skilful and efficient arrangement, and will repay the most careful study. The elevations speak for themselves. They are preeminently characterized by those qualities which distinguish the plan—simplicity and directness. The purpose of the building, its situation, and its size have rightly been permitted to dictate a sober and dignified treatment of the whole, and no attempt has been made to invest the building with any character but that proper to itself. The style employed is to some extent eclectic and cosmopolitan—as is surely appropriate. At the same time a definitely English expression has been obtained in it, and a building produced that will find its natural home in Liverpool.

One word should be said in conclusion about the presentation of the scheme. No other drawings in the exhibition could touch the winning set. For the purposes of a limited competition they are ideally right in type—quietly and delicately drawn with the most fastidious finish, and exquisitely rendered in ink.

Reviewing the competition as a whole the most remarkable thing about it is the difference between the provincial and the London work. Both the designs submitted by the Liverpool competitors exhibit a more intimate study of the subject and a greater competence in handling it; especially is this so in the case of the winners, whose solution is altogether more logical and at the same time more imaginative than anything sent in from London. The difference in the standard of presentation is not less remarkable. At every point the local drawings are incomparably superior—in draughtsmanship, in rendering, and in form. The explanation is simple: Liverpool as an architectural centre now tends to look for guidance to New York rather than to Paris or to London, and the results evident in this competition are amongst the first fruits of the new orientation.

An exhibition of all the drawings in London might be usefully arranged. It could not fail to have a salutary effect.

The Town Planning Institute

Annual Conference at York

THE fifth annual country meeting of the Town Planning Institute was held on October 5 at the Tempest Anderson Hall, York, under the chairmanship of Mr. Thomas H. Mawson, the President. A civic welcome was given to the delegates by the City Sheriff (Councillor J. E. Gibbs) in the absence of the Lord Mayor, who is touring America.

The Sheriff expressed the hope that the visit would be profitable to the members and would further advance the ideas which they had at heart. Town planning was absolutely essential to-day to prevent a perpetuation of the horrible mistakes of the last fifty years in which districts had been allowed to grow up without any idea of order or any definite plan. The result of this neglect had been that hardly a big centre in England was to be found which had not some district which was an eyesore and also insanitary. He wished them every success in their gathering.

The President, in acknowledging the welcome, said that although the Institute was only a few years old it was one of the most vigorous, not to say ambitious, of the younger professional societies. They started with twelve members; the apostles of a new missionary enterprise which had as its object the saving of souls by communities rather than by individuals, and they hoped their sojourn in York would do much to strengthen their hands and help them to attain their high ideals. They congratulated themselves on their choice of a rendezvous for their annual conference, for York was a beautiful city instinct with architectural traditions, with a long history of intellectual and physical achievements, which was written large in the wonderful Cathedral and many other buildings in the city. No wonder that it acted as a compelling force, alluring great men and women to its sacred shrine, from the uttermost parts of the earth and particularly of those sharing our common history and speaking our mother tongue. They, as town planners, came to York for inspiration in their art and profession. They wanted to see how succeeding generations solved the problems with which they were confronted, and how the citizens now proposed to adapt an old historic city to the needs of to-day. They hoped from the papers to be read to obtain a comprehensive grasp of the city—past, present, and future. He hoped that in the discussion this complex subject would be further clarified so that they might assimilate all that could be applied in the regular course of their work.

Papers were then read by Mr. G. Benson, A.R.I.B.A., on the "Evolution of York," and Mr. F. W. Spurr on "The Town Planning Proposals of the City of York," of which the following are extracts :—

The Evolution of York

By GEORGE BENSON, A.R.I B.A.

YORK became successively a Roman fortress, the capital of Anglian Northumbria, the head of the Northern Church Province, the centre of the Danish and Norse Kingdom of York, a port whence merchant ships crossed the seas, a market in the midst of an agricultural area, an important coaching and railway centre; all these were entirely due to the city's important geographical position. York stands about midway between the capitals of England and Scotland, and is on the direct way by road, rail, or air between London and Edinburgh. When the Danish kingdom of York extended to Ireland and Kings of York were also Kings of Dublin, communication between York and the Irish capital seems to have been established by way of Manchester and the Mersey.

Situated on a cluster of glacial mounds in the midst of a plain some twenty-four miles wide, York commanded the waterways northward. Its river was navigable to the sea; and communication westward was afforded by the rivers Wharfe, Aire, and Calder. The Derwent gave access to the Vale of Pickering, whilst the navigation of the Trent made communication possible with the heart of the Midlands. North and east of York, at a distance of forty miles, is the sea, which sweeps round to the Humber estuary twenty miles south of York.

The erection of a bridge over the Ouse at York caused roads to be made leading to it. From the west roads came by Tadcaster, Knaresborough, and Boroughbridge, and passed thro York to Hull, Malton, Pickering, and the coast. The ri offered a good water supply, and even to-day the water we get in York is taken from the Ouse. The animal and life, the vegetation and fruits on the land, and the fishe the rivers offered food in plenty, and made the site emine suitable for a human settlement. It attracted hunters anglers from early times.

York had a succession of settlers. Stone, flint, and br users have left evidence of their presence. The people occ ing the district at the time of the Roman invasion were kn as the Brigantes, and doubtless were under the rule monarch at York. From the time of the first settlers wood had been cleared, land cultivated, and progress mad the arts. The Brigantes had a gold and silver coinage.

Its Early Planning.

After referring to the military value and the political portance of the city, and to York as an ecclesiastical me polis, as a market, as a port and commercial city, and coaching and railway centre, he said : The defensive valu York is responsible for three of its greatest building namely, that of the Roman Fort, the Norman castles, and Plantagenet embattled walls. The lay-out of the city time to time has been influenced by its enclosing wall. Roman fort was rectangular, and its angles faced the car points. Its streets were planned on rectilinear lines.

Subsequently the Anglians dwelt securely between the rivers with the Roman fort at their back. A winding track emerged through this suburb and crossed the Ouse south o destroyed Roman bridge and climbed the Bishop's Hill to the old Roman road to Tadcaster at what is now Mickle Bar. The other road from Aldborough to the fort was tinued and crossed the new trackway and continued to Foss. These two are our main roads to-day.

Under the Danes there arose new streets or gates windi all directions. The Cathedral blocked the old Roman s passing through the fort. The south-east wall had gradually removed and a new street arose within the li wall from Feasegate, and cut through the north-east south of the Roman gateway which was abandoned for new one at Mouthgate. The winding streets were also ado by the Normans in their rebuilding of the city after the and were continued to the Victorian era, when the R practice of rectilinear streets was revived.

The twelfth century was remarkable for the buildi churches : no fewer than twenty-six new ones were erected six new chapels were built. The suburb of Walmgate protected by a mound.

During the reign of Henry III a stone keep was built the castle area walled in. The Minster transepts were er and two-storied chapels attached to the Archbishop's Pa at York and Bishopthorpe. Bedern College, the four Fri and the Gilbertine Priory were also erected.

York in its main outlines is to-day still a typical Edwa city. Its walls and gatehouses, the Minster Nave and Ch House, and the Abbey Church belong to this period. The was intersected by narrow thoroughfares from off which numerous courts and passages. Nearly all the street co were terminated by a parish church with its burial gr Shambles gives the most realistic idea of a mediæval s Petergate shows the old approach to a city gatehouse. D ating over all is the glorious Minster.

In the days of Queen Anne and the Georges York w local metropolis. The country squires built themselves houses and wintered here.

During the Victorian era streets of houses to accomm workmen engaged on the railway arose in the Clementh Nunnery Lane, South Bank, Holgate, Leeman Road, Boot Layerthorpe, and Groves districts. Around the cocoa new streets have arisen, and a model village at New Ears

Since the war the Corporation have undertaken a ho scheme on the Tang Hall estate. York is particularly we in open spaces which surround it. Scarcroft, Knavesmire Hob Moor have been transferred by the Freemen of Mickl Ward to the Corporation. Amongst other open space

Bootham Monk and Walmgate Strays, which are still retained by the Freemen. The Strays occupy 778 acres. There are fine riverside walks. Rowntree's Park of 17 acres is situated between Terry Avenue and Bishopthorpe Road and has been recently given to the city. The Corporation have provided allotment gardens, tennis courts, bowling greens, golf courses, and bandstands. All these required to be included in any planned scheme of reconstruction of York.

York as a University.

Having outlined the evolution of York by pointing out the natural advantages of the site and showing that it was used as required for such purposes as a fort, market, or railway centre, it may be pointed out what exceptional advantages York had for becoming a university town. It had a fine river, and buildings that could have been utilized for colleges, such as the Abbey building, with its gatehouse and hospitium; the King's Manor House, with its two quadrangles; St. Leonard's Hospital, with its vaulted apartments and thirteenth-century chapel; St. Wilham's College, with its courtyard; he Bedern College, with its hall and chapel; St. Anthony's Hall, and the Merchants' Hall with its chapel.

In 1647 a petition was presented to Parliament for the stablishment of a university at York, and the Bedern College was suggested for the purpose, but the project has never been ealized. The educational advantages of the Yorkshire University at Leeds would be enhanced by having a college at York for history, architecture, and art in general, including culpture and painted glass, for nowhere else can these be tudied better than at York. There is no doubt that a great pportunity has been missed.

The citizens are proud of their historic monuments, and in ny future re-planning of the city these should be preserved and ave appropriate settings, as has just been done in the case of he Merchants' Hall. There is the danger of heavy traffic, arried along roads adjoining some of our monuments; vibraon is set up, resulting in cracks and injury to the stability f edifices. Along the greater part of the south side of the normous and magnificent pile of York Minster there is such a oad. Another example is that of the Church of All Saints, ith its beautiful octagonal lantern. On each side of this hurch is a road leading to the market, and along which heavy affic passes, while to make matters worse the two roads are different levels, and an up-and-down motion is caused. o wonder there are cracks in this edifice. Those who are sponsible for the upkeep of the historic monuments are conantly expending money in repairing them. Such streets ould only be used for light traffic. These problems must be lved if the monuments, which are an integral part of the city, e to be retained.

Town Planning Proposals for York

By F. W. SPURR

THE York Corporation decided in 1913 to proceed with the town planning of the areas to the north-east of the city, most of which are outside the city boundary, and thin the district of the Flaxton Rural District Council. is authority was approached with a view to these areas ng worked together, and representatives of the Flaxton ral District Council sat on the Town Planning Committee the York Corporation, the Corporation in the first instance aring the cost of preparing the scheme, the Rural District uncil being the responsible authority for its own area after npletion.

n 1914 the late Dr. Tempest Anderson suggested that npetitive schemes might be obtained, and offered a first ze of £100. The Joint Committee and the Council agreed this offer, and the York City Council also decided to provide other premiums of £70 and £50 respectively for second third designs.

he plan accepted, by Mr. Reginald Dann, was full of ail which was not required to be shown to-day in connection h town planning, and other plans would therefore have to prepared to comply with the present requirements of the istry of Health. About the time the designs were obtained re was a great deal of misunderstanding, particularly ongst property owners, as to what were really the intentions he Corporation, and with the object of giving full information it was decided to reproduce the first premiated design on nall scale and issue a copy to each property owner interd, and I think we were successful in this respect.

own Planning Area No. 1 has a total area of 1,806 acres, of ch 1,177 are in the area of the Flaxton Rural District Council, 456 in the city, and 173 in the area of the Escrick District Council. Area No. 2 has a total acreage of 543, 423 being in the Flaxton area and 120 in the city. Area No. 3 has a total acreage of 515, 506 in the Flaxton area and 9 in the city. Developments that are taking place in these areas are being arranged so as not to interfere with the proposed scheme. This is being done without any difficulty up to the present.

In 1920 it was decided to proceed with Area No. 4, and this scheme has proceeded as far as the first public inquiry, which was held in February last, when certain objections and proposals brought by property owners were put forward. The outstanding objections, however, have not yet been satisfactorily settled. The acreage of Area No. 4 is 109, situated wholly in the city. This area was taken in hand with the view of finishing off in the best way possible a large building area which had been left with a lot of small irregular pieces of land and unfinished street ends, and also so as to enable a new church which is proposed to be built in the area to be proceeded with.

York is well provided with permanent open spaces, which have a total area of 778 acres. There are also quite a number of small permanent open spaces, such as the moats and ramparts of the city walls, small parks and recreation grounds. The Corporation during the last few years have catered most liberally for recreation, and have provided twelve bowling greens, eleven grass tennis-courts, six hard tennis-courts, and have also levelled very large areas on the Knavesmire for cricket, football, and hockey, and since the commencement of the war 2,500 allotments of about one-sixteenth of an acre each have been provided in various parts of the city.

The First Development.

The first real development of the city took place in the first half of the nineteenth century, between 1809 and 1860, and I have no doubt that the chief cause is attributable to the advent of railways, the opening of the first into the city taking place on May 29, 1839, and the first station—of very modest dimensions—stood at the bottom of Queen Street, outside the city walls. This station appears to have been altogether inadequate for the ever-growing traffic, for in 1841 the station we know as the "Old Station" was brought into use. This station, after being in use about thirty-six years, gave place to the one now in use, which, since the date of opening (June 25, 1877), has been added to from time to time.

The carriage and wagon shops of the railway company (commenced in 1865) have steadily been extended, until at the present date the works cover a very large area.

Prior to the advent of the railway, the bulk of the traffic to and from the city was water-borne, and for the purpose of improving the waterway as much as possible the river above Naburn was canalized about 1757, and a lock of larger dimensions was brought into use in 1888. I have no doubt that this provision facilitated the river traffic very considerably.

With the extension of the city it became necessary to provide for the increased population and the consequent additional traffic, both pedestrian and vehicular, and a number of improvements were carried out in the last century. The first was probably the erection of the present Ouse bridge in 1818, with the necessary widenings of "Briggate" (now called Bridge Street), and Low Ousegate. This improvement must have been a boon to the citizens as this was the only bridge at that time.

The second bridge to span the river was Lendal, and after a serious mishap with a lattice girder bridge, a cast-iron one was erected and completed in 1863 at a cost (with its approaches) of £35,500. The bridge and its approaches was erected to deal with the traffic to and from the old railway station inside the city walls. This bridge was strengthened in 1893, and in 1907 a steel bridge was built inside the cast-iron one. The connecting roadways outside the city walls giving access to the present station were constructed at the same time as the new station.

As the city developed a bridge was found necessary for connecting the extensions of the city in the neighbourhood of Bishopthorpe Road and Fulford Road, and also as a more direct means of communication between the Fulford Road district and the station. Skeldergate Bridge was erected to meet this need in 1871 at a cost of £57,000. One of the small spans of the bridge was made to lift, so as to pass masted vessels to and from the King and Queen Staiths.

The time, I think, is not far distant when further bridge accommodation will have to be provided to the north and south of the present ones, and these will be necessary for linking up the ring roads on either side of the river.

The development in population coincides very closely with railway development, but the ever-growing works of Messrs. Rowntree & Co., and Messrs. Leetham, no doubt have added largely during more recent years. I think we may hope for further development by the starting of new works and industries, with the rail, water, and road communications we possess, and perhaps also we may expect development in some degree as a residential city.

I suggest that the areas adjacent to both rail and river in the vicinity of Bishopthorpe are ideal for large works, where plenty of room is required for works extensions. It would be practicable to supply any works erected here with gas, water, and electricity, and sewage could be disposed of without difficulty. An extension of about two miles of the Bishopthorpe Road tramway route would link up this site with the city. Other sites for smaller works are proposed in various places.

With regard to further town-planning areas, I might say that for the greater part the land requiring to be town planned is within the areas of the Escrick Rural District Council (Fulford area), the Tadcaster Rural District Council (Dringhouses area), and the Great Ouseburn Rural District Council for the Acomb area, the latter being the one which perhaps requires to be dealt with at an early date, on account of the developments which are taking place there.

Discussion

Mr. W. R. Davidge, London, moved a vote of thanks to the readers of the papers. He said they had had a remarkable picture of what was really one of the most remarkable towns of England. One could not help being impressed by the problems which the city fathers of York had faced in the two thousand years of its existence. In the old days, as Mr. Benson had told them, the municipal authorities were really regional authorities, their jurisdiction extending a long way around. The earliest conception of local government was that of a regional authority. It was so in London and it was the case also in York, where the authority extended to what was known as the Ainsty also. He had been interested to see how in York they had been faced from time to time by the same problems as they had to-day. The maps which Mr. Benson had shown of the earlier city enabled them to get some idea of the necessities of the time and also showed that the problems were faced in a big way. One could well imagine that a generation which had to construct city walls had not only to get their daily bread, but also had to keep that daily bread from being snatched away from them by those living outside. One could not fail also to see the public spirit which the city fathers had shown right through; a public spirit not untinged with personal advantage. The Merchant Adventurers showed a community spirit which added not only to the wealth of the city, but also to their own. There was a good deal to be said for the big companies of modern times; they were the successors of the Adventurers of the past, and though they added to their own wealth, they too, no doubt, were doing their share in handing on the traditions of the important city in whose life they took a part. Referring to the town planning scheme which Mr. Spurr had described, the speaker said it looked well ahead but not too far, for if they could look ahead a hundred years they would find that in no case had a plan reached up to what had been actually done. Truth had always gone one better in town development than town planning had foreshadowed. One of the difficulties which any authority had to deal with was the local boundary. However big the area might be it was always circumscribed by lesser authorities in the neighbourhood. It was almost impossible in local conditions to get them to see eye to eye. This made it necessary to get back to the regional idea for all essential services which the public had to provide—transport, lighting, water supply. The largest possible vision must be brought to the service of the community, for he believed that the present generation had as difficult tasks to perform as those who erected the walls of that city, and he wished the York authorities every success in their solution.

Mr. L. S. Mackenzie, city surveyor of Bristol, who seconded, said he had been especially interested in Mr. Benson's paper because he was strongly impressed in the matter of town planning with the necessity of following the history of a town as far back as possible before they began to make a town plan.

Mr. G. L. Pepler, London, supporting, said that Mr. Benson's paper was a model of its kind, for it not only described the streets and buildings of the city, but gave some inkling of the reason why they were built and how the roads were laid out. Mr. Pepler said he thought York was to be congratulated on their new electric power station on the river at Linton, in an endeavour to get "white coal." If York developed industr
ally they would have electric power and there would not be th
necessity for the smoke which had disfigured other parts of th
country.

The resolution was put and carried unanimously.

At the after session Mr. F. C. Mears's paper on the Pla
ning of Mediæval Cities was read. Extracts from this pap
are appended :—

The Planning of Mediæval Cities

By F. C. MEARS, M.T.P.I.

THE size of communities to-day may be greater than
the past, but human needs remain the same. A house-
a garden—a highway—a workshop—space for play a
recreation—some shrine for the ideal—are not inventions
present day civilization. They have all been provided and
various groupings throughout the past; so to the past we lo
rightly for suggestion and inspiration.

Yet strangely enough although the planning of Roman a
Renaissance cities has been well-nigh exhaustively studied, t
mediæval period, from which most of our towns have sprun
has received but little attention in Britain. We all admire w
preserved examples of old cities, with their picturesque corne
"All very well!" says the modern practical man, "but lo
at their crowding and bad sanitary conditions." We used
be almost silenced by this sort of criticism, which inde
largely drove Ruskin and the Romanticists out of popul
esteem. But now that we learn to decipher the planning
mediæval cities we find them far better than even Rusk
knew. For the evils with which they are so popularly credite
can be shown to be of subsequent growth. These arose first
through the new intensive warfare which accompanied t
Renaissance and Reformation, wars on a scale far beyo
anything the middle ages can show; and secondly, through t
corresponding ever widening rift between country and tow
which culminated in our late industrial age.

Credit must here be given to the initiative of Camillo Sit
on whose theory of mediæval town planning certain pre-w
German planners founded much of their practice; but it wou
seem that this view did not meet with much acceptance
Britain, perhaps because of an instinctive feeling that it
not meet the facts. It believed the theory to be a wrong one,
rather, an inversion of the real order of development.
appeal doubtless arose from the desire of thoughtful people
preserve from desecration or destruction the beautiful sixtee
and seventeenth century streets and places of continen
cities. It may be admitted that Sitte was correct in stat
that many of the characteristic irregularities in these cit
rose from natural traffic lines, but the towns were not plan
thus originally.

Lack of Appreciation.

Our difficulty to-day in arriving at an appreciation
mediæval planning may then be summed up as due to t
causes :

1. The present reaction against extravagances of
Gothic Revival leads us to judge everything by Renaissa
and later standards of axial planning and in terms of streets
2. The romantic story writings on which we have all b
brought up have made it almost an article of faith that to
of the middle ages were always irregular, overcrowded, pac
with tall buildings, and highly insanitary. This comfort
belief has helped us to justify in part the by-law suburbs
the industrial age as at least an improvement on what w
before.

When we undertake a scientific study of mediæval t
planning, we have to break down these barriers to un
standing and endeavour to approach the matter with an o
mind. This is a matter of great difficulty, because the subj
of our study have been superficially altered almost out
recognition. We have also to remember that modern la
towns may sometimes have grown around one or more s
straggling villages or hamlets, or an early village and Nor
Borough may have been fused together as at Saffron Wal

In most old towns hardly a single building, unless
church or castle, can be recognized as belonging to the orig
setting out, and as architects on holiday, we have been con
when visiting such places to enjoy the beauty or interes
these without trying to puzzle out the tangled town plan
the aid of large scale maps, for this would be too like w
My own introduction to early mediæval town planning
not made during some one of many such sketching tours,

happened in course of a holiday in Westmorland. There was a good reason for this, since I stayed at a little village called Milburn, which has preserved its original lay-out almost unaltered.

My interest was aroused by the regularity of its plan, while the complete system of long fields surrounding it showed that the lay-out dated from perhaps the twelfth century. Here we have a rectangular central green, 800 ft. long by 250 ft. wide, with a very tall maypole in the centre, surrounded by a single row of farmhouses; behind these are long garden enclosures, with stables and barns—then a back lane encircles the whole and beyond this are the long cultivation strips which have clearly spread out in successive stages as the community prospered. The church, of older origin than the village, lies outside. We note the mill and at the other end of the village the broad way leading to the common lands, where the villagers found not only grazing for their stock, but fuel, stone, and lime. A little way off is the small castle or manor house (with no fields), and beyond this a monastic grange with again its compact cultivated area surrounding it. Thus one found in this remote village a complete association of Church, Govern-nent, and People—provision for a completely rounded civilization.

Next, as one walked over the country, one found a line of similar villages, each near the border between rough Fell and arable land—each with good water supply, and all near, but not on, a main road running up the Eden Valley. A set of 6 in. maps brought out a further point of interest. These villages with their long fields showed clearly as units planted n the waste. They belonged to some early scheme of regional development.

About this time I became associated with Professor Geddes n the preparation of the survey of Edinburgh, which was shown n the Town Planning Exhibition of 1910, and in carrying on he study in closer detail was surprised to find that the plan f high built and overcrowded Edinburgh was closely com-arable with that of Milburn, not only in broad outline, but in very essential. For there is no doubt whatever, that twelfth entury Edinburgh was a formally planned garden city with a ensity of rather less than four houses to the acre.

Old Property Boundaries.

This conclusion is made possible by the fact that however uch we rebuild we find it very difficult to get rid of old roperty boundaries. In an area like that of the Old Town of dinburgh, which has not suffered entire reconstruction during e industrial age, this factor stands out very strongly. The d garden boundaries still exist, though scarcely a square ard remains unbuilt on. Comparison with old maps, and with her towns enables one to lay down with fair accuracy the nits of the twelfth century plan, and this done we may be rprised at its regularity, spaciousness and civic dignity. In dinburgh, Castle, garden city, and Abbey are strung out along mile of the great ridge—on a scale which shows that twelfth ntury town builders lagged no way behind their brethren of y other age. Here, too, as at Milburn, were the burgh and bey mills, the common lands, with a seaport in addition.

To conclude, our cities of dust and noise and slums, if not our own making, have largely taken on their present form thin the lifetime of people whom we have known. It is up us to set them right again.

So far as I have found there is only one book which helps to understanding of the early mediæval community, and that 'To-morrow," by Mr. Ebenezer Howard, written apparently intuition. Yet the lost handbook which may have led to the at twelfth century regional town planning period, can rdly have set up an ideal very different in its essentials. True problem then was not of escaping from towns, but of ablishing communities, and these communities in practice re very much what Mr. Howard dreamed of. It is at least couraging to know that once before in the history of our ntry such a scheme of reconstruction was successfully ried out on the widest scale.

Discussion

Professor L. Patrick Abercrombie, Liverpool, proposing a vote hanks to Mr. Mears for his paper, said it was both interest-and fundamental. He only regretted that his dear friend Mr. ry Aldridge had not been present to hear it, because in book on the mediæval city he used the phrase "the dead d of the Middle Ages lies heavily on our modern towns." vas a phrase which Mr. Mears had shown them to be in-ect. The Middle Ages had not a dead hand; they were very lively; they had very definite ideas of regular planning, and their notions of density were very similar to our own to-day. There was one point which he was not sure of and he should like to be certain. Mr. Mears had said that the houses were separated like they were in modern garden cities, but his own impression was that for economical reasons they built up the whole frontage but kept the same density by means of bigger spaces behind. He agreed that their lecturer had proved that mediæval planning was conscious and regular—wherever possible, for of course they were dominated by the site—and also that it was spacious both as regards open spaces and the building plots. He did not think, however, that Mr. Mears had quite proved his thesis of a larger planning scheme consisting of a lay-out with the castle at one end and the abbey at the other with the mercantile houses in between, though certainly that was the case at Edinburgh. He did not think the case quite proved for a logical scheme of universal use in the Middle Ages.

Mr. Barry Parker, Letchworth, formally seconded, and the vote having been passed, the Conference at once adjourned to inspect the points of interest raised in Mr. Benson's paper and the sites of the town planning areas described by Mr. Spurr.

A session was held at the Royal Station Hotel in the evening for an informal discussion with Mr. Spurr and Mr. Mears on some points in their addresses.

Saturday was devoted to a visit to the New Earswick Garden Village, and on Sunday a party motored to Rievaulx Abbey, near Helmsley, to inspect the work of excavation and preservation undertaken at this, the earliest of the Cistercian houses, by the Board of Works.

Town Planning and Housing

Three leaflets dealing respectively with "town planning: what it is and why it is needed; public utility societies: how they can be formed and worked under the Housing Act of 1923; and how to get houses built, a summary and explanation of the Housing Act of 1923," have been issued by the Garden Cities and Town Planning Association.

With regard to town planning it is stated that points particularly to be watched are: (1) The separation of industrial and residential areas; (2) the limitation in residential areas of the number of houses to be built per acre; (3) the scheduling of areas best served by natural advantages, communications, power supply, etc., for industry, and of areas of sufficient size and suitability placed for commercial use, shopping, and public buildings; (4) the reservation of land for roads. If roads are properly planned great economies may be made in the construction of roads in residential areas, and heavy through traffic can be diverted from narrow streets and office districts. For the wise planning of roads co-operation with adjoining councils is essential; (5) the proper placing of schools, churches, theatres, public buildings, etc.; (6) The earmarking of land for playgrounds and open spaces. Small children need small recreation grounds near their homes, boys and girls space for tennis, football, cricket, and other games, and all ages require parks and gardens; (7) the preservation of beauty spots and places of historic interest.

In the leaflet on "How to get Houses Built," it is pointed out that houses are so urgently required that no opinion whether the present Act is or is not an adequate solution of the housing problem should be allowed to stand in the way of making the fullest use of it. Whether it will be necessary to introduce a new housing policy can only be decided when the Chamberlain policy has been given a fair trial. The Chamberlain policy will remain operative until October, 1925, and everything should be done in that time to get houses built. The provisions of the Act should be made widely known to all private builders. All members of local authorities ought to be exactly informed on what they can do to encourage the building of houses. Individuals who want houses themselves should apply to the local authorities for assistance in one or more of the many forms described in the leaflet. Employers of labour and any bodies of persons who wish to help in meeting the housing shortage should know the way in which public utility societies can be formed, and the various other ways in which the local authorities and the building trade can now co-operate in building houses. Copies of this leaflet can be obtained, price 2d. each, 1s. 6d. per doz., postage included, from The Garden Cities and Town Planning Association, 3 Gray's Inn Place, Gray's Inn, London, W.C.1. Copies of the other two leaflets are sold at 1d. each, or 9d. per doz.

Correspondence

The Reconstruction of Japan

To the Editor of THE ARCHITECTS' JOURNAL.

Sir,—With regard to your leading article on the question of sending architects out to assist in the reconstruction in Japan, my Council, who have taken advice from architects with personal experience in Japan, feel that your idea is not feasible owing to the number of native architects already in practice there.

ERNEST GEE,
Hon. Sec., The Liverpool Architectural
Society (Incorporated).

An Italian System of Housing

To the Editor of THE ARCHITECTS' JOURNAL.

Sir,—In "The Times" of August 8 appeared an article by their Rome correspondent on Housing in Italy. It explained the Italian post-war system of obtaining small houses in quantity, which is summed up as follows :—

"Success in Italy has been achieved by the grant of a substantial annual subsidy in the form of (*a*) remission of taxation; (*b*) by the financing of building societies at a low rate of interest, 2 to 3 per cent.; (*c*) by a resolute policy, at whatever cost in popularity, of throwing the arrangement of the relationship between landlord and tenant upon the first parties themselves."

As compared with our expensive complications and uncertainties this system appears to be a simple and commonsense one.

Our pre-war system of house building was one of private enterprise financed on easy terms, backed by the building societies with their loans for house purchase. It was our people's own way of getting their homes.

At the present time of uncertainty as to future building costs, the building societies cannot lend on mortgage to a purchaser a sufficient percentage of the purchase price, and as a consequence the builder must be content to leave a considerable sum secured to him by a second mortgage, sunk in each house he builds and sells; he cannot continue to do so indefinitely.

Under a system of Government guarantees the building societies would be prepared to lend almost the full purchase price, or an amount which, together with the purchaser's available cash, would pay for the house. These loans would presumably be made at about 5 per cent. interest; they would relieve the builder of a great burden and so free him to proceed with his building at a greater pace, and they would enormously increase the number of small house purchasers.

Even better than this system would be the financing of the building societies at between 2 and 3 per cent. by Government loans, the societies' profit being restricted to its present rate, for then the purchaser would be paying no more in interest annually than he did in pre-war days. On the face of it this proposal may seem absurd, but surely if it can be done in a comparatively poor country it can be done in Great Britain. In Italy the capital was provided by institutions which correspond to our Post Office Savings Bank, and it seems very reasonable that the people's savings should be put towards assisting the building of the people's homes.

To subsidize builders with cash sums has the effect of raising prices of materials, but not of wages; this has been proved quite recently, and it looks as though it were now in process of being proved again under the new Bill.

There is, however, in this Bill one hopeful sign. Section 5(1)(*b*) empowers a local authority to guarantee to a building society the repayment of an advance made to any of its members desiring to build or acquire a house having an estimated value of not more than £1,500.

This clause looks something like the nucleus of a system of guaranteed house purchase which would not raise prices artificially, would not enforce the acceptance of ninepence for fourpence on people who prefer to be independent such gifts, and which would begin to provide the requi homes in adequate quantity. In fact, it is the only syst which can be permanently successful.

The Italian system might be adapted to our own housi problem without difficulty, and I am convinced w economy and with as much success as has been the c in Italy.

It is, indeed, certain that no efforts of Government c be successful unless based on the old and well-tried meth of house building that existed for so long in this coun before 1914.

As to the part that qualified architects might play such a scheme, it will be recognized that a new generat of house builders is getting to work, and that the R.I.B has already agreed with them upon a scale of fees to charged by its members for this kind of work.

ARTHUR WELFORD

The Society of Architects

At a special general meeting of the Society of Architec held on Thursday evening last, the result of the elect of Officers and Council was announced, the Victory Schol ship prizes were distributed by the President, Mr. E. Partridge, F.S.I.; and a criticism of the designs submit in the competition was given by Mr. Arthur Da F.R.I.B.A., on behalf of the jury of assessors.

It was announced that the following officers and Cou had been elected :—

President :

PARTRIDGE, Edward John (Richmond, Surrey).

Past Presidents :

HAMILTON, E. J. (Brighton).
MONSON, E. C. P. (London).
PRIDMORE, A. E. (London).
SADGROVE, E. J. (London).
TUBBS. Percy B. (London).

Vice-Presidents :

SKIPPER, Major C. F. (Cambridge).
SULLIVAN, Leo Sylvester (London).
TAYLOR, A. J. (Bath).
WALLIS, Thomas (London).

Honorary Secretary.

SHEFFIELD, Noel D. (London)

Honorary Treasurer :

INGRAM, William George (London).

Honorary Librarian :

TUBBS, Grahame Burnell (London).

Council :

LONDON.—The following London Fellows remain in office : MONSON, Harry Castle Hiett; NORMAN. Charles Frederick; VERITY, Frank Thomas, 1925; MARSLAND, Ellis; PEARSON, John Her DAVIDSON, Thomas Gerrard, 1924.

Fellows : FREYBERG, Herbert; CROP-YOUNG, Frederick Charles; ERY, Thomas Sidney.

The following London Member main in office : ANGELL, Th Groweley; DARBYSHIRE, Thomas field, 1925; CHANCELLOR, Fr Graham Moon; ROBERTSON, Ho Morley, 1924.

Members : HAYWARD, Arthur win; SAYER, Harvey Robert.

Licentiate : BRADFORD, Stanley Vi

COUNTRY.—The following Co Fellows remain in office : GILL, H 1925; VERNON-INKPEN, George Ch 1924.

Fellows : REES, Thomas Tal Liverpool.

The following Country Member main in office : WILLIAMS, Edward 1925; KNIGHT, John, 1924.

Member : SMITH, Harry Wi Oxford.

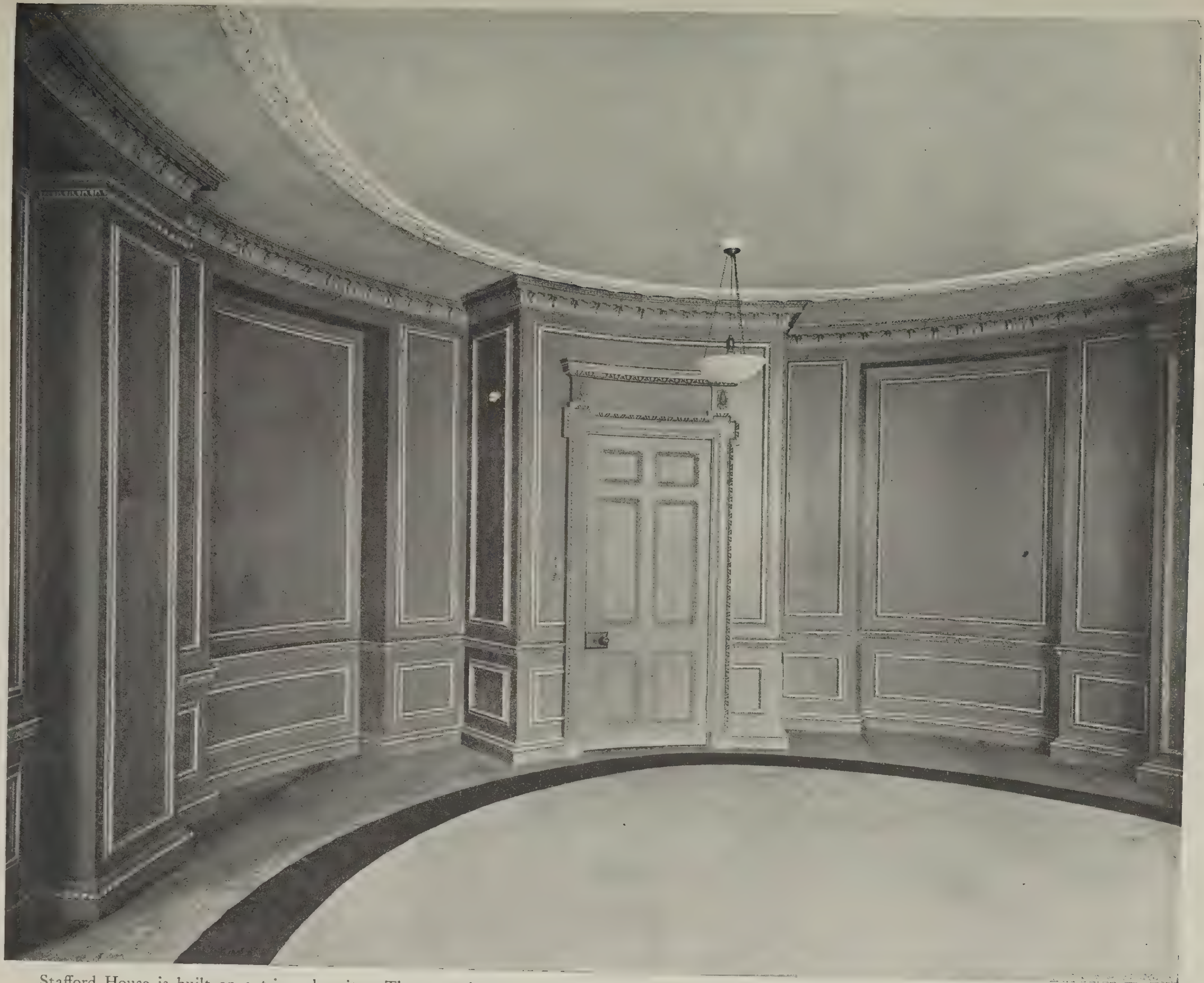
Licentiate : LYE, Joseph H Bexhill.

The President said that they were very pleased at success of the Victory Scholarship. Thirty-three had ent the preliminary competition, and in the subsequent c petition the jury of assessors had awarded the first pri a gold medal and £100—to Mr. B. M. Flegg, of Lon In presenting the medal and the cheque to the winner President said that he hoped the success he had achie would be a stepping stone to a very much finer success. other seven competitors—Messrs. F. Scarlett, D. F. Ma Smith, J. G. Shepherd, R. H. Brentnall, A. J. Saise, J Coia, and S. Bradley—received a prize of £5 each.

Mr. Arthur Davis, F.R.I.B.A., said that the idea for subject set for the competition, "A Hydropathic Estab ment," was suggested as the result of a scheme prepare his own office, and as one which would produce interes plans. On the whole he thought the designs submi were disappointing. He outlined the principal factors w should have been considered by the competitors. He that the fact that the site was on an incline had been tot ignored, and that many had overlooked the special chara of the building and garden lay-out. In many cases, the question of outlook and aspect with regard to the va had been ignored. The prize had been awarded as result of a great deal of discussion. The winning design a simple and straightforward plan, but the principal f was the arrangement of the terrace, with its unfortu recreation room in the centre. The façade was distin disappointing. Not one of the elevations of the competi could be said to be cheerful.

Association, Ltd., Stafford House, E.C.

Sydney Tatchell, F.R.I.B.A., and Geoffrey C. Wilson, A.R.I.B.A., Architects

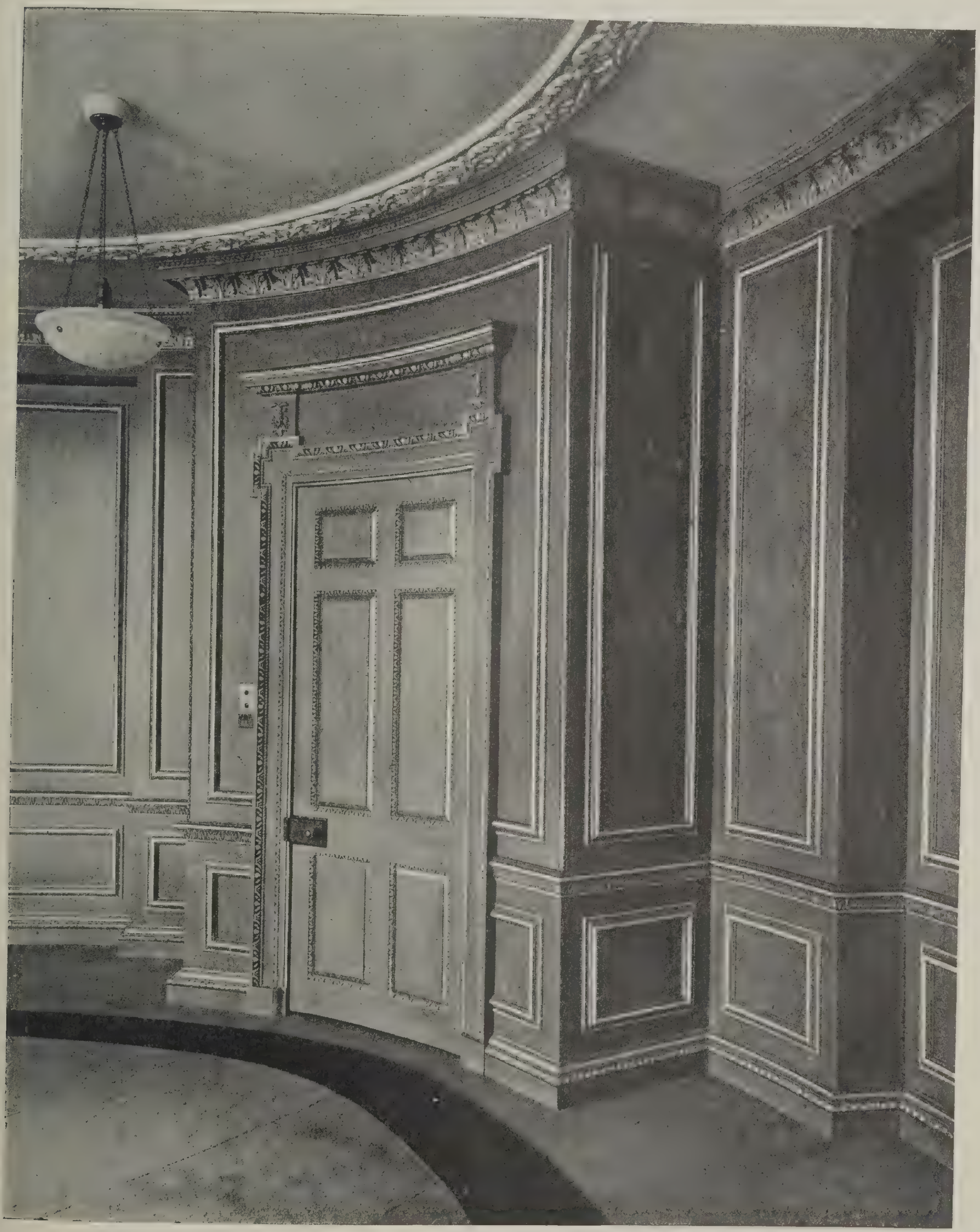


Stafford House is built on a triangular site. The somewhat acute angle at the corner of King William Street, and the necessity for placing the Board Room in a central position on the second floor, determined the elliptical shape of the room.

THE LIBRARY
OF THE
UNIVERSITY OF ILLINOIS

Current Architecture. 203.—Board Room at the Offices of the British Australian Wool Realization Association, Ltd., Stafford House, E.C.

Sydney Tatchell, F.R.I.B.A., and Geoffrey C. Wilson, A.R.I.B.A., Architects



The colour scheme is in William and Mary green, with curtains and other hangings of golden brown corduroy velvet with appliqué border.

THE LIBRARY
OF THE
UNIVERSITY OF ILLINOIS

Contemporary Art

The Independent Gallery

London has not known hitherto of the powers of André unoyer de Segonzac, as they are now revealed in these rty etchings, drawings, and paintings. One of the oungest of *Les Fauves* he is also one of the strongest, not one of the most uncompromising. He has still a eling for the tradition which guided the painters of ontainebleau, with an understanding of modern problems nied to the formalists. It is not his technique, but his irit which is new. Many before him have painted with eir palette knives; many have rubbed down a drawing ink, many applied direct pen strokes. De Segonzac es all these things in a way of his own, and by so doing eates a new means of expression and indication. His uses are dimly seen as mystery houses, his trees emerge angely out of the woods; his roads wind curiously tween queer fields, and in the paintings each faction in picture is a piece of solid colour—necessarily, as treated— t the conjunction of these pieces is what creates the gic of the finished work. "Le Grand Morin" is imessive; it is essentially romantic in the oil painting d it is no less so in the large rubbed-ink drawing. A nter effect is induced in the tinted drawing "Le Conde la Rivière," and some of the pure pen-point drawings, t even these do not account for the extreme lightness d delicacy of the dozen etchings here exhibited with ir direct representation of Nature and their exquisite wing of landscape, building and figure. The height accomplishment in drawing, however, is seen in the erb "Siesta," with its astonishing trick in foreshortening, d having seen and studied this, the half-figure "Pauline," d the "Le nu au Journal," both studies in the painted le, leave much to be desired. De Segonzac is a fine ughtsman as well as a strong colourist.

The Arlington Gallery

he Campden Hill Club is holding an interesting exhibi- n of pictures and drawings in which there are several asant subjects of an architectural character. S. Blunt's ey-next-the-Sea," "A Cottage in Suffolk," by E. dstanes, and his "Old Houses in Cornwall," "The teau de Bien-Assis," by D. de Carteret, A. C. Tatham's an Gimignano," are examples in colour, and E. Menzies es has two nice etchings of "Lucca and Ponte Vecchio," the latter there being a good effect of small patches etched line on large white spaces. There are a few orative works and A. C. Tatham's "Benedicite Omnia ra" and E. Gledstanes' "Cycle" are noteworthy, as lso A. Weber's "City of Glass," an explosive cubist ly.

The Gieves Art Gallery

rofessor Beat Wieland, who was born in 1867, and s at Schwigz, in Switzerland, has made an intensive ly of snow effects of which most are notable for their ations in colour reflections. There are few with a white, but many with purples and blues, and trees buildings are seen transformed from what is generally rded as natural colours, to a series of variable spectra ch, with the vision revealed by the work in shadows, of extreme interest and value.

The Mansard Gallery

he London group is holding its nineteenth exhibition. usual Randolph Schwabe carries off the honours in ving, A. P. Allinson in colour, John Nash in imagination, Charles Ginner in accomplishment. The latter's rthleven" and "Flask Walk at Night" are archi- ral subjects admirably treated. Schwabe's group of dings is able, John Nash's "Abbotsbury" is a stirring version of his peculiar way of looking at buildings in a setting of landscape, and Alfred Thornton is successful in his picture of "Ham Butts, Painswick," as well as F. J. Porter in "The Suburbs," which is amusing, while Allan Walton's "Danish Landscape" renders some characteristic points. The nicest piece of painting is Allinson's "Venetian Fantasia," but the same artist's flower pieces run it close.

Greatorex Galleries

Henry A. Wight is an American artist with vision. He exhibits no fewer than seventy small versions of what he sees in such things as the "Resurrection of the Soul," in the "Birth of Colour," in "Symphony of the Universe." His medium is monotype: an oil painting on zinc from which one transfer is taken with charming effect, while the paint is still wet.

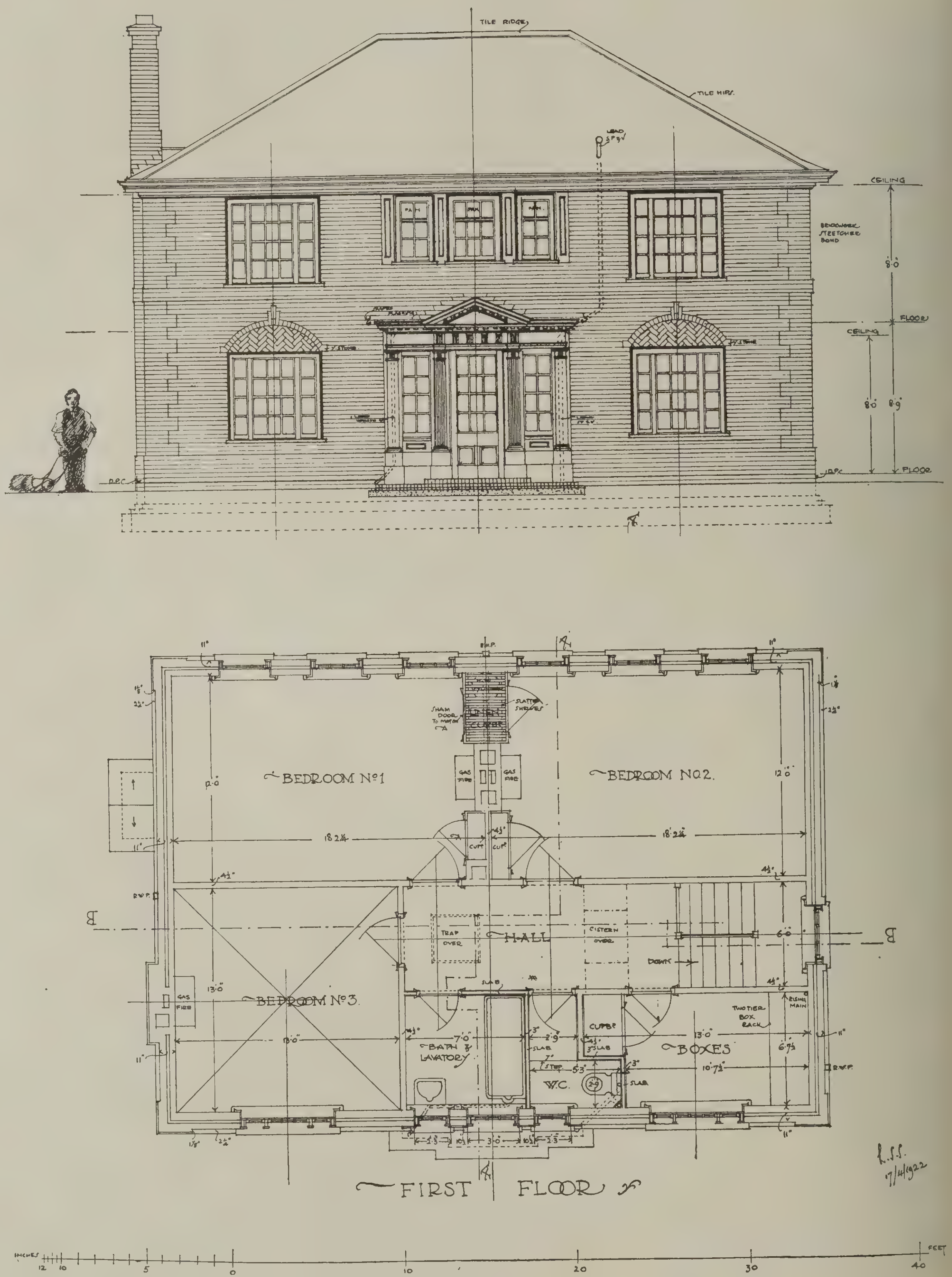
KINETON PARKES.

Woodcuts and Some Words

Mr. Edward Gordon Craig, whose woodcuts are to be found in some of the best English and foreign collections, notably at the Victoria and Albert Museum in London, and the Ryks Museum, Amsterdam, is producing through Messrs. J. M. Dent & Sons, a book on his experience as an engraver. It will be illustrated by sixty full-page reproductions of his cuts, and contain an introduction by Mr. Campbell Dodgson, Keeper of Prints and Drawings in the British Museum. No book by Mr. Craig can be expected to be quite free from all reference to the theatre and this volume is no exception, for he tells us how the craft of woodcutting has helped him in the larger work to which he has devoted his life. The book is to be entitled "Woodcuts and Some Words," and it will probably be ready in October. Besides the ordinary edition there will be a small edition de luxe of 160 copies, of which 150 are for sale.

Australian Art at the Royal Academy

The Duke of Connaught, opening the exhibition of Australian Art at Burlington House last week, said the pictures had all been painted in Australia, and had been chosen in order to give a full representation of the best art that had been produced in the continent. The enterprise was not a commercial one; the pictures were lent from national collections in the several States or by private owners. Australia did not at present accord to our artists the elaborate facilities for trading that were provided in this country and in the great cities of Europe, and it might be found that that very fact had given a more native and individual character to the work of her artists. Australian art was not unknown here. Specimens had been seen at the annual exhibitions of the Royal Academy for many years past, and among painters who had established a reputation in England was Mr. Lambert, A.R.A., whose work was represented in that exhibition. This was the first time that an opportunity had been afforded to take a general and vivid view of Australian art achievement as a whole, and what visitors saw would bring home to them the fact that there existed in Australia a vigorous intellectual movement and a love of beauty, together with the desire and power to give them expression. Nations were bound together not only by community of material interests, or by a share in the glories and traditions of statecraft, commerce, and war, but also by mutual sympathy in regard to the pleasures and activities of the mind which gave grace and charm to human life. The promoters of the exhibition were to be congratulated on an undertaking which he hoped was only a prelude to further interchanges from which the culture of the Mother and the Daughter Countries might receive benefit.

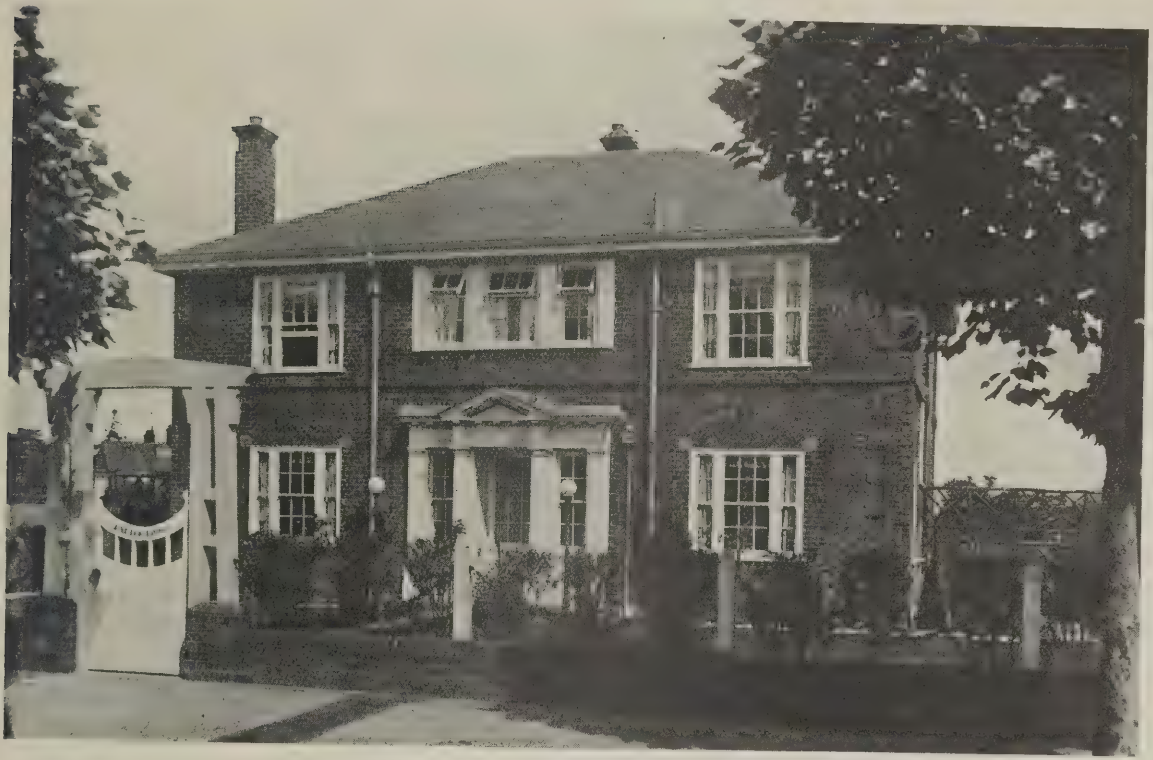


WEST ELEVATION AND FIRST-FLOOR PLAN.

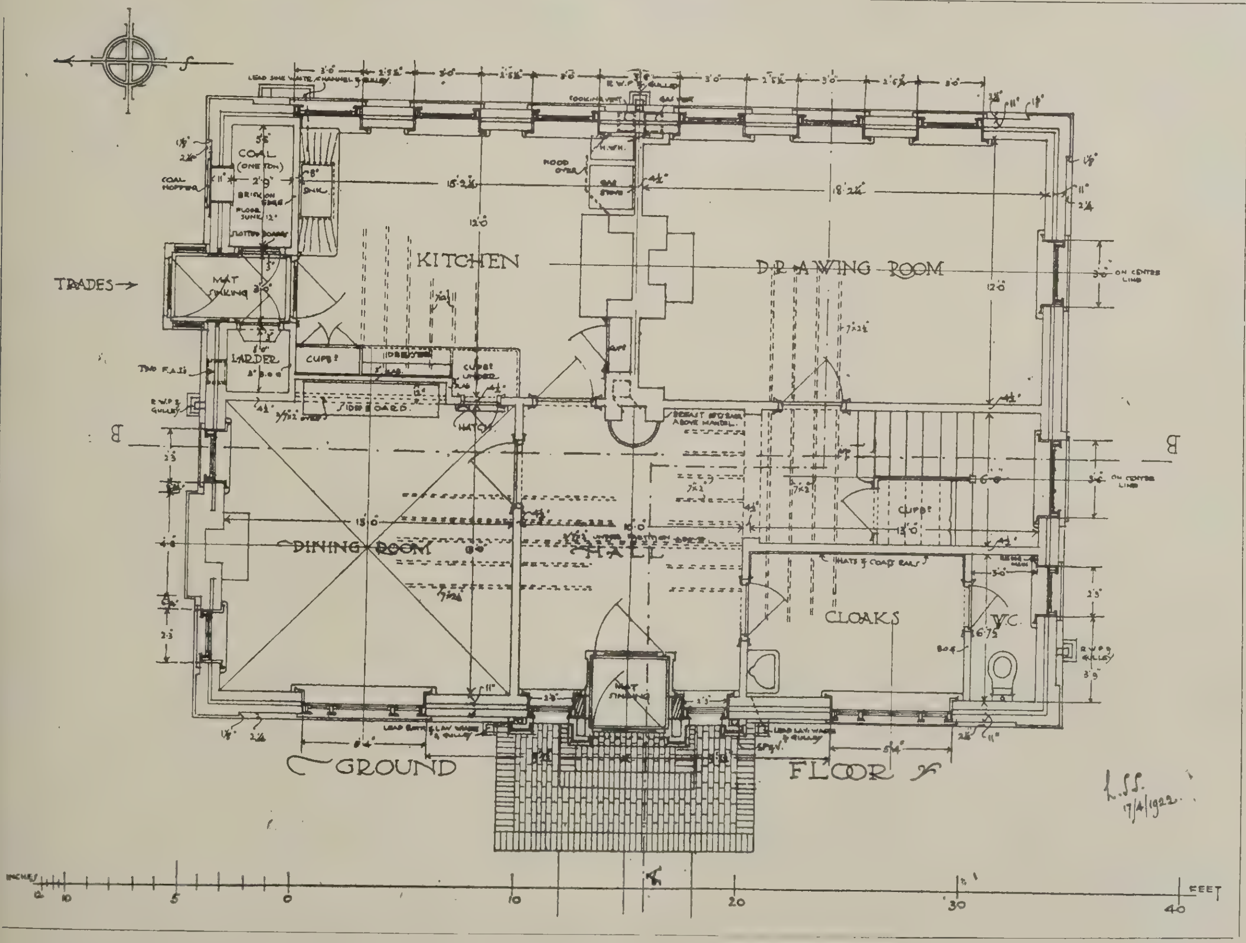
"BURTON'S," WIMBLEDON. L. SYLVESTER SULLIVAN, A.R.I.B.A., ARCHITECT.

Modern Domestic Architecture. 63.—"Burton's," Wimbledon

L. Sylvester Sullivan, A.R.I.B.A., Architect



A GENERAL VIEW.



The especial requirements in connection with this house were that it should be planned on two floors only, and should be capable of being run without maids. The scullery and kitchen are combined in one apartment for ease of work.

THE LIBRARY
OF THE
UNIVERSITY OF ILLINOIS

The Practical Design of Steel Beams and Pillars in Buildings.—2

By W. BASIL SCOTT

THERE are heavy demands on the time that the young architect has at his disposal for study, so without further preliminary I shall outline the nature of the knowledge it is advisable to quire for the efficient and economical design of steel eams and pillars for buildings.

Consider the following statement : The general problem steel work design is to provide in a structure a sufficient ea of material distributed in such a manner that the ternal forces will be safely resisted by the internal forces d that the state of equilibrium will be maintained with ficiency and economy. Before this assertion can be applied d translated into a practical design with working draw- gs of members, connections, and details, a clear under- anding of the technicalities involved is desirable. I use e word "desirable" instead of "essential" because I admit e possibility of sections being selected from a maker's nd-book and conventional or standard details being ded, resulting in what may be termed a steelwork design, though the producer of it has little or no knowledge of the vhy and wherefore." The scope of such a mechanical ethod is strictly limited, however, and has nothing to commend it. It is confined to loading of the simplest ture; it is helpless without the book, and at the best can ly make partial use of it.

A maker's hand-book containing tables of the properties d safe loads for simple and compound sections is a most eful tool, and the possessor of the clear understanding the laws of statics and the strength of the material—uctural mild steel—is in a position to take full advantage it, not only as a ready reckoner or time saver of tedious lculations, but as a quick means of arriving at efficient d economical design.

The foregoing statement of the general problem of steel- rk design, therefore, involves a knowledge of the follow- :—

(1) Loads or external forces.

(2) The fundamental principles of statics.

(3) Properties of the material and of its usual structural rms.

(4) Details.

(5) Economical efficiency.

The order in which the above items are set down does not essarily imply the order in which the knowledge of them to be acquired or considered. To a certain extent they interdependent, and cannot be separated entirely from h other.

In the actual practice of steelwork design, the first pro- s is the arrangement of the positions of the various mem- rs. This may or may not be dictated solely by architec- al considerations. If freedom of arrangement is per- ssible, there is considerable scope for economy in the licious exercise of it. The second process is the estima- n of the values of the loads or external forces to be sup- rted. This is a matter of great importance, and one ing for judgment and skill. The third process is merely arithmetical one, being the making of such preliminary ulations as are necessary prior to the selection of suit- e sections. The fourth process is the selection or design he sections, and the final processes are matters of detail. t is to be noted that the validity of the calculations of third process, and the efficiency of the sections of the rth process, are dependent on the accuracy of the load data of the second process, also that economy is dependent on arrangement, relative efficiency and details of workmanship. The idea of following the order of events as observed in practice is a pleasing one, but unfortunately it is not a suitable one for the reason that it presupposes the possession of the necessary knowledge. For the purpose of acquiring that knowledge the matter must be approached in a different way.

Before taking up the theory of the subject I consider it is good for the student to make himself very familiar with the British Standard Rolled Steel Sections for Structural Purposes, complete lists of which are printed in various text-books, makers' hand-books, and in the official publications of the British Engineering Standards Association, viz., No. 6, 1904, and No. 6, 1923. The names adopted by the above association for these sections are : beams, channels, equal angles, unequal angles, and T-bars, also bulb plates and bulb angles. Bulb plates and bulb angles may be disregarded as they are not used ordinarily in steelwork for buildings, but are practically confined to shipbuilding.

The most important sections for our purpose are those termed "beams" by the association, but known more familiarly as H-beams or rolled steel joists. As the word "beam" is a general term used in statics to indicate a member of any material and shape, but subject to a particular kind of stress, it is necessary to make some distinction, accordingly the term "H-beams" will be used in these articles when rolled-steel joists are meant and the word "beam" by itself will retain its general significance. It is most useful to know the dimensions and weights per foot of the H-beams so well that a mental vision of them leading to an appreciation of their relative efficiency can be conjured up when wanted, and the same applies, although in lesser degree, to the other shapes. It is also wise to learn the usual breadths and thicknesses of the steel plates, and the manner in which these are combined with the standard sections to form compound and plated girders and pillars. A maker's hand-book is the best guide for this, and as one of these is procurable without much difficulty by anyone engaged in the architectural profession, I make the assumption that such a book is available for reference.*

At the present time the question of the British standard sections is somewhat complicated by the fact that there are two ranges of these consisting of the sections originally standardized in 1904 and of the newer standard sections as revised in 1920. The first range is still in general use, but will become obsolete in course of time, the second range is not yet fully available, but will become so gradually. Makers' hand-books dealing with the revised sections in compound forms are not yet generally published, so that when we come to the consideration of practical examples they will be selected usually from the older lists.

An excellent method of becoming familiar with the H-beams is to make a set of full-size drawings of their cross-sections. I believe that if this is done thoughtfully certain questions worth answering are bound to arise. The variety of depths, breadths, and thicknesses suggests the question of how these have been determined. Is it a matter of rolling-mill practice or a scientific distribution of the metal ? Given an area of metal, is there one definite disposition of it in the form of an H-beam to give the highest efficiency ? If so, why should 5.29 sq. in. of steel be disposed into two such different H-beams as 5 by 4½ and 8 by 4? It is noted that the inner surfaces of the flanges slope at an angle of 8 deg. with the horizontal. Why are the outer and inner flanges not parallel?

---

*By courtesy of Messrs. Redpath, Brown & Co., Ltd., readers of these articles engaged in the architectural profession, who have not previously received a copy of their handbook, may be supplied on written application being made to the author, c/o the Editor of this Journal.

At this stage, these and similar questions can only be answered in the most general terms to the effect that the distribution of metal is based on scientific principles; a given area of metal may be disposed of in more than one way, and the efficiency of the distribution will depend to some extent on the purpose for which it is used; the flange slope and rounded corners are entirely matters of rolling-mill practice which, to a degree, also limits the overall dimensions. Reverting to the 5 by 4½ and 8 by 4 H-beams refer to a maker's hand-book containing tables of safe distributed loads on these as beams and of safe concentric loads as pillars according to the London County Council regulations. The weight per foot of each section is 18 lb. As beams of 10 ft. clear span, the 8 by 4 will support 6·9 tons, but the 5 by 4½ will support 4·5 tons only. In this respect the 8 by 4 is 50 per cent. more efficient than the 5 by 4½. As pillars having both ends fixed and of 10 ft. height, the 8 by 4 will support 15 tons, but the 5 by 4½ will support 19 tons. In this respect the 5 by 4½ is fully 25 per cent. more efficient than the 8 by 4. This example merely shows that the section more efficient for one purpose may be less efficient for another.

The maker's hand-book should also be consulted for details of connections—fish-plates, end-angles, sizes of rivets and of bolts and nuts, clearances, and the proper positions on the cross-sections for holes. All these details are necessary to the completion of a working drawing, and knowledge of them adds interest to the study of some portions of theory, the immediate connection of which with practical design is not always too obvious.

I assume now that my reader is forming an acquaintance with the usual forms of simple and compound beams and pillars, also that as an architectural student he has opportunities of inspecting examples of them in buildings in course of erection. This being so, I hope that, together with the wish to learn theory, there is the desire to know something about the material itself—structural mild steel.

It is not too much to say that structural mild steel is the most wonderful building material of modern times. Even the practicable development of reinforced concrete as a wonderful system of building construction is due largely to mild steel. The universality of application of structural steel work is so great that it is difficult to realize that barely forty years have elapsed since the first rolled-steel H-beams and other familiar shapes were introduced. What then are its outstanding merits as a material of construction? They may be summarized as follows: great strength of equally high tensile and compressive value in small bulk of uniform quality at reasonable cost. Mild steel made to the British standard specification has an average ultimate strength of 28 to 33 tons per sq. in. both in tension and in compression. No other building material is comparable with mild steel in this respect. Of the metals cast-iron has as high a compressive value, but its very low tensile strength in addition to certain unreliable qualities are against it. Wrought-iron is no longer of significance as a material of building construction. We are not concerned with the chemistry and manufacture of steel except superficially.

Wrought-iron, cast-iron, and mild steel, are all forms of iron derived from iron ore but subjected to different processes of manufacture, which result in the finished materials having different chemical and physical properties. The presence or absence of carbon and the manner in which it appears may be said to mark the principal difference between these three metals. Pure wrought-iron is practically free from carbon; foundry-cast iron contains carbon chiefly in the mechanical form of graphite but also a trace in chemical combination with the iron; structural mild steel contains a small proportion, about 0.1 to 0.5 per cent., of carbon in chemical combination, but no graphite.

The two best-known methods of mild steel manufacture are the "conversion" and the "open-hearth" processes. An enclosed vessel known as a "convertor" is used in the former; the term "open-hearth" is sufficiently self-explanatory. In each case a charge of the metal from which the mild steel is to be produced is made along with other materials to act as a flux, etc. In the convertor, the metal is practically made into pure iron by the elimination of carbon, and is then converted into mild steel by the introduction of a special metal containing a known high percentage of the element. In the open-hearth process the operation of smelting is stopped when the small percentage of carbon required still remains in the metal. The molten metal of either process is run into ingot moulds to form ingots. When in a fit state for handling these ingots are reduced by roller pressure in a cogging-mill to the more convenient size of "billets." The billets in turn are passed and repassed through the suitably shaped rolls of the rolling-mill until the metal is squeezed into the finished form required. The finished shapes depend to some extent on the mechanical limitations of the rolling process. The diameter of the rolls is limited by the capacity of the rolling machine. The depth of cut that can be made in a roll is limited by its diameter, while the breadth of flange of a section of H-beam is limited by the depth of cut. Further, as the steel being rolled is at a high temperature, and therefore in a plastic but not a fluid state, the dimensions of the cuts have to be considered very carefully, hence the necessity for the rounded corners and the flange-slope previously mentioned.

The chemical analysis of mild steel is a matter for the manufacturer, but we should understand its physical qualities.

The British Standard Specification for Structural Steel includes the following:—

Mechanical Tests.—The tensile strength and ductility shall be determined from standard test pieces, etc.

Tensile Tests.—Plates and sectional material:—

For plates, angles, etc., a standard test-piece having a gauge length of 8 in. must show a tensile breaking strength of 28 to 33 tons per sq. in. with an elongation of not less than 20 per cent.

There are various items in the specification, but the above test for strength and ductility is the one of chief importance, and so great is the skill in modern steel manufacture that it may be taken for granted that every ton of steel sold as being made to the British standard specification will comply with it.

In the simplest language, the test means that if a bar of structural mild steel, having a uniform area of one square inch of cross-section for a length of 8 in., is subjected to a gradually increasing load that tends to stretch it in the direction of its length, the bar shall not break until the load has reached a magnitude of not less than 28 and not more than 33 tons. Also, after fracture, it shall be found by measurement that the original length of 8 in. shall have increased by not less than 20 per cent.

Tensile strength and ductility are considered together and as of equal importance. Should the tensile strength fall below 28 tons per sq. in., the elongation will probably increase, meaning that the steel is too soft. On the other hand, an increase of tensile strength over 33 tons per sq. in., accompanied by a reduction of elongation, indicates a material that is too hard and brittle.

There is no standard test for compression as it can only be made with great difficulty, and in view of the general acceptance that the strength of mild steel is equal in tension and in compression, there is no necessity for it.

Such then is the material we have to work with, and fortunately it is a highly satisfactory one of uniform quality.

In the next article, technical considerations of stress as exemplified by tension and compression as well as other matters will be considered.

[The previous article in this series appeared in our issue for September 5th.]

he Grand Stand at the Rectory Field, Blackheath

An Example of Reinforced Concrete Construction

THIS new reinforced concrete grand stand has been erected from the designs and under the supervision of Messrs. Walter Bridges & Company, architects and consulting engineers. Last year e original timber stand was destroyed by fire and Messrs. e Blackheath Football, Cricket, & Lawn Tennis Company, d., decided to erect a larger and more permanent struc- e. On the advice of the engineers, reinforced concrete nstruction was adopted for main portion of the work. e columns, riser beams, l treads are constructed the pre-cast method, and er at least three weeks' ma- ing, were erected and nded to the other mem- s formed *in situ*. In the nion of the engineers the ption of this method of nstruction was amply jus- ed by the results obtained. cial arrangements were de for the bonding to- her of all portions of the k, no attempt has been de at ornamentation, and structure presents an ap- rance of solidity, and a racter indicative of the pose for which it is uired.

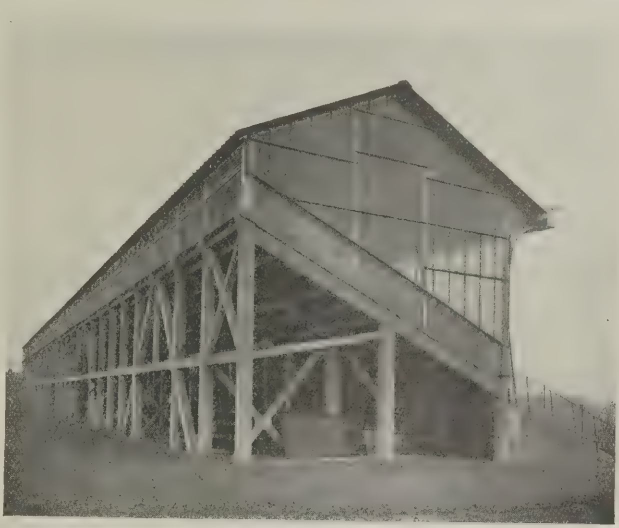


FIG. 1.—SHOWING ARRANGEMENT OF BRACES.

he terraces are 300 ft. long. They consist of 16 steps, : × 15 in.; and accommodate about 3,400 spectators, f whom have an uninterrupted view of the whole field lay. The lower steps are on the solid, and the upper n are of reinforced concrete on 9 in. walls, spaced 10 ft. re to centre, this being found the most economical n of construction. There are four wide exits from the aces under the stand, giving access to the office and tories, and to the wide approach road behind.

he near touch-line of the field of play is unusually close he stand, and in order to give the spectators on the t row of seats an uninterrupted view of this portion of field, this row of seats of the stand was raised 5 ft. 9 in. ve the top of the terraces. To enable each of the 1,800 tators seated in the stand to obtain a clear view of arts of the field, steppings of 1 ft. 3 in. × 2 ft. 9 in. are rided. The treads are unusually wide, but this adds to the comfort of the spectators and does not seriously reduce the seating accommodation.

The stand is 300 ft. long by 30 ft. wide; and is supported on reinforced concrete columns arranged in three rows at 10 ft. centre to centre in each row, and on the piers on the walls of the five exit staircases. The columns are from 10 in. × 10 in. to 14 in. × 14 in. in sections, and were all pre-cast and up-ended on to temporary timber supports and stayed plumb as shown in Fig. 3. The reinforcement for the footings and ground tiers was then placed and these members concreted *in situ*. The reinforcement of all the cross bracings was securely bound to the bond bars cast in the columns and the framework was then erected, as shown in Fig. 2.

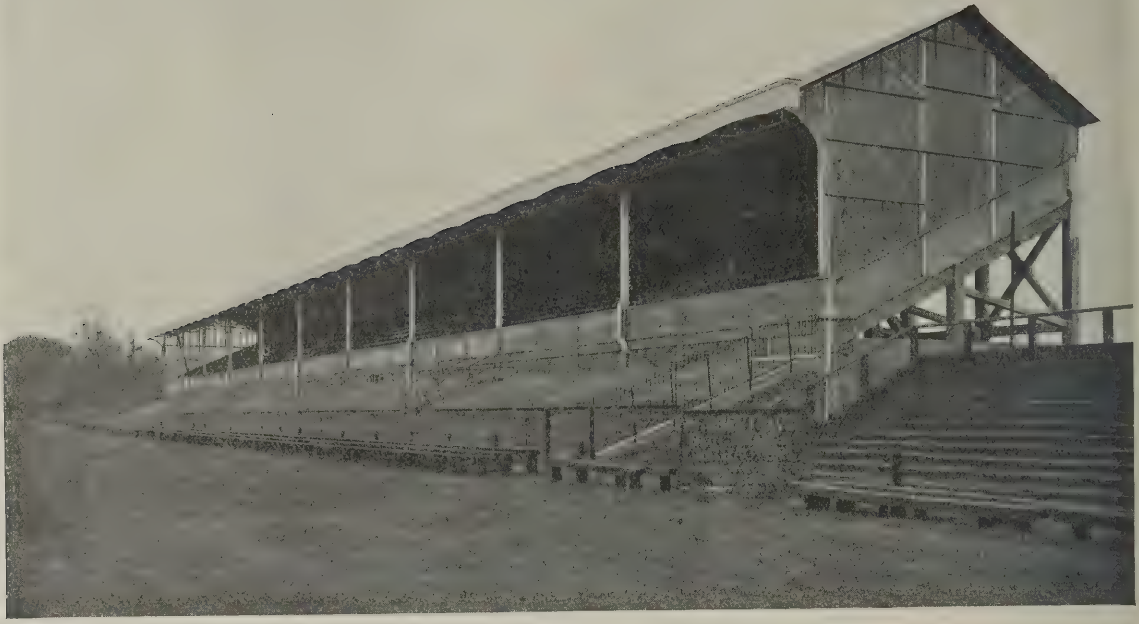
After the casting of the braces, the formwork for the raker beams was placed in position as shown in Fig. 3.

Owing to the fact that the riser beams and treads of the steppings in the stand were pre-cast, and the reinforcement from them projected into the body of the raker beams, they were erected before the casting of the latter and had to be carried on the formwork above mentioned. An inverted truss construction was adopted for this in order to utilize the load-bearing capacity of the columns.

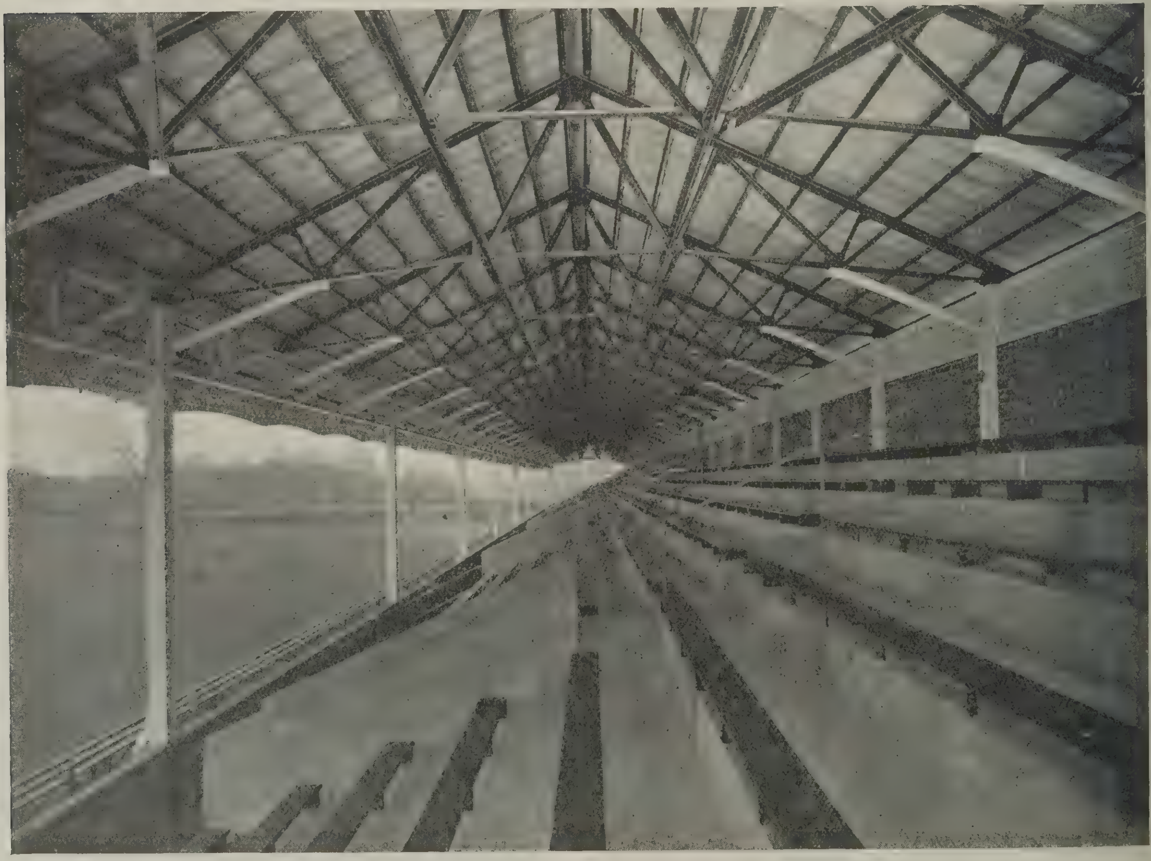
The raker beams, 21 in. × 7½ in. in section, were reinforced with three 1 in. bars, top and bottom, and passing from back to front of the stand, bent-up bars near supports being avoided owing to the congestion of steel from the risers and treads. Ample shear resistance was provided, with stirrups of 1 in. × ⅛ in. section. Figs. 1 and 2 show the arrangement of the braces, all of which (excepting the large diagonal struts about each of the exits) were 8 in. × 8 in. in section, reinforced with four ¾ in. bars bound with $\frac{3}{16}$ in. at 3 in. centre to centre.

The whole of the reinforcement consisted of mild steel bars of plain circular section, "self-sentering" being used for the parapet panels and the curtain walls round the stairs. Expanded metal was used in the 3 in. treads, and as

FIGS. 2 AND 3.—VIEWS SHOWING PRE-CAST COLUMNS UP-ENDED ON TO TEMPORARY TIMBER SUPPORTS.

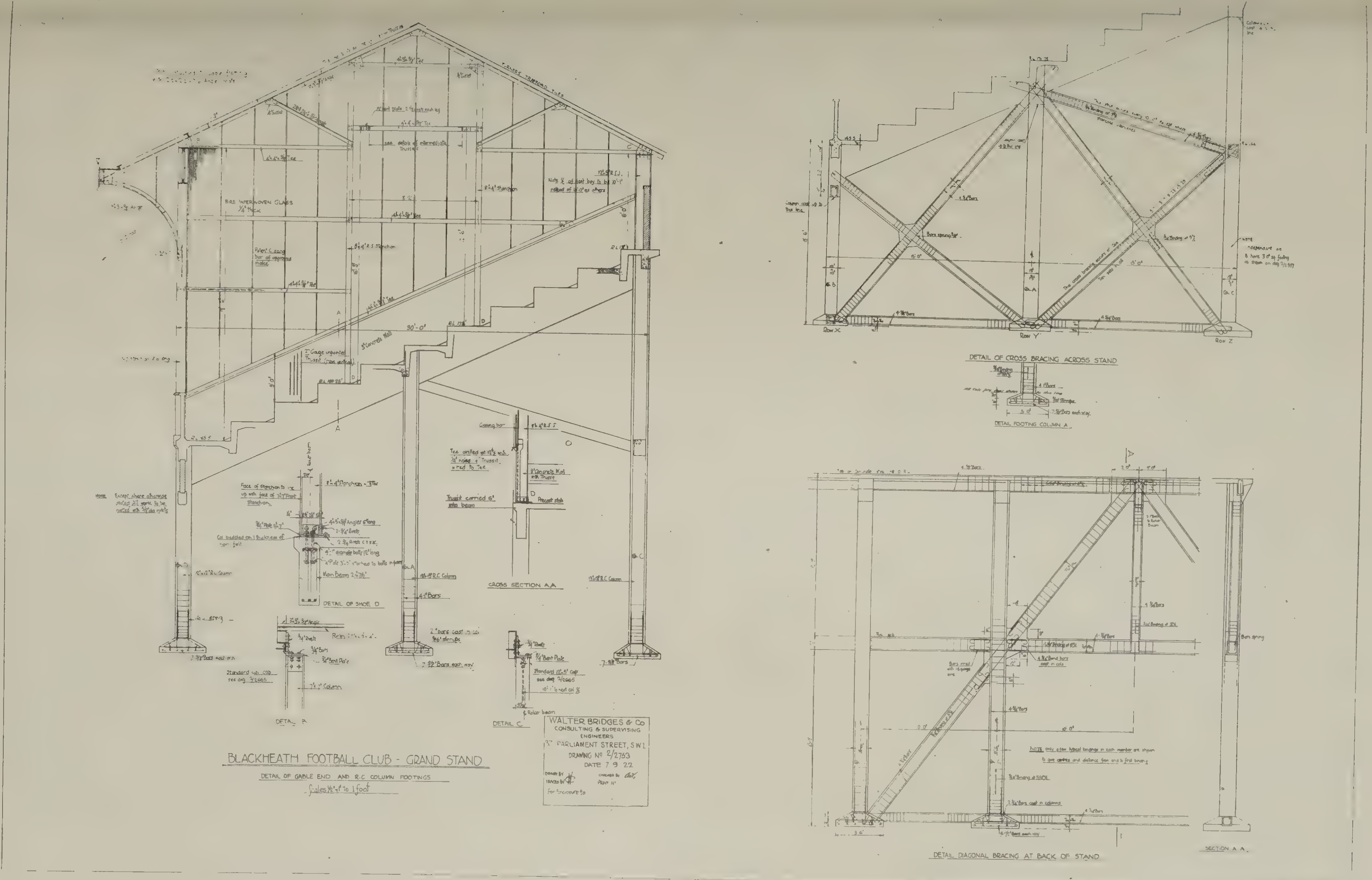


THE EXTERIOR OF THE STAND.



THE INTERIOR OF THE STAND.

THE GRAND STAND AT THE RECTORY FIELD, BLACKHEATH.
WALTER BRIDGES AND CO., ARCHITECTS AND CONSULTING ENGINEERS.



THE GRAND STAND AT THE RECTORY FIELD, BLACKHEATH: CONSTRUCTIONAL DETAILS
WALTER BRIDGES AND CO., ARCHITECTS AND CONSULTING ENGINEERS.

reinforcement for the risers. The mesh in the latter was bent round the top and bottom bars and extended out at the sides to lay-in 6 in. × ¾ in. rebates formed in the treads. These rebates were afterwards grouted up to improve the continuity of the whole.

The reinforced concrete sub-structure is particularly well executed, and is perfectly sound throughout. The arrangement of the steel roof can be clearly seen from the photographs. The trusses, spaced 10 ft. centre to centre, are supported at the back on 12 in. × 5 in. rolled steel joist stanchions, and at the front on light steel lattice girders of 30 ft. span. The front columns, consisting of 7 in. × 7 in. steel joists, are of ample section for the load to which they are subjected, but owing to their slender proportions, are unable to greatly assist in resisting the wind stresses coming on the superstructure. Adequate provision is, however, made by means of the more numerous short columns at the back of the stand, which are well braced and anchored with long plate bolts carried well down into the reinforced concrete columns under. Commodious and well-lighted lavatories and offices are provided under the stand, and provision has been made for dressing-rooms, baths, etc., which will be constructed at some future date.

The general building contractors were Messrs. A. Roberts & Co., Ltd., of London; the steelwork superstructure being manufactured and erected by Messrs. James Allan Senr. & Sons, Ltd., of Glasgow. Mr. William Hide was the Clerk of Works.

Competition News

The Bournemouth Pavilion.

Bournemouth Corporation have decided on additions, including a lounge and billiards room, to the original scheme for a new pavilion on the sea front. The additions will raise the total estimated cost to £171,100.

List of Competitions Open

Date of Delivery.	COMPETITION.
Oct. 22	Bridge over the River Medlock, Limehurst. Designs are invited by the Rural District Council for a bridge over the River Medlock. Apply Mr. R. Thompson, Council Offices, Ashton-under-Lyne.
Nov. 5	Art Gallery for Hull. Assessor, Mr. John W Simpson, PP.R.I.B.A. Apply, with cheque for £2 2s., to Mr. H. A. Learoyd, Town Clerk, Guildhall, Hull.
Dec. 10	The War Memorial Committee of the Burgh of Coatbridge invite designs for the erection of a War Memorial on a site in the West End Park. The estimated cost of the work amounts to £3,000, and premiums of £75, £50, and £25 are offered for designs placed first, second, and third respectively. Assessor is Mr. James Lochhead, F.R.I.B.A., Hamilton. Apply Town Clerk. Deposit £1 1s.
Jan. 1	The Imperial War Graves Commission invite architects who served during the war as members of the Military, Naval, or Air Forces raised in any part of the British Empire to send in their names for admission to a competition for the designing of memorials to the missing to be erected by the Imperial War Graves Commission at Bethune, Armentières, Cambrai, and Soissons. Applications for particulars of premiums and other regulations from those desiring to compete are to be addressed to the Secretary (Works Branch), Imperial War Graves Commission, 82 Baker Street, London, W.1, and must be received there not later than January 1, 1924, and must be accompanied by a statement giving particulars of the war service and professional career of the applicant and clearly stating which of the memorials it is desired to compete for. Deposit, two guineas for each set of plans. The Assessor is Sir Aston Webb, K.C.V.O., P.R.A.
Jan. 5	Memorial Building and Tower, Dudley. The Council of the County Borough of Dudley invite Competitive Designs from duly qualified Architects for the "Brooke Robinson Memorial" Building and War Memorial Tower comprising a Public Hall, Coroner's Court, small museum, and a new sessions court. Premiums £300, £200, and £100. Mr. W. Curtis Green, A.R.A., F.R.I.B.A., Assessor. Conditions of competition, together with a copy of the site plan, can be obtained on application to E. W. Tame, Town Clerk, Town Clerk's Office, Dudley, with deposit of £2 2s.
No date *	The Eastleigh and Bishopstoke Urban District Council invite designs for the extension of their existing Council buildings, and the erection of an assembly hall, on the site adjacent. Premiums: 50, 30, and 20 guineas. Apply, with deposit of £1, to Mr. J. Lawrence, Clerk to the Council, Council Offices, Eastleigh.
No Date	Taunton School War Memorial. The Council of the Taunton School invite designs for a War Memorial, consisting of an Art and Science Block, the cost of the building to be approximately £10,000. The Assessor is Mr. Robert Atkinson, F.R.I.B.A., who will have the power to nominate a second Assessor if desirable. Premiums first, £100; second, £50. The first premium will merge in the architect's commission. Particulars, together with photograph of the present buildings, may be obtained from the Secretary of the School, H. J. Pollard, F.C.A., 3 Hammet Street, Taunton, in return for a cheque for £2 2s.
	* Indicates Competitions whose conditions are not in accordance with those laid down by the R.I.B.A. and the Society of Architects.

Coming Events

Wednesday, October 17.

L.C.C. Central School of Arts and Crafts.—Lecture I "The Sphinx, the Pyramids, and other Tombs." 6 p.m.

Thursday, October 18.

British Museum.—"Excavations at Ashur and Ur, dat from Fourth Millennium B.C." 4.30 p.m.

Friday, October 19.

Art Workers' Guild.—Nominations for Master "Londo 8 p.m.

Big Pumping Station for London

The Metropolitan Water Board have placed a contract the erection of one of the largest pumping stations yet plan for London's water supply. It will cost £100,000, and pump the water from the Thames into the new storage reser at Littleton, near Staines, which will be capable of hold 650 million gallons. Work will shortly be commenced on buildings, which cover an area of 20,000 sq. ft.

Part Demolition of a City Church

The eastern portion of St. Alphage, London Wall, has b handed over to the housebreakers. St. Alphage is chi noted for the fragment of the old Roman wall, which is preserved in a part of the churchyard on the opposite side of street. Unlike the majority of the City churches, it is not work of Wren, the original structure having survived the G Fire. The present building was erected in 1777, at a c according to the old records, of £1,350. The portion now b demolished, the second in recent years, does not include main body of the church, but only the part which fronts to Aldermanbury, where a new block of warehouses is to erected.

Government Assistance for Public Wo

The Government have formulated proposals designed provide employment in depressed industries by stimula the acceleration of work by companies operating undertak of a public utility character. It has accordingly been deci to extend to such companies as are prepared to comme during the coming winter works that would not otherwis undertaken at the present time, financial assistance in res of revenue-producing works similar to those undertaken local authorities. Such works would include gas, wa electricity, tramways, docks, harbours, and canals. All ap cations should be addressed to the Secretary, Unemployn Grants Committee, 23 Buckingham Gate, S.W.1.

Egyptian Architecture

Sir Banister Fletcher, F.R.I.B.A., in a lecture on "Egyp Architecture" at the Central School of Arts and Cra London, outlined the influences which controlled that archi ture, to understand which one must enter into the spiri their religious beliefs, and appreciate their social conditi besides giving due importance to the unusual geograph geological, and climatic conditions of that strange land. pyramids, the greatest monuments of antiquity that had c down to us, were the result of the Egyptian belief in imr tality, for in them they sought to preserve the body for return of the soul. Then, too, the powerful priesthood up the traditional, mysterious, and unchangeable religious r reflected in the planning of the temples. A sketch of the of Egypt in early days was followed by a review of its his from the time of the first dynastic king, over 6,000 years to the present day. Sir Banister then described the feat which characterize the buildings of the Nile, referring in to the planning of the temples, the sloping walls (giving appearance of great strength), often incised with sculptu scenes, the imposing colonnades with their wonderful var of sculptured capitals, and finally a sketch of Egyptian o ment, from the painted scenes and symbols down to the tr ment of domestic furniture.

Sheffield and South Yorkshire Architects

A S was to be expected, registration and the revision of building by-laws were prominent among the matters of outstanding importance which occupied the attention the Council of the Sheffield, South Yorkshire and District ciety of Architects and Surveyors during the past ar.

According to the annual report just received, the Council ged the Council of the R.I.B.A. to rescind its decision to disive the Unification and Registration Committee. The Council pointed a Sub-Committee to consider the Draft Registration ll submitted by the Royal Institute and a report suggesting merous amendments was sent to the secretary of the stitute. The suggestions seem to have met with scant favour, the subsequently published Draft Bill appeared with but v alterations. The whole subject is fraught with many ficulties and progress is of necessity very slow, but the uncil hopes that some measure of success may be achieved view of the time and trouble expended upon the matter by many members of the profession.

Referring to the subject of building by-laws, it is stated that September last the Ministry of Health issued a circular ter to Councils of Urban and Rural Districts calling their ention to the need of frequent revision of building by-laws, l stating that there was a large number of local authorities o have not altered their by-laws for so many years that these l become antiquated. The Council considered the circular l wrote the Royal Institute, suggesting action to obtain a rough revision of building by-laws so as to bring them into ordance with modern methods and materials. The Council e instances in which building owners in this district have fered severely from the insistence upon the observation of olete by-laws, and asked that particular stress should be l upon the need for the removal of such restrictions upon lding work. A letter was also sent to the Town Clerk ting that the Council would be pleased to give any assistance possible when any revision of by-laws, such as that suggested in the circular letter from the Ministry, is contemplated.

Among the lectures given during the year were: "The Architecture of Two London Streets—Regent Street and Strand," by Prof. C. H. Reilly, O.B.E., M.A., F.R.I.B.A.; "Some Notable Houses in Northampton," by Mr. J. A. Gotch, F.R.I.B.A., F.S.A.; and "Italian Architecture in England," by Major H. C. Corlette, O.B.E., F.R.I.B.A., R.B.C. The annual dinner was held at the Royal Victoria Hotel, and was attended by 61 members and guests. Mr. Paul Waterhouse, M.A., F.S.A., the President of the Royal Institute, was the chief guest of the evening. An interesting feature of the evening was the presentation to the President, Mr. J. R. Wigfull, by Mr. Waterhouse, on behalf of the subscribers, of a gold watch as a memento of his valuable services during the seventeen years he acted as Hon. Secretary.

The Council records with deep regret the death—at a comparatively early age—of Mr. C. F. Innocent, who was a member of the Society from 1891. Mr. Innocent took an active interest in the work of the Society and for many years was a member of the Council. He was one of the Honorary Lecturers in the Department of Architecture, taking as his special subject the Romanesque Period of English Work. Mr. Innocent was a well-known archæologist. The Council also records with regret the death of Mr. Clement Gibson, who joined the Society upon its formation.

The Society was founded in 1887 and two years later became allied with the R.I.B.A., thus claiming to be the first provincial society to take advantage of the scheme of alliance.

We join the Council in offering hearty congratulations to a former President and Hon. Secretary, Alderman W. C. Fenton, J.P., upon attaining the position of Lord Mayor of the city. Mr. Fenton is the first architect to reach that position, one which is a fitting reward for the many years of hard work he has devoted to the interests of the city.

The Study of Architecture and Building

Some London Opportunities

N all parts of the country the schools of architecture and the technical institutes are beginning their new terms. During the summer vacation each school has been actively aged in reorganizing its courses of instruction, and in bringto the notice of likely students, by the issue of a prospectus other means, its aim, policy, and organization, and the cial facilities for study it has to offer. Some of the prospecs have already been referred to in the JOURNAL, but others, ling with some of the London schools and institutes, have come to hand, namely, those of the Bartlett School of hitecture of University College; the L.C.C. School of lding, Ferndale Road, Clapham; the Northern Polytechnic itute, Holloway; and the Westminster Technical Institute. niversity College, owing to its central position, its engineerlaboratories, Slade school of fine art, sculpture studios, ol of hygiene, department of archæology, and lectures and es on general subjects, offers special facilities for a full comprehensive course of architectural education on a d basis. The advantages to be gained by students attendlectures and classes in other departments are manifest. y are brought into touch with students engaged in other, to some extent kindred, pursuits; they work side by side future engineers, painters, and sculptors. In the lectures eneral subjects and in the collegiate life they meet students nding to follow other professions or callings. Such general rcourse is not only advantageous to architectural students ng the period of their early study, but is likely to be of ng benefit to them.

e study of architecture comprehends so many subjects is so general in its application that it is essential for candis to have received a liberal education before taking up special work. To assist the student at the outset of his er, a curriculum has been arranged not only to ensure ing on a systematic basis, but also to obviate, as far as ble, the inevitable hiatus that occurs between ordinary l education and academic study.

is recognized that building is as much an art as it is a ce, and that architects are artists who need to grasp not the realities of the factors governing their work, but also the technique associated with each particular branch of it. It is impossible, in so far as building is concerned, to define where art begins and where science ends. An architect more than any other artist should be instructed to associate his work with the conditions of modern life; he must be familiar with the underlying principles of the sister arts of painting and sculpture. His knowledge of building should be based upon a close appreciation of history, tradition, and research; moreover, regarding the scientific aspect of his profession, he must be guided to regard construction as being organic and functional and not a separate and independent theory.

The freshman entering the school is first instructed in means of expression; he attends lectures on draughtsmanship and presentation. These studies are followed by lectures on architectural history and theory illustrated by lantern slides, blackboard demonstrations, and diagrams, as well as by visits to the British Museum. At a convenient stage, a definite course of reading is arranged in connection with the departmental library and the Yates library, having as its aim a knowledge of architectural literature bearing upon the subject.

Directly a student becomes familiar with the rudiments of draughtsmanship, sketching, geometry, sciography, and perspective, and has attended the opening lectures on building construction, he is encouraged to prepare designs of an elementary character, and is brought to realize the principles characteristic of building throughout the ages.

The whole of the first term is devoted to encouraging appreciative interest towards building on the part of the student, and to showing by the close correlation of lectures and studio work how one branch is interdependent on another.

Work in the second and third terms follows closely on the lines of that previously undertaken, with the exception that the studies gradually become more advanced and more closely related. At all stages the lessons of tradition are pointed out and stimulus given for imaginative renderings. The summer vacation affords the student an opportunity to increase his knowledge of old work from the study of the list of buildings arranged for his guidance.

During the vacations students have specific work allotted to them, which includes studying and sketching historical examples of art generally in London and the country.

By the time the student reaches the second year, he is ready to undertake simple essays in historical design combined with subjects in which prominence is given to construction. These studies widen the student's previous acquaintance with the architecture of ancient civilizations and extend to the Renaissance and modern times. Special lectures on these subjects, by Professor Gardner and others, have been arranged; also on the theory of composition and the history of the Renaissance in Italy, France, and England.

During the third year students taking the certificate course qualifying for exemption from the intermediate examination of the R.I.B.A. concentrate mainly on design and constructional subjects, and prepare a specified number of designs combining construction with requirements likely to be encountered in modern practice.

Work during the fourth and fifth years is confined to courses specially arranged for students taking the degree and diploma courses as well as for those students who elect to enter for the prizes offered by the R.I.B.A. and other bodies. In addition to advanced lectures on construction, structural engineering, acoustics, and professional practice, students have to prepare designs at intervals to meet stated programmes.

Although architectural drawings are merely a means to an end, and not the end themselves, the ability to express ideas on paper in a satisfactory and attractive manner is essential to the architect. Architectural drawing is fully dealt with in the architectural studio, but, in addition, students sufficiently advanced may draw from the life in the Slade school. The teaching of modelling is carried on in new studios adjoining both the school of architecture and the Slade school. In these studios architectural students will be able to obtain instruction in modelling. The three arts of painting, sculpture, and architecture are thus housed side by side. Painters, sculptors, and architects are sometimes called upon to collaborate, and would be more frequently so called upon if they better understood one another's work. The close association of students in the kindred arts should do much to promote such an understanding. Special arrangements have been made whereby architectural students can attend the Slade school to become acquainted with the principles governing decorative painting in so far as the subject is related to architecture.

The following courses are provided: (1) The B.A. (Architecture) Degree Course of the University; (2) the Certificate Course in Architecture; (3) the Diploma Course in Architecture; (4) Advanced Design Class; (5) Evening Courses in Design of Buildings; (6) the Atelier; (7) Certificate Course in Town Planning; (8) Diploma Course in Town Planning and Civic Architecture; (9) Diploma Course in Town Planning and Civic Engineering.

The staff is as follows: Architecture—A. E. Richardson, F.R.I.B.A., professor; Arthur Stratton, F.S.A., F.R.I.B.A., reader in architecture and tutor; James Burford, A.R.I.B.A., assistant; A. Stanley Furner, A.R.I.B.A., assistant; E. P. B. Musman, B.A., A.R.I.B.A., assistant in the evening school; W. R. Jaggard, F.R.I.B.A., assistant; W. Wilson, assistant. Town Planning—S. D. Adshead, M.A., F.R.I.B.A., professor. Engineering, Municipal—M. T. Ormsby, M.Inst.C.E.I., Chadwick professor; B. H. Knight, A.M.Inst.C.E., assistant. Engineering, Civil and Mechanical—E. G. Coker, M.A., D.Sc., M.Inst.C.E., F.R.S., professor; A. H. Barker, B.A., B.Sc., lecturer, heating and ventilating engineering; E. Sprague, A.M.Inst.C.E., senior assistant. Painting and Sculpture—H. Tonks, Slade professor; T. Borenius, Ph.D., professor, history of art; W. W. Russell, A.R.A., assistant professor; P. W. Steer, assistant professor; G. Thomas, assistant (sculpture). Archæology—E. A. Gardner, Litt.D., Yates professor. Hygiene and Sanitation—H. R. Kenwood, C.M.G., M.B., D.P.H., F.R.S.E., professor; A. G. R. Foulerton, F.R.C.S., D.P.H., lecturer; M. E. Delafield, B.A., M.B., B.C., M.R.C.S., L.R.C.P., D.P.H., assistant and lecturer; and the professors and lecturers in general subjects in the Faculty of Arts.

At the London County Council School of Building senior and junior technical day instruction is obtainable, and evening classes are held. The evening school has been established to enable artisans and others engaged in the building trades and allied professions to acquire an intimate knowledge of the principles that underlie the processes which they have to carry out in their daily work. Workshops have been provided and equipped for the practical teaching of the several building trades under conditions similar to those met with on buildings and in builders' shops.

A school of architecture, with courses of instruction in the history of building and for the study of architectural desig and planning, together with the preparation of architectura drawings, forms part of the complete scheme of the work of th school. Lecture and class-rooms, drawing offices and laboratories have been arranged in connection with the workshop so that the practical work of the school may be combined wit class studies in building construction, drawing, architectur and the chemistry and physics of materials. There are also library, common and refreshment rooms, for the use of student Every facility is given for full-size work and the various trade will act in conjunction, to which purpose a portion of the larg hall will be devoted.

The prospectus divides the work of the evening school, t allow of easy reference, into five parts, viz.: section 1, trac subjects (workshop practice and theory); section 2, lectur and classes in building construction and allied subjects section 3, surveying; section 4, structural engineering; sectic 5, architecture and drawing. Students joining the school i any one subject will find the workshop training, the scientif classes and the design or drawing necessary for the full master of that subject, dealt with in each of the sections.

Great importance is attached by the council to the practic combination of the studies in the several trades and branch as required by a master builder, foreman, or architect, and a architectural director of the school has been appointed for th purpose. Facilities will therefore be given for combining arch tectural studies in practical and theoretical work in the wor shops, lecture rooms and drawing offices. Courses of speci lectures, open to all students, are held each session upon arch tectural and scientific subjects in connection with the work the school.

The staff includes the following: Principal, A. R. Sag M.B.E.; director of architecture, Professor Beresford Pit M.A., F.R.I.B.A.

The work of the architectural classes is under the gener superintendence of H. F. Murrell, A.R.I.B.A., assisted W. R. Jaggard, F.R.I.B A. Lectures upon examples, and cri cisms of the students' work, will be given during the sessi by Professor Beresford Pite. Students who, having pass the preliminary examination, are admitted probationers of t R.I.B.A., will have opportunities for preparing the subjects the intermediate examination in history and design and for t preparation of all the testimonies of study.

Students of the R.I.B.A., having passed the intermedia examination, will undertake the problems in design requir for the final examination under the tuition provided at t school.

The department of architecture, surveying, and buildin and the building crafts of the Northern Polytechnic Institu Holloway, is divided into four sections, viz.: (1) Day school architecture, surveying, and building; (2) evening school architecture, surveying, and building; (3) day school of bui ing crafts; (4) evening school of building crafts. The cour of study given are regarded as purely educational and cramm for examinations is discouraged. No student who has tak a full course should, however, experience any difficulty passing any examination connected with that course. T work of the school covers the requirements of: the R.I.B. the Surveyors' Institute, the Quantity Surveyors' Institu the Institute of Structural Engineers, the Royal Sanita Institute, the Institute of Builders, and other institutes.

The head of the department of architecture, surveying, a building is T. P. Bennett, F.R.I.B.A., and chief lecturer a assistant to head H. J. Axten, A.R.I.B.A.; other instruct include T. E. Scott, A.R.I.B.A., H. Parker (Hons. City a Guilds), D. W. Ayre, A.R.I.B.A., H. Kenchington, A.R.I.B. and R. A. Duncan, A.R.I.B.A.

At the Westminster Technical Institute group courses instruction have been arranged to enable students enga in the offices of architects, surveyors, quantity surveyors builders and in the building trades to follow out a systema course of study extending over several years, and involv attendance for several evenings a week, and students, es cially those just beginning their studies, are strongly rec mended to adopt them. Students of the R.I.B.A., Surveyors' Institute, the Society of Architects, and Institute of Builders, who thus supplement their pract experience in their offices and on the works by a little ent siasm and conscientious study on the lines suggested, sho be capable of passing the professional examinations of th respective institutions on the completion of the full cour

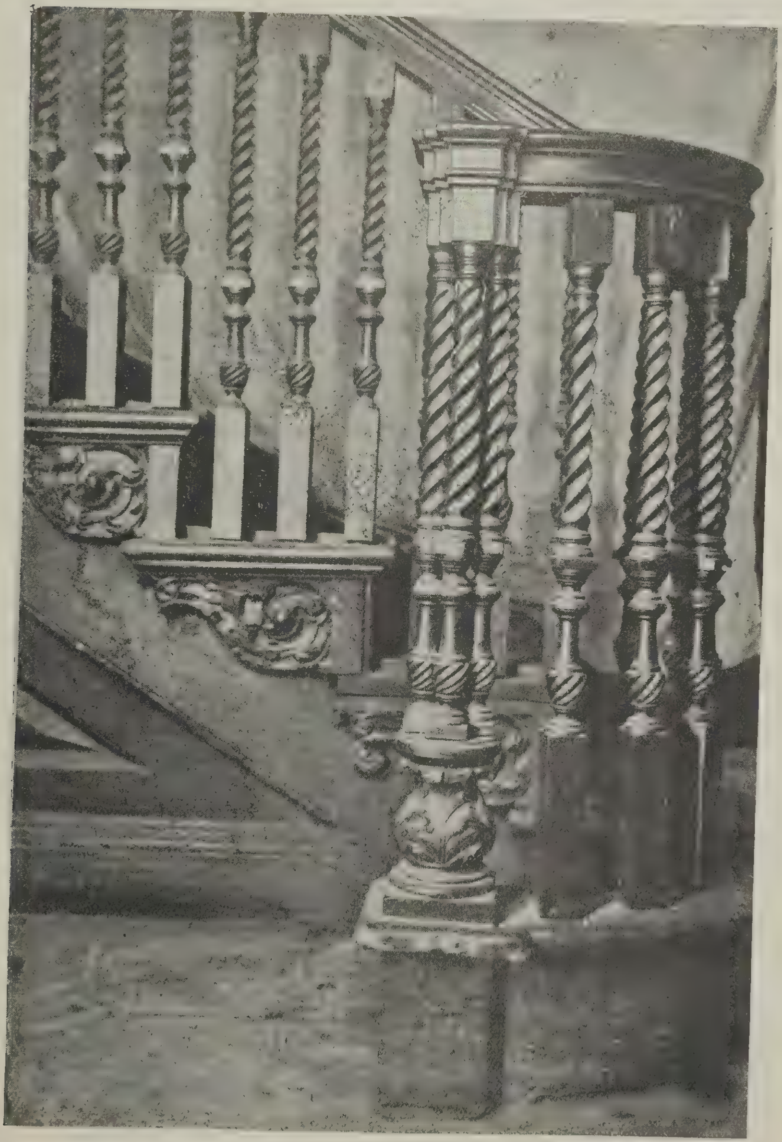
Mr. J. Stuart-Ker, B.Sc., A.M.Inst.C.E., is principal; the instructors include W. J. Wilsdon, F. C. Webster, L. Blanc, L. Lickis, and W. T. Creswell.

Vednesday, October 24, 1923.

Vol. LVIII. No. 1503.

THE ARCHITECTS' JOURNAL & Architectural Engineer

With which is incorporated "The Builders' Journal."

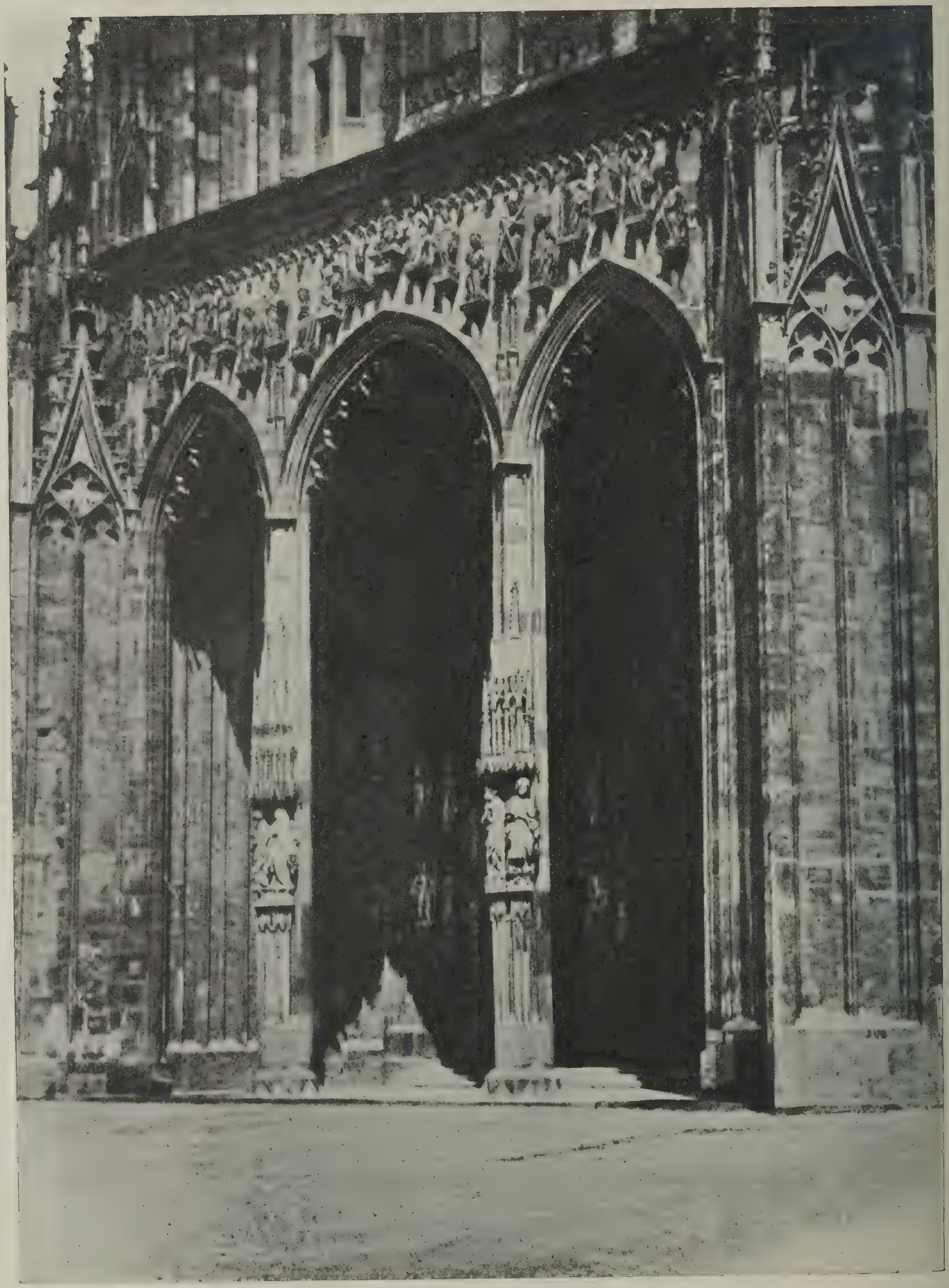


DETAIL OF STAIRCASE, NO. 15 QUEEN SQUARE, BRISTOL;

27-29 Tothill Street, Westminster, S.W.1.

c

Ulm Cathedral : The Portal



Ulm Cathedral, with its great portal, shows the beautiful and crisp style German Gothic workmanship could attain to in the early fourteenth century—its best period. The whole district indeed is dotted with towns full of fine Gothic churches.

(*See article on page* 597.)

THE

ARCHITECTS' JOURNAL

27-29 Tothill Street, Westminster, S.W.1.

nesday, October 24, 1923

Volume LVIII. No. 1503

Nixon v. Erith Urban District Council

The Need of a Seal in Municipal Contracts

A CASE of great importance to architects, surveyors, builders, and contractors, was heard recently by Mr. Justice Bailhache, and is reported in this week's issue. An action was ght by Mr. E. D. Nixon for work done by him in aring quantities in connexion with a housing scheme h the Erith Urban District Council wished to carry The Council authorized their architect to employ a eyor to prepare the quantities, and all the necessary was done by Mr. Nixon. In due time he claimed his but the Council refused to pay them, or any part of 1, because the contract to employ him was not under The legal advisers of the Urban District Council ited the claim upon the ground that every contract an urban authority whereof the value or amount eds £50 must, by statute, be in writing and sealed with ommon seal.

e Judge was, and made it clear that he was, bound to judgment against the plaintiff. In this case, as in all s, there appear to have been side issues—matters on 1 one party or the other thought that stress ought to be -but all that is material for the consideration of our rs has been set out.

e case is a very hard one—not so unusual as it should ind sets out a rule which may, and very often does, do injustice, not only to architects and surveyors, but ilders and contractors.

e section of the Public Health Act 1878 which enacts ule is imperative and not merely directory.

e law upon the subject of work, to a value exceeding or a local authority is, therefore, quite clear, and since has been the subject of many authoritative states from the Bench. A succession of cases affecting ects, surveyors, builders, and contractors, have, in iain, been decided precisely as Mr. Justice Bailhache ed a day or two ago.

t it seems onerous to many, especially professional to insist upon compliance with the strict letter of the t the moment when it appears probable that a new of business has been found. Meticulous demands offend and even frighten some of the members of the uthority; business, possibly small in itself, may lead ge and continuous employment, so some persons, icting with the local authority, shut their eyes to they know to be necessary for safe reliance upon their ctions.

ers—and, indeed, the great majority—do not know of, o not appreciate, the contents of a section of an Act liament passed half a century ago depriving them y, not only of remuneration, but of money spent in ing plans and other information, or in doing or ing for work. The nature of the items making up an it for a sum exceeding £50 is immaterial. These items may be for outlay of one kind or another. If in the aggregate they exceed £50, even though the total be for money expended, it is impossible to recover if the authority to do the work was not sealed by the Board. Members of a local authority ought in their own interests, for the protection of the ratepayers, to see that no ground is left for uncertainty as to what an order of the Board—whether for goods purchased or work done—means, and that all persons working or spending money for the Board shall be honestly paid.

Facts, long and intimately known, incline us to blame a disinclination upon the part of architects, surveyors, and others to place matters upon a rigid basis at the commencement of their employment. It may appear unlikely that a sum of £50 will be involved—it may, indeed, appear probable that the total will involve a smaller sum than £50, and that a demand for the seal of the Board may arouse an element of suspicion likely to cause the loss of the business. Rather than take that risk many professional men seem to think it wiser to trust to the probability of the business by some means or another going through without question. But quite clearly there is grave risk, and of this they should be aware.

We consider it unlikely that section 174 of the Public Health Act 1875 will be repealed or modified by legislation. It was enacted because of grave scandals committed by members and officials of the old Metropolitan Board of Works, errors and crimes which led to the establishment of the London County Council. The profession, therefore, must, for the present at any rate, consider the enactment binding, and affecting many relations with public bodies. We understand, and sympathize with, reluctance to drive home to an employer what is, by law, necessary—namely, to insist that the contract for employment be under the seal of the Board in all cases which do, or possibly may, involve payment of £50. The risk involved in failure to obtain a contract under seal is serious, and it is very doubtful whether omission to demand such a sealed contract is, in the long run, justifiable.

The subject is in the hands of members of the profession. None but themselves can secure them from the effect of a provision in an Act of Parliament. There is not any probability that the provision of the statute will be modified or altered. It is essential that they boldly stipulate for the seal of the authority in all cases where there is a certainty or even a reasonable doubt that remuneration will exceed £50. The case which we have quoted, and all other cases on the same subject since 1875, which we have read, are to the same effect. We have searched in the hope that we might find some means of protection from the imperative enactment, but without success, and we are compelled to leave it to practitioners to adopt whatever method may be thought, in individual cases, most reasonable and desirable.

Notes and Comments

Relief Works and the Building Industry

THE Government proposals for the spending of £50,000,000 in the immediate future upon works of public utility are not only sound statesmanship, but sound business. The work that such a huge sum of money must provide should do much to reduce the distressing amount of current unemployment, while the works that are to be undertaken—mainly roads, railways, and bridges—are really necessary, and in many cases long overdue. To improve our communications is to lay the foundation of future prosperity; and in any case it is better to spend money on productive labour than to distribute it in doles and put a premium on idleness. Satisfactory as the proposals undoubtedly are, so far as they go, we would wish that something more had been done for the building trade. Sir Montagu Barlow, the Minister of Labour, in his speech last week, had nothing better to say to this great industry than that the Government housing policy was progressing steadily, and that 380 local authorities had initiated housing schemes. In spite of this we still find considerable unemployment in certain branches of the building trade. It is obvious that housing alone cannot absorb the surplus of unemployed labour. Some other and more effective means will have to be devised if the building industry is not to suffer serious hardship. Precisely what form this assistance should take it is the business of the Government to determine, though a score of suggestions for works to be immediately undertaken could be given off-hand. Before any definite proposals can be expected from the Government, however, the building industry will have to put its house in order. Sir Montagu Barlow was indubitably right in saying that there are two or three branches of the building trade that are "bottle necks"—the bricklayers, the plasterers, and the stonemasons. While there is an acute shortage—an artificial shortage—in these branches, there must necessarily be a "hold-up" of operations, and an attendant body of unskilled labour that cannot be utilized. Sir Montagu did not fail to point out that when, two years ago, the building industry was pressed to adopt a scheme for training 50,000 able-bodied Ex-service men, this was vigorously opposed by the National Federation of Building Trades Operatives. The time has surely come for a reconsideration of this attitude. The remedy for unemployment is in the hands of the industry itself.

Numismatics

The fifty-third annual report of the Deputy Master and Comptroller of the Royal Mint (Mr. Robert A. Johnson), issued last week, is a very encouraging document, not only from the point of view of art, but from that of the artist and of the public. It shows that excellent work has already been done by the small Advisory Committee, which was appointed last year, to raise English numismatic art from the low and poverty-stricken level to which it had fallen. A successful effort has been made to revive the medallic art, and the way is being prepared for the production of a good series of British coins when the time comes for these to be issued. The excellent work of Mr. Carter Preston, Mr. Kruger Gray, Mr. Langford Jones, and other first-rate artists of the younger school, is already familiar to us in medallic and similar forms, and it is gratifying to find that, as a result of the deliberations of the committee, the services of these artists are being made use of by the Royal Mint. The cause of the decline of English numismatic art is not far to seek. It is to be traced chiefly to the decay of the old art of engraving upon steel or other matrix direct, and to the introduction of the mechanical reducing machine. Sculptors and other plastic artists are skilful enough in producing plaster models; but, as Mr. Johnson observes, it is necessary also to understand the technique of the small steel punch from which the working dies are afterwards prepare "In other words, it is necessary not only to be a sculpto but to be a medallist possessing at least something of the e and skill of the old engravers." This skill can only be o tained by intensive study, such as is now being given to by some of our most accomplished artists under the æg of the Royal Mint. The committee (whereon the R.I.B. is rightly represented) is to be congratulated, no less th the artists concerned, upon this successful endeavour revive an ancient and a delicate art, that needs only a litt encouragement to find it again a popular and a flourishing a

"Cast-iron Gothic"

Waterloo Bridge is not the only Thames bridge that showing signs of age; the bridge at Hampton Court, thou its junior by nearly half a century, is also on the sick li It has just been declared unsafe by the enginee of the Middlesex and Surrey County Councils. The pr pect of its demolition (it cannot, apparently, be satisf torily strengthened) will not bring any protest from th societies that concern themselves with the welfare of thi of historic or architectural interest, for it has neither virt Its only claim to notice is that it represents an unhap period in the history of modern engineering—that peri during which engineering became sham-architecture; wh structural forms were considered "bad form" unless th were dressed up with debased "architectural" detail. was the period of "cast-iron Gothic." Hampton Co Bridge is in the Tudor mode, in deference to Wolse Palace, just as Westminster Bridge emulates the Gothic St. Stephen's; though in the latter instance, instead o saint and a sinner we have two sinners; or, more prope one sinner and a saint who is regarded as an upstart by more venerable members of the calendar. It was the sa period that gave us, lower down the Thames, the specta of a double drawbridge of steel (also nicely bedecked w sham-Gothic detail) making diurnal obeisance to the g and aloof Tower. Let us be thankful that we have beyond such architectural trickery and hope that we n be kept from the dual sin of pretence and anachronism.

Preservation or Demolition?

Our leader under this heading on October 10 appea appositely, for it would seem that Rochester is in dan of losing one of its few remaining historic monument Fort Clarence Arch. Rochester is no upstart of a mod city, but is redolent of English history, and althoug Roman origin, it is chiefly famous for its Norman rema which were among the finest in the country. Little little it has been robbed of its significant buildings, this latest threat of depredation has moved the tow leading citizens to action, and in "The Chatham, Roche and Gillingham News" of October 12, there appeared copy of a protest in the form of an extremely able interesting letter written by Mr. Donald Maxwell, signed by some sixty citizens, addressed to the Mayor Corporation of Rochester. It appears that the arch i be removed to make way for a road widening. We k that town planning in its widest sense always takes nizance of beautiful and historic monuments, but we kr too, that at the present moment commerce and the inte combustion engine are the ruling factors of our ti Nevertheless, we hope that this petition will not be in v A similar situation arose at Croydon; fortunately prese tion won the day, and an alternative scheme was fo Here an alternative exists. Rochester possesses a society. We do not know why the protest was not n through this body. We are aware, however, that some must often lapse after the formation of a civic society be it becomes generally recognized as an authoritative b and establishes itself in harmonious relationship with town council.

Architectural Travel

Edited by F. R. Yerbury, Secretary of the Architectural Association

4.—Germany. (2) South

By GORDON H. G. HOLT

AS with North Germany, we are here dealing with a tract of country exceedingly rich in mediæval and modern architecture. Perhaps no other country can show as much in both. Saxony, aria, Würtemberg, and the Rhineland afford great sure and many opportunities to realize the amazing ensity of the German mind to adapt a foreign style, so many variations of its own that a quasi-indigenous itecture is, in the end, evolved. This might be said pply especially to late Baroque and to our own period.

ie Romanesque style, of h so many examples are e found, has not the tic vigour of its French Italian prototypes. It is inly quaint; it is naïve; it has the gaunt clum- s of indifferently-grown scence. It suffers from ncertitude and apathetic ism of merely obedient s. Most German Roman- buildings have rather pired façades; indiffer- poised and suffering less a paucity of ornaments from unsatisfactory pro- ons. What Jean-Paul of man applies well to kind of architecture: its fault is that it has so small ones. Here, again, tions but prove the gen- ule. Bamberg Cathedral, nany churches at Ratis- two churches (out of) in the island of Reiche- on the Lake of Con- e, and the church of ormer Benedictine Ab- of Alpirsbach, in the g-Tal. German archæ- ts and architects are rally proud of the nesque to be seen in hineland, but with the tion of the carving and c work at Cologne, ners find it difficult to thused by it.

CASTLE ERBACH-FÜRSTENAU IN OVENWALD.

(14th to 17th Century.)

very flat treatment of Romanesque façades in ny does not lead to the spontaneous appearance to served in Provençe or South Italy. No amount of c argument could make the west front of Mauzs- er Church less insipid than it is; none could save odegar, Gebweiler (also in Alsace). We prefer the ities of St. Fides, Schlettstadt, with its gracile octa- tower in the centre, or the very "recherché" front of s Cathedral. Mainz, too, has an imposing exterior. strikes first in these large churches is the great height ttain. Freckendorf Church, St. Patroklus, at Soest, tphalia, and Stifskirche, at Wimpfen, are abnormally that, and the turrets and spires flanking them, are edeeming features. Often these turrets or towers are ound bordering both east and west elevations, such as Bamberg Cathedral, which boasts of two towers at both ends. The plan of Bamberg, incidentally, is unusual; it includes nave and aisles, an elevated choir at each end, with a crypt below and a transept between the west choir and the nave. When we come to the interior of these churches it is a different matter. Here we are certainly face to face with a pleasant richness and a great variety of ornaments, the mosaic work being especially efficient, and the stone and wood carving straightforward and sincere,* although in many cases the "restorer" has spoilt no inconsiderable part of interior fittings and ornaments.

The Early Gothic period is scantily represented in South Germany, but within the two centuries following the end of the thirteenth, a vast amount of building took place. As is to be expected, cathedrals and an imposing series of parochial city churches and conventual churches were then erected all the way from Alsace to the borders of Hungary. The cathedral of Freiburg may be coupled with Strassburg Cathedral as among the finest of its class, if not in unity of style (a doubtful advantage, taking it all round), then by the completeness of its execution and by its handsome tower. It is in this category of building, as differentiated from the mere church, that the architects of the time took a line of their own, and elected not to follow the French models so slavishly. The cathedral of Ratisbon, begun in 1275, and completed after a long interval in the nineteenth century, shows neither the marked development of the transept nor the rich elaboration of the choir which were customary in the cathedrals of western Europe. The transept does not project beyond the aisles, and the nave and aisles each end in a separate apse instead of the aisles extending in the form of an ambulatory round the choir.

Another peculiarity in German cathedrals is that nave

---

[*] Coleridge's epigram, "In Köln, a town of monks and bones, and pavements fanged with murderous stones," slurs over the niceties of the church pavements, most of which are adorned with charming mosaic work. The vaulting to the crypt of St. Gireon, the pavements and the walls of the main fabric, have many examples, although some of them have since been replaced by mediocre copies. The story of Samson is shown in various panels. It is very beautiful eleventh-century work, embued with a sense of form and fitting colour. Many of the Cologne churches have altars reached by means of steps, but at St. Gireon two whole flights divide it from the fabric itself, lending to the church interior the kind of dramatic picturesqueness to be observed in some of the Italian churches (St. Sisto, Viterbo). The choir stalls of St. Gireon have also delicate woodwork; the "Helena," so amazingly slender, should not be missed. Most Rhenish churches have still many examples left of Early Gothic Renaissance woodwork of great beauty and vigour. A very good collection is also on view at the Kunstgewerbe Museum, Cologne, whose richness in mosaic work, woodwork, and leaded glass from the eleventh to the sixteenth centuries is well known.

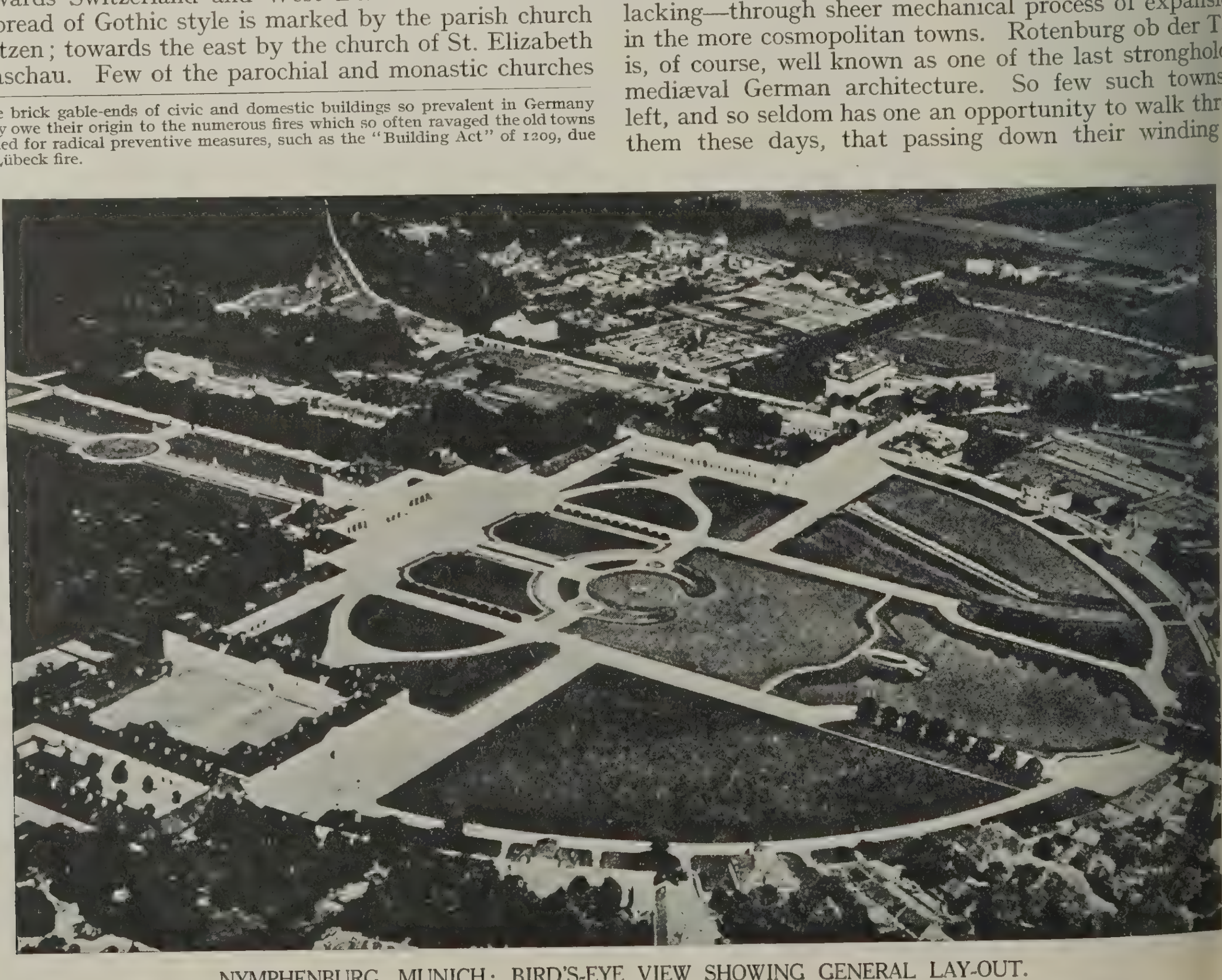
and aisles are fairly often of the same height—a peculiarity found nowhere else. The detailing, the mouldings, patterns, and stone carving, which adorn their doorways, windows, and gables are of a high quality. Whenever clergy, architects, or even master masons made up their minds to have an outstanding building of high quality in finish, they could always command the utmost technical skill in their own country. An illustration is included of the porch of Ulm Cathedral. It shows the very beautiful and crisp style German Gothic workmanship could attain to in the early-fourteenth century, its best period. The whole district in which Ulm ensconces, that is, all Swabia, is dotted with towns full of fine Gothic churches. In the Liebfrauenkirche, Esslingen possesses a masterpiece which, though of small dimensions, is well off in ornament of every kind, culminating in the very graceful open-work tower. Similar small towers of open-work are found at Bebenhausen, near Tübingen; at Thann, in Alsace; and at Maria-Strassengel, in Styria. Again, that of Nördlingen, of St. George at Dinkelsbühl, and the abbey-church of Tübingen itself, should not be missed. The churches of Nüremberg, in the Bavarian Palatinate, form a well-known group; the impression created by the choir and richly-decorated "Bridal Door" of St. Sebaldus, and by the façade of St. Lawrence, is a very striking one. In other parts of Bavaria our interest is excited mainly by a few huge brick edifices, like the Frauenkirche at Münich, and St. Martin at Landshut, which served as a model for a whole sequence of churches; its tower looks exceedingly well, but is somewhat marred in the upper part by the fantastic and odd tracery girdling its spire. Brick churches are naturally shorn of the thousand-and-one enrichments of stone buildings, but their very simplicity, given a modicum of correct proportions, makes an instantaneous appeal, the texture of the fabric making calls upon our sympathy. The form and lines of these Bavarian brick churches are not so absolute as those of Prussia and consequently look less arresting.*

Towards Switzerland and West Bohemia the limits of the spread of Gothic style is marked by the parish church of Botzen; towards the east by the church of St. Elizabeth at Kaschau. Few of the parochial and monastic churches of the towns are remarkable for their structural form which are generally of great simplicity, while the origin kernel is often wholly lost in alterations. The richness ar artistic merit of the decoration of their individual parts however, perhaps all the more striking on that accoun The architect is thrown into the shade by the sculptor ar stone carver. Wall-mouldings, window-tracery, deta of buttresses, carvings of doorways are all executed with t most admirable care and in the richest and most delica manner, while the interior of the church is filled with wor of art in metal, stone, or wood.

Sculpture (so conspicuous all through South Germany) indebted for its solid foundation and its admirable comma of technical skill to its diligent practitioners of the Got era. It does not break abruptly with tradition, becau for centuries the tasks of the sculptor remained the sam chiselling tombstones, carving altars in wood, casting for in metal. The application of metal to monumental wor is of comparatively late introduction; hence in this sphe the deviation from the mediæval style is most striki while in works of marble, stone, and wood suggestions Gothic art may be traced even in the sixteenth centu Sculpture in stone and wood continue to be decidedly t most popular branches of art. Wood-carving was alwa practised from the earliest times in such Alpine distri as Ammergau, while the wood-carvers of the great towns South Germany also found steady employment in turni out large altars and choir-stalls. The sculptures on t altars were usually painted. This polychrome decorati was rendered necessary, partly by the nature of the mater which possessed no rich colouring of its own, and par by the immediate neighbourhood of the pictures, genera added as wings to the carved centre of the altar. Alt of this kind may be studied either in museums (Bavar National Museum at Münich, Germanic Museum at Nüre berg) or in their original positions at Blaubeurren, Gmü St. Wolfgang, or Rotenburg, and many other places. M of these have kept a semblance of homogeneity n lacking—through sheer mechanical process of expansio in the more cosmopolitan towns. Rotenburg ob der Ta is, of course, well known as one of the last strongholds mediæval German architecture. So few such towns left, and so seldom has one an opportunity to walk thro them these days, that passing down their winding

---

* The brick gable-ends of civic and domestic buildings so prevalent in Germany probably owe their origin to the numerous fires which so often ravaged the old towns and called for radical preventive measures, such as the "Building Act" of 1209, due to the Lübeck fire.

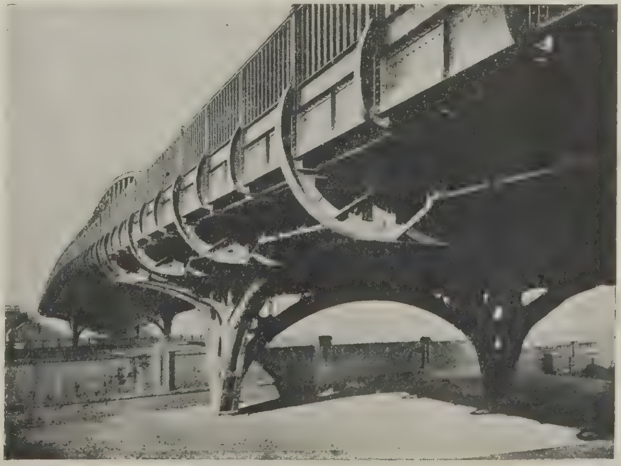


NYMPHENBURG, MUNICH: BIRD'S-EYE VIEW SHOWING GENERAL LAY-OUT.

TE RENAISSANCE GARDEN PAVILION, RADEVOZMALDE, OLD BERGEN.

uresque streets gives the sensation of seeing a film ng for some mediæval romance. The beauty of Roten- lies in its completeness, variety, and substance. Rathaus, the "Hegereiterhaus," the town walls, the ic fountains (all so numerous and handsome throughout nany), the streets, bordered with serried rows of Gothic Renaissance façades, climbing and dropping along the on which the town is built, give it a charm made the ter by their very propinquity.

Germany is not now so rich in whole towns left unspoilt, can still claim a very vast array of "Burgen" lumped ocky hills or spread on the wide spurs of high ground. really mediæval castle will be found perched in a ty inaccessible position, the mob and gentry in those ulent days having peculiar views on the sanctity of es and a strong sense of plunder. Waidbruck, Brug en, in the Tyrol, the Oberhaus and Niedenhaus at au, Burg Trausnitz, near Landshut, Parsberg Castle, he Bavarian Oberfalz, the "Palace" at Taub, the le of Eltz a.d. Mosel, the majestic and lofty castle and ch of Quedlinburg, are all so remotely placed; probably omantic setting more than the architectural excellence unts for their wide appeal; if so, it affords another ration of the importance of carefully choosing a for all large and isolated buildings in hilly coun- The large towns of Westphalia, Baden, Hessen, temberg, Alsace-Lorraine,* and of Bavaria, all contribute their full quota to the Gothic glories of Germany.* Creeping up the ages, we deal with a greater variety of buildings, buildings of more formal and conscious treatment, the sure sign of a polity getting both complex and assuaged. That is why the irregularities and winsome incidences of the Gothic period slowly disappear; things get more orderly, a sense of formal rhythm occurs in this order, refinement is introduced outside and inside: the Renaissance triumphs. In the first article, mention was made of its occurrence, and of its peculiar character in the North, where the style, if it did borrow from Italy, nevertheless held from too close an imitation. It is true the Gothic tracery, mullions, mouldings and geometrical patterns had to be given up and that the pointed arch lost its importance. In the constructive part, however, in the articulation and arrangements, old usages still held their ground. The genesis of German Renaissance is also the best explanation of it. Even in the early years of the sixteenth century, the German painters and engravers had begun to use the graceful schemes of foliage and branches that were characteristic of the Renaissance ornamentation of Italy;† and a knowledge of the different orders of architecture, the rules of which were sought in Vitruvius, also quickly penetrated to the north side of the Alps. The masters of decorative sculpture were the next to adapt themselves to the new Italian style, which we meet on tombstones, screens, fountains, and works in metal and wood. Its latest conquest was in architecture, where at first it appears only in the ornamental parts: doors, windows, etc. If the builder wished the work to be erected in a pure Italian style, he had to send for an Italian architect, and indeed, many Italians did cross the Alps and made plans which they left to be executed by native workmen. The traces of this intercourse are recognizable in German buildings. The lofty gable is a distinct reminiscence of the mediæval house, while the Italian Renaissance is, of course, practically destitute of substantial roofs; the richly-decorated balcony or oriel is also a northern peculiarity. One of the nicest examples is to be seen at Nüremberg, the oriel of the Sebaldus Vicarage. It is well to remember that the manner in which the German Renaissance came into existence explains the want of a uniform type. The Renaissance in North Germany differs widely from the Renaissance in South Germany, where the greater proximity of Italy exercised a stronger influence. This is especially marked in such imposing ecclesiastical edifices as St. Michael's in Münich. Erected under the influence of the Jesuitic Order, they bear the stamp impressed by the Jesuits on their



HINDENBURG BRIDGE, BERLIN.

---

rassburg, naturally enough, is known for its cathedral, a very glorious fabric, one tower and spire rising so loftily on the left (the right-hand one was never out), but it is also rich in Renaissance buildings, and is a representative town successive changes of German architecture. The "Kammerzell'sche Hans," erkelmarkt," the "Kleinen Frankreich," the narrow "Rabenhof," are pic- e, bold landmarks. The bulky but simple "Hotel du Commerce" (1583- preads its unsullied Renaissance façade in the centre of the town and gives of the wealth of the town in those days. The lover of glass windows should ss the fine remnants left at the Wilhelmkirche, characterized by puissant gs and fulsome colours. The huge and handsome structure known as the rspital," by Franz R. Mollinger (1718–1724), is also a landmark to be seen and ered for its simplicity and massing. On the other hand, the buildings erected tury are ambitious and stodgy; still they have qualities of correctitude and r: among them the "Landesausschussgebaude;" the university and the Kaiser Wilhelm (the first) University College, the Palace of Justice. All re "designed," and all their façades display interesting central motifs and their ation has not been left to chance.

* In Frankfurt the towers, or "Warten," have a stolid Gothic character. A good deal of the liveliness that breaks up the placid decadence hanging about the old streets is due to them. The Eschenheimer Tower, circular in plan and spiked above with four little turrets, sits atop the city wall, at the vulnerable point where the main entrance to the old town bridges the moat. The last of the more magnificent towers or spires is that of the Cathedral. It is a remarkably elaborate Gothic erection, a sort of filigree stonework, so very often seen in these West German cathedrals.

† See "Der Ornamentstich," by Peter Jessen (Kunstwissenschaft G.M.B.H., Berlin, 1920); also "Bilderbuch aus drei Jahrhunderten," by Georg Hirth (G. Hirth, Leipzig and Münich, 1883, 6 vols.).

property in all countries.* Even secular buildings betray it. Some of them are German only through the soil on which they stand, while in style they belong to the Italian Renaissance. The so-called "Fugger" bathrooms, at Augsburg, in Bavaria, show this clearly. But this preference is revealed even more strongly in the castles of the nobility than in private dwellings. South Germany contains a stately series of such castles, which gave up the character of castles to assume that of palaces. At the head of these stands the Otto Heinrichs Bau, at Heidelberg, the gem of German castle-architecture. Few of the other princely chateaux can at all compare with it. In the famous Castle of Landshut, wholly irregular in place as it is, we see, however, one of the most convincing proofs of the influence of Italy in the decoration of the rooms; this was mainly entrusted to painters. A building of great interest is the "Old Palace" at Münich, a large affair adorned with plastic and pictorial ornaments, but alas! in most of them the vigorousness, genius and vim of its Venetian, or Florentine, or Siennese prototypes is sadly lacking. There is seemingly only one country, outside Italy, where the Italian Renaissance seems plausible and thriving: the western provinces of the U.S.A.

The period of the Thirty Years' War sadly interrupted the evolution of German art. From this calamitous period dates the predominance of the foreigner in matters of taste. And then, after a long lull, the greatest activity took place in South Germany and Austria, and the Renaissance, Phœnix-like, arose out of its own pyre, transformed, and clothed in somewhat more sophisticated garments. What Goethe once said soon became a kind of slogan with the new spirit. "Joyfulness is the mother of all virtues." There is nothing austere and calvinistic about the Baroque style and we can therefore infer that Baroque took a good hold on the Catholic part of Germany first of all. Ecclesiastical buildings were obviously the most likely to undergo the transformation; it is to Bavaria, therefore, that we look for the earliest essays in Baroque. Prague, the capital of Bohemia, is easily ahead of all other Germanic towns; if not in quality, then in quantity. But in Germany itself we can take our choice from Münich, Salzbürg† or Würtzburg. Possibly, the two last-named can show a more cultivated, or at any rate a more intense form of Baroque. If one merely considers the façades of churches and palaces designed in this baffling style, one understands how they could be made to express Opitz's *obiter dictum* that "the highest wisdom is not to be always wise" by the petulance of their considerable aggregate. It would be advisable to study the plans of Baroque churches beforehand, because they do yield up some of the meaning that underlies their fulsome forms. Compare the normal plan of Salzbürg Cathedral with the abnormal one of Kempten Cathedral, or of St. Margaret at Brschevnow, or the Dreifaltigkeits Kapelle at Waldsassen, and see how, towards the middle and late period, very harmonious, if heterodox shapes, chiefly elliptical, were made to encompass ritual, clergy, and congregation. In most cases the planning is indeed able and evinces minds fond of subtle differences. Even Protestantism has been known to answer the insidious call. The plan for a Protestant church at Münich, by C. L. Sturm, bears this out.

Münich is an ideal centre for the study of anything architectural from the Renaissance up to our own days. Of Baroque, as we have said, there is plenty: churches, palaces and lay-outs in the grand manner. Among the
churches, the Theatiner Kirche, and the Damenstiftskircl
and the Johann Nepomuk Kirche—its rich and gaud
fitted interior has much charm and life, and its entrar
doorway, flanked by rocks jutting out on to the paveme
and leading in towards the overloaded pediment, adds
anti-dull note to the Sendlingerstrasse—are good exampl
Among the palaces, we shall single out the Grafen Mar v
Prensing, where the carved detail is much above the avera
but one of the more sumptuous and costly is undoubte
the "Residenz," a large rambling palace for the reigni
House, chiefly by François Cuvilliés, although Bar
carried out some parts of it, such as the attractive "Pop
Room."

Larger still, and obviously influenced in its lay-out
both the Dutch School and that of le Nôtre, the Nymph
burg, three miles outside Münich, spreads the 660 yds.
its regular main block (see bird's-eye view) between s
stantial water sheets and canals. Built in 1665 by Bare
Viscardi, Zuccali, and Effner, it was completed half a cent
later. Cuvilliés also added to it the Amalienburg, the int
nal decoration of which is one of the happiest roc
interiors of the period.

No one walking through Münich can fail to appreci
the remarkably handsome vistas afforded by success
town-planning efforts. Some of these vistas are v
formal and grand. Others reach their effect through a sy
metrical picturesqueness. The centre of the town
formal. From the Justiz Palast to the Alte Pinakothe
then to Ludwigstrasse, is one half of the square, w
the line Justiz Palast—St. Michael's Church—Rath
and Theatiner this formal square is completed. Within i
be found the Karolinen Platz; without, and on the east si
is the Odeon-Platz, a very effective lay-out, with
Feldherrnhalle (a replica of the Loggia dei Lanzi, Florer
as an undisputed focal point raised, in this case, on a fli
of steps which makes it look rather podgy. Germany,
matter of fact, is exceedingly rich in delightful town vis
The Schläfflersmarkt at Nördlingen, the Rothenburg Str
at Dinkelsbühl, the Marktplatz of Witternberg, the Hau
strasse and the Spindeltal at Donanwörth, the rick
Marktplatz of Miltenberg, the Hauptstrasse at Dresc
the Frauengasse at Danzig, and lastly the vista to
Lamberti Church, down the Prinzipal Markt at Müns
are instances of picturesque and irregular grouping, wh
the Schlossworhof at Würzburg, the Marktplatz at L
wigsburg, the Rondel at Karlsrühe, the Paradenplatz
Metz, and in the capital the Parizer Platz, Brandenbu
Tor, and the Opernhaus Platz, are imposing instance
formal lay-outs† the Louisenplatz at Darmstadt and
Gärtnerplatz at Münich are equally important and equ
formal; it is really idle to go on; there are so many of t
throughout the country. This long nomenclature se
dry, but each of these places has enough architect
beauty to reward the most timorous traveller. One
have an *a priori* conception of the formal lay-outs wh
after all, consist of so many formulæ in massing and seq
tial rhythm, but to appreciate the others, to get an ide
the thousand and one different ways of providing ha
vistas, one must simply go on the spot. It is especiall
those smallish towns of the Mark of Brandenburg, Sax
Bavaria, and towards the Tyrol, that these lovely l
piazzas nestle, a characteristic and almost haphazard se
of features unequalled in any other country, except Italy,
town planners of even the most radically modern type m
well reap ideas of value out of their governance and ef

(*To be concluded.*)

---

*The architectural fruit of their labour, as in other countries, is here seen a generation later. Then we find a long series of churches being erected after church building had been at a standstill for a century. Nor was the movement confined to churches alone. Still more significant are the new universities and seminaries, the real key to their power. It is in these buildings that we first see genuine Baroque architecture, as was seen in Italy a little earlier.

† Second only to the Cathedral—commenced in 1614, under Archbishop Paris von Lodron, to the design of Santino Solari, an Italian. The exterior is of no very great interest, but the interior is planned on monumental lines, and decorated in the Italian manner—is the Collegien Kirche (1696–1707), an enormous building by Fischer von Erlach, the celebrated Viennese architect. The scale is colossal, the plan cruciform, filled out to form an oblong shape, with four similar oval chapels in the angles. The decoration is florid—the late Jesuit church from floor to ceiling. The Archbishop's Palace and the Neugebände, now the Post Office, are also excellent and group exceedingly well, with the Cathedral as focal point. See also a little way from Salzbürg the charming country house known as Schloss Hellbrun.

* The vast and formal arrangement around the Alte-Pinakothek includes the
Pinakothek, the Techn. Hochschule, the Propylæ by L. von Klenze (1784–18
man of great eminence in his days, who, like Schinkel, in Berlin had caught i
teaching of Gilly the enthusiasm for the antique, but his style, less strict than Sch
exhibits efforts at picturesqueness, and borrows from both Roman and Pall
architecture. Von Klenze also built the massive "Walhalla," near Ratisbon, a
of temple to Glory, in the Greek Doric, beautifully situated. A more or less s
building at Kelheim is the "Temple of Deliverance," by F. H. Gärtner (1792–
a powerful circular construction, cold, severe, but not without grandeur.
"Feldherrnhalle" of Münich is by the same architect.

† The modern demand for far-reaching and strict town-planning rules and l
evidenced in the plan of Marienberg, which sets forth the following principles :–

1. To aim at as many and as valuable building lots as possible.
2. To aim at good correspondence with the existing lines of communicati
3. The designing of good intersections of streets.
4. The careful regard for the boundaries of landed properties.

The Manchester Masonic Hall Competition

The Winning Design

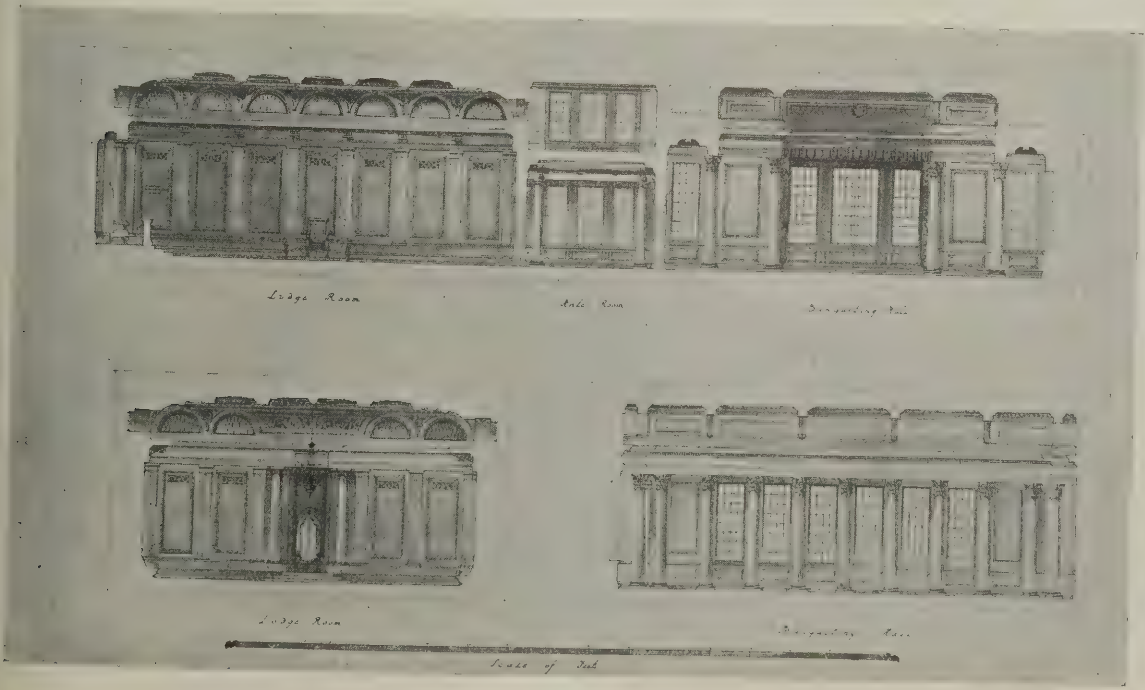
REPORTING on the above competition, Professor C. H. Reilly, F.R.I.B.A., the assessor, observes: "The problem before the five competing architects was to design an efficient and practical lding for all the numerous activities connected with headquarters of the East Lancashire Province of sons, and so to weld these requirements together that result both externally and internally should worthily ress the ideal side of Freemasonry. In this very icult problem the winning architects, Messrs. Thomas rthington and Sons, have been, in my opinion, eminently cessful.

Taking the interior first, they have achieved this par- lar character by making all those who visit the building, ept for purely business purposes, pass into a solemn hall d on each side with columns and roofed with a Roman ered barrel vault. This stately hall is placed axially in with the main entrance, so that the eye is at once led he range of columns on either side, and the lines of the lt, to the farther end. Here at the head of a flight of s is a high, closed door, with symbolical columns on er side, which leads to the main lodge rooms. No stair- intrudes upon the solemnity nor encroaches upon the e of this hall, yet the staircase and lifts are close at d, and lead conveniently to the various departments, as the rooms for the masonic club, which are placed on first floor with their windows to Bridge Street. These rooms have their own entrance hall from the stairs and own lift, and members reach the banqueting hall of main lodge suite, which is to be used as the club lun- n room, by a short private stair. They are well nged and well-shaped apartments, with all the con- nces of a modern club. Above the club rooms on the front are situated the museum, library, and common , for the use of the whole Province, while below them, e ground floor, with a special entrance to the offices, e board room, waiting room, registry, and rooms of the al secretary. At the back of the building are the s of lodge rooms and banqueting halls one over the , each with their ante-rooms, robing rooms, and practice rooms. The lodge rooms are, therefore, in the quietest part of the site in addition to being oriented, while the banqueting halls, being placed one above the other, enable the service from the kitchen to be easy and efficient.

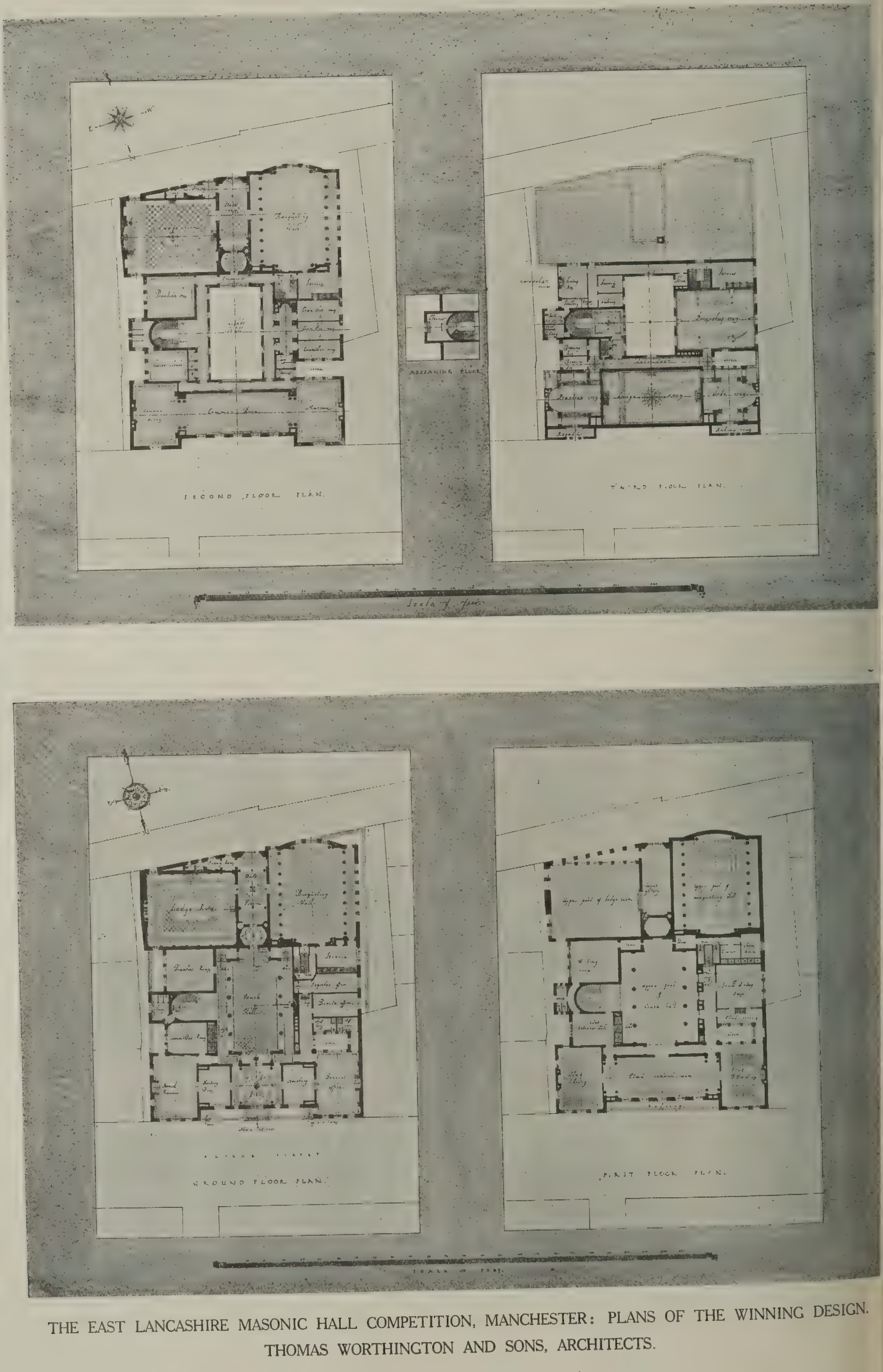
"The successful architects have, therefore, placed all the chief portions of the building each in the position best suited to it. They have proved, moreover, by the large scale drawings of the crush hall, chief lodge room, and banqueting hall, that they can give to such apartments dignified and satisfactory expression. Internally, therefore, they may be said to have found a fine architectural solution to the complex problem presented to them, the practical character of which a closer study of their drawings will only amplify. The kitchen arrangements, for instance, are all very well thought out, with admirable means of receiving and checking goods and with plenty of storage space.

"Externally it seems to me the winners have been equally successful. By designing a simple but well-proportioned building, and by setting back the central section, they have given to the building a sedate and serious aspect without making it gloomy. The fine plain wall surfaces they have obtained give the building great dignity. In appearance, it is neither a commercial building on the one hand nor a municipal one on the other. It suggests what it is, a building for a dignified purpose, yet an urbane and welcoming one. The rich frieze and cornice, which crown the central block, seem to me not only beautiful features in themselves, but to indicate refinement and nobility in the purpose of the building. The frieze and cornice are echoed by the long continuous stone balcony below the first-floor windows, which serves the architectural reason of binding the whole building together near its base, at the same time providing a pleasant communal feature to the club windows.

"The Masons of East Lancashire Province are to be congratulated on obtaining from the competition so excellent a design for their temple; it is a design, in my opinion, far in advance of any I have seen in this country for a similar purpose."



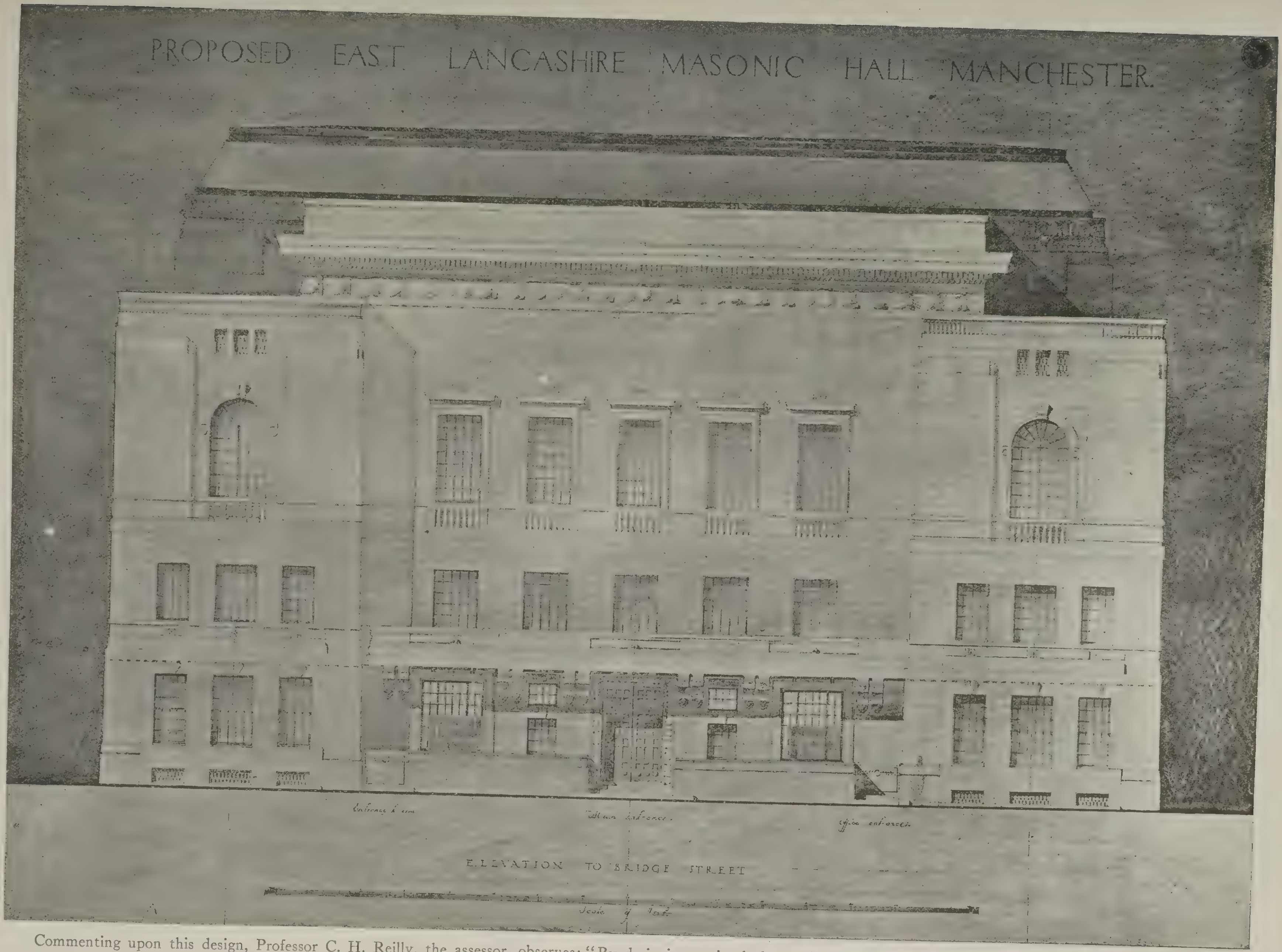
THE WINNING DESIGN: SECTIONS THROUGH THE PRINCIPAL LODGE SUITE.
THOMAS WORTHINGTON AND SONS, ARCHITECTS.



THE EAST LANCASHIRE MASONIC HALL COMPETITION, MANCHESTER: PLANS OF THE WINNING DESIGN. THOMAS WORTHINGTON AND SONS, ARCHITECTS.

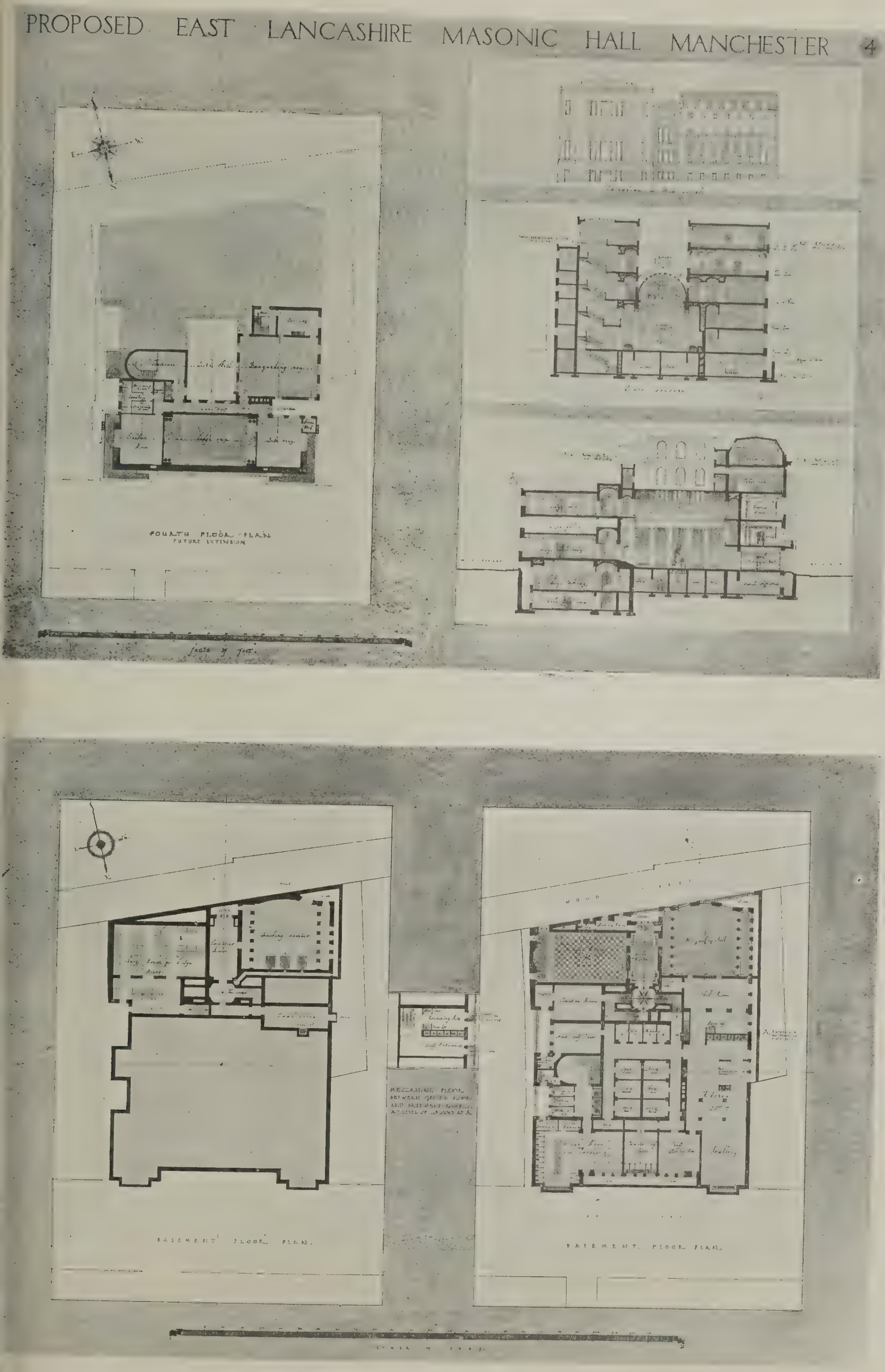
Elevation to Bridge Street

Thomas Worthington and Sons, Architects

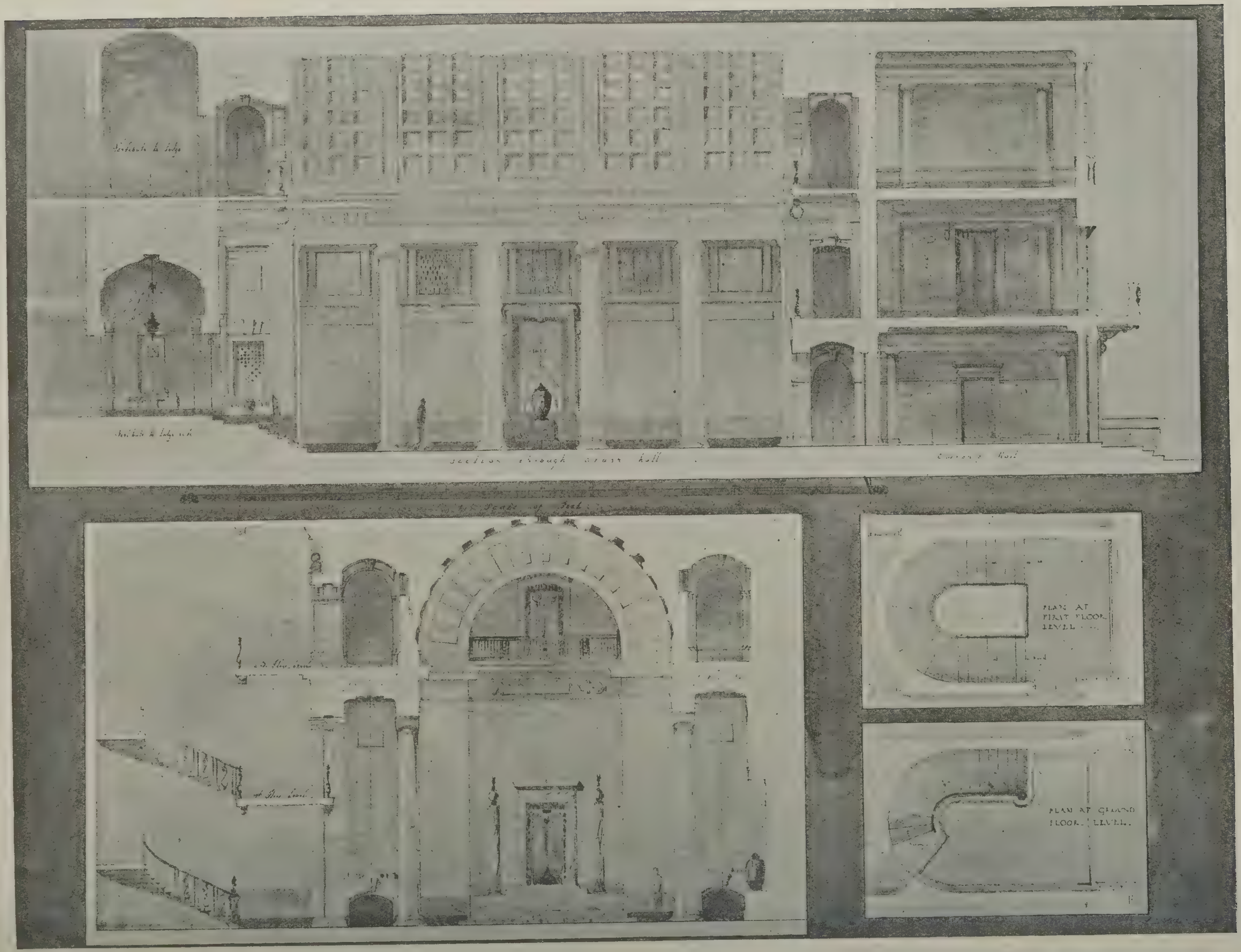

PROPOSED EAST LANCASHIRE MASONIC HALL MANCHESTER.
Main Entrance
Office entrance
ELEVATION TO BRIDGE STREET
Scale of feet

Commenting upon this design, Professor C. H. Reilly, the assessor, observes: "By designing a simple but well-proportioned building, and by setting back the central section, they (the winning architects) have given to the building a sedate and serious aspect without making it gloomy . . . it is a design, in my opinion, far in advance of any I have seen in this country for a similar purpose."

THE LIBRARY
OF THE
UNIVERSITY OF ILLINOIS


PROPOSED EAST LANCASHIRE MASONIC HALL MANCHESTER 4
FOURTH FLOOR PLAN
FUTURE EXTENSION
Scale of feet
MEZZANINE FLOOR BETWEEN GROUND FLOOR AND BASEMENT AT LEVEL OF GROUND AT A.
Scullery
BASEMENT FLOOR PLAN.
BASEMENT FLOOR PLAN.
SCALE OF FEET.

THE EAST LANCASHIRE MASONIC HALL COMPETITION, MANCHESTER: PLANS, SECTIONS, ETC., OF THE WINNING DESIGN. THOMAS WORTHINGTON AND SONS. ARCHITECTS.


Section through crush hall
PLAN AT FIRST FLOOR LEVEL
PLAN AT GROUND FLOOR LEVEL

THE EAST LANCASHIRE MASONIC HALL COMPETITION, MANCHESTER: WINNING DESIGN: SECTIONS THROUGH THE CRUSH HALL.
THOMAS WORTHINGTON AND SONS, ARCHITECTS.

he City, its Past and its Future Form

By RAYMOND UNWIN, F.R.I.B.A.

> *"Town life is of very ancient institution, and became highly developed in antiquity. Towns were the cradles of arts and letters ; all history deals with life in towns, for history itself was the product of town dwellers. Town life in one word is civilization. The great purpose of life in towns is to produce finer and finer types of civilization and civility. The very object of civilization is to build beautiful cities and to live in them beautifully."*
>
> W. R. LETHABY.

HROUGH the ages civilization has been associated with cities, for civilization depends on the working together of many men, both physically and intellectually, to secure common ends ıttainable by the unaided efforts of isolated individuals milies. As each succeeding race has emerged from the itive simplicity of the hunting tribe or the pastoral ly, its people have settled together in larger numbers, its villages have grown rapidly into cities. As each e of civilization has advanced towards its zenith, its cities have grown, until many of them reached the of size fixed for the time being by the conditions of by the productivity of agriculture, local or distant, xtent of practicable transport, and perhaps most imnt of all, by the capacity for human co-operation h had been developed. Some such cities were, in fact, ed by the momentum of their aggregation beyond the which their economic basis could support, their military pline defend, or their social system organize, and they red destruction or decay in consequence.

ver has this tendency for populations to aggregate wns been so dominating a feature as in our own time. rever modern civilization has spread it has rapidly ased the proportion of the population living in large s. In the United States at the beginning of the nineh century only 3 per cent. lived in towns of more than inhabitants; to-day 51 per cent. live in such towns. ur own country, although the earliest to be induszed, the proportion of urban to rural population has nued to grow rapidly up to the present. During the fifty years the proportion of urban dwellers has ined from one-half to three-quarters; so that to-day out of every four of us live in a town.

e criticism which is offered of the modern town is not it is modern, not that it embodies large scale producor wholesale commerce, or that it takes advantage of oved means of locomotion and intercommunication, hat it is economically inefficient and socially unsound. contended that the advantages which might be derived modern opportunities are sacrificed wholesale by the gulated and haphazard character which marks the development. Economic inefficiency can hardly be ising under these circumstances, for growth by mere nal accretion could hardly result otherwise. Such a of growth is characteristic of the crowd, which ines by the running together of more and more people d the fringe, and the crowd is surely one of the most ctive of gatherings. The criticism of the town may st be summed up in saying that it too closely resembles e crowd.

illustrate by contrast, we may well take an example a source which has—alas!—been only too familiar in t years. I refer to one of the few organizations which ompare in matter of numbers with the modern city, ly, the great army. If you consider its method of ization and growth, or the laying out and expansion e vast camps to accommodate it, you must realize markable contrast that exists between this organizand the disorganization which characterizes the town ation, and the expanding city in which it is encamped. population has been likened to a crowd. It would y be unfair or greatly untrue to liken the confusion ny a modern town to the hasty bivouac of an army had retreated in disorder after heavy defeat !

nilitary form of organization clearly is not adapted for the civil life of a city; but no great community can live and work together without some adequate form of organization; and I suggest that our modern towns present to us such terrible problems of destitution, congestion, and deterioration of character, mainly because they too much resemble the disorganized crowd, and too little resemble an organized army.

We have provided the most elaborate mechanical apparatus to make possible the existence of the great city, but we have forgotten that its life must be built up on that of the individual, and it is this great lesson that we may learn from the army. No organization so entirely depends for its existence on being able to rely upon each individual to play his part, whatever it may involve when called upon to do so; but no organization in turn takes greater care to provide for that individual, to feed him, to clothe him, to train him, to enspirit him, to amuse him when idle, and heal him when sick. The whole vast organization of the army is at the service of every individual soldier, and he knows it. As a result every individual is ready in turn to serve the whole army to the utmost. The two relations go together; the progress of the city depends on all its individual citizens playing their part; the citizen in turn depends for his prosperity upon the proper working of the whole civic unit. I am convinced that our great cities cannot continue safely to grow unless some form of organization can be introduced into their civic life which will provide for this interdependence.

Perhaps some one may be inclined to ask what this dissertation on social organization has to do with the practice of town planning and civic design. I think it has everything to do with it. You cannot separate the body from the spirit or the life which inhabits it. You cannot usefully study man apart from his environment or seek to arrange the environment without regard to human nature. No more can you separate the community from the city in which it dwells or seek to plan the city without regard to the nature of the community and of the life for which provision is to be made.

There is, however, a further reason; arising from the origin of town planning in this country. The movement developed from the aims of those who sought to improve the housing conditions of the people; as notably at Bournville, Birmingham, where Mr. George Cadbury carried out most valuable pioneer work. From the improvement of the dwelling there followed the provision of the garden; with the enlargement of the garden new systems of site planning became necessary: the need for space for the newly-planned site or garden suburb demanded new facilities for getting in and out of the towns and the planning of streets and highways and the preparation of schemes for town extension followed on. But we have reached a stage when our conception of town planning must again be enlarged, if we are to deal with the great problems which modern towns present. Such difficulties as I have referred to cannot be dealt with by merely planning more highways, by the laying out of boulevards and park systems, the provision of stately places or even the enactment of zoning regulations. All these things are good and have their proper place in the work of the town planner, and necessarily must occupy a large proportion of the time of the student. The great need of the moment, however, is to look at our towns in a more comprehensive way, to regard them each as an organic whole which must be studied, planned, and built as such. There is need to study the distribution of the different parts of the town, to realize that it has become essential to disentangle the confusion of the existing areas, and to regulate the form and limit the extent of their future growth.

Mr. Lethaby, in the quotation, tells us the part which the city has played in the past development of civilization and of culture. If he is right, the further progress of civilization will greatly depend on how we handle our cities, whether they can again fulfil the purpose which he allots to them, in his statement, "the great purpose of life in towns is to produce finer and finer types of civilization and civility."

As town planners we have a special opportunity, for it is our duty to lay out the camping ground for that finer civility. If that camp is laid out badly, if the ammunition wagons are mixed up with the cooking fires, or the ambulance with the cavalry lines, the best disciplined corps will soon be thrown into confusion. On the other hand, no greater aid can be given to the organization of the freshly-recruited corps than to provide a well-laid-out and orderly camp.

Town planners can do much to facilitate good social organization and to promote the "finer types of civility"; they can secure proper space for the individual and his life, and help to develop the industry, the commerce, and the culture of the city community by making suitable and adequate provision of space for each.

I should like to lay stress on the importance of a few general principles which have now emerged and are rapidly being accepted by all the adherents of the new school of thought on civics.

The first of such principles, underlying all the proposals for the improvement of towns put forward by the new school, is that in city building nothing is to be gained by overcrowding. That the first necessity is to secure to each citizen space to live and do his duty. This is the basic condition of healthy city development. It comes first for health, first for efficiency, first for pleasure, first for beauty. If this can be secured, much else becomes possible; but if we seek to grasp at other things without this basis, failure is sure to follow. The futility and shortsightedness of overcrowding, and its failure ultimately to benefit any of the parties concerned, has been completely demonstrated. A critical examination of the conditions of land development, and a comparison of those which have arisen under greater and less degrees of congestion, show conclusively that the immediate gains which appear to be obtainable by crowding buildings upon land, and stories upon buildings, or by packing together in uninterrupted masses the different component parts of the great town, are all largely illusory, because each method of crowding is accompanied by rapidly increasing costs, and gives rise to more and more serious disadvantages. The intensive use of land for urban purposes is subject to the law of diminishing returns, and the point is soon reached beyond which the total costs and disadvantages of all forms of overcrowding outweigh the apparent gains.

Overcrowding solves no problems; in whatever form adopted it creates new difficulties; that is our first lesson.

The second is that in essence the problem we have to handle is one of distribution and localization; the proper distribution of the parts of the town in relation to each other and to the site, and the localization as far as possible of the life of the people in each part. In existing towns the disentanglement of the confusion of parts and buildings which has resulted from haphazard growth must take time, but this proper distribution of parts must underly all our planning if it is to be on right lines. Better distribution and greater localization of life offer the only solution of the present traffic problems. It has become evident that there is no solution to be reached by merely multiplying facilities; each in turn is liable to increase the congestion by bringing people to the centre, as much as it relieves it by taking them out. Bad distribution simply means that things are in wrong places.

The volume of traffic in large towns will be great in any case; but it can be reduced by good distribution, by decentralization, and by localizing the life of the people in ea decentralized unit. There will still be need to study ca fully the many new methods of transportation now ava able, and using each for the kind of service for which it best adapted, to frame the whole scheme to give adequ facilities for such movement of men and things as m prove to be necessary or desirable. So long, however, our towns are permitted to spread out indefinitely over t surrounding territory in a dense mass of streets and bui ings, industrial, commercial, and residential parts ind criminately mixed up and packed together, so long m the life in our towns be one vast disordered confusion people rushing backwards and forwards over the whole ar impeded by the congestion which results from this cr transport of men and things.

The third principle concerns the method of expansio for the growth of towns by irregular accretions on the c cumference there must be substituted a system of devel ment by definitely organized and complete units, to ea of which shall be allotted space for expansion up to a reas able limit. It must be recognized that definite organizat implies limitation. Healthy organisms do not grow by t indefinite inflation of their own bodies, but by becom the parents of new and younger organisms. The great tow must be disentangled and organized as a group of defin parts, and in so far as they continue to grow this must be by mere accretion, but by the addition of new satell parts, industrial or dormitory suburbs, complete satell towns or garden cities, each having its allotted area expansion and its reserved belt of open space to limit a define it.

This brings me to the fourth principle, namely, that o space is an essential ingredient of every town or part o town. Those sections of the private and public life of community which depend on adequate open space are essential as those which depend on adequate buildin they cannot be sacrificed to the undue expansion of other constituent parts—streets, buildings, or what no without destroying the completeness of the unit and cr pling the efficiency of the city.

The scope of the town planner's work has been expand stage by stage from the planning of the simple site or str until he now has to regard the whole town as an expand organization for which he must lay out a suitable ho This involves a study of the economic, and social princi which must determine the proper distribution of the pa of the town, and fix the limits within which that distri tion can be guided into the form we desire; for it is the fo of the whole town which in the future we must define if great aggregations of population are to be able "to bu beautiful cities and live beautifully in them," as Lethaby suggests they should.

My final point, therefore, is that the city plan must b definite design, no mere mix-up of country and to garden, and buildings. Such a compound, brought ab by the extravagant scattering of buildings on the land, m destroy the character of both town and country. Ther a beauty of town dependent on the proper grouping of buildings, and there is a beauty of open space, of fiel woods, or gardens. Design consists not in mixing of th together, but in bringing them into proper relations so t each may enhance the beauty of the other, and combin them into a still larger unity.

Much of the most important work of town planning m depend on the knowledge and judgment of the sociolog the surveyor, the valuer, the economist, the sanitarian, the engineer, but the result of all their work must finally embodied in a plan; that plan, if successful, must rev a definite design, and can only be made by an architect c town planner who is a trained designer, one whose imagi tion has been cultivated in the art of creating out of a m of details a unified design, bringing them all into pro proportion and relation.

[The above extracts are from Mr. Raymond Unwi inaugural lecture at the University of Birmingham.]

The Admiralty Screen in Whitehall

Its Restoration to Robert Adam's Design

FOR nearly a century the Admiralty screen in Whitehall, a familiar example of the work of Robert Adam, has stood mutilated and shorn of its two columns. When the screen was erected entrance to he courtyard of the Admiralty was given by a central arch- ay, flanked on either side by low pavilions connected by a ntinuous Doric colonnade. There came a time when thority thought there should be two carriageways instead the one provided by Adam, and with a careless disregard architectural design the central arch was blocked by ooden doors, a column was removed from each side of the lonnade, and openings were made through the wall hind the pillars. The exact year when the alterations re made is not known, but it was probably in the early rt of the nineteenth century.

The Lords of the Admiralty recently decided to have the reen repaired, and as the original drawing, signed by the chitect and dated 1759, is in their possession, they ap- oached the Office of Works to see whether the original sign could be exactly restored. Officials gave an under- king that this could be done and the work has now en brought to a successful conclusion. The missing lumns have been replaced, the openings in the wall have en filled in, and entrance to the Admiralty is again tained by the central archway. Foot passengers are mitted by small gates in the screen close to the two sides the central entrance. Adam used Portland stone for the een, and this is always likely to crumble a little under influence of London smoke, but the stonework has been red for and is, perhaps, in as good a condition as could be pected. The plaster and cement of the wall, on the other nd, required attention, and have been to a considerable tent replaced.

Following is an extract from "Robert Adam and his others," by John Swarbrick.

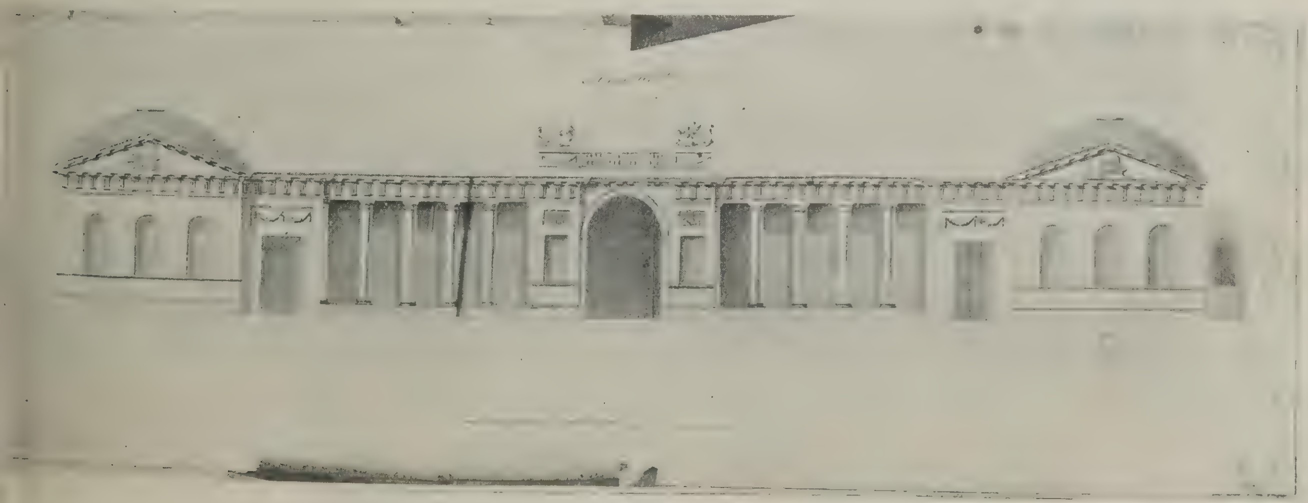
"Although the screen in front of the Admiralty building Whitehall is stated in the first volume of the 'Works' have been 'designed and executed in the year 1760,' first drawing was prepared in the previous year. This wing is now indexed as No. 103 in vol. li of the Adam ies in the Soane Collection, and bears the inscription: bt. Adam, Architect, 1759.' The Doric Order used by bert Adam measures 16 ft. 4 in. high, including the ablature and colonnade, which are proportioned in the io of 1–$4\frac{3}{4}$. The columns are slightly over eight diameters height, and are spaced two and a half diameters apart, in other words, with intercolumniations slightly larger than eustyle. Judging by the perspective in the first volume of the 'Works,' it appears that figures in full relief were, at one time, intended to be placed in the three niches of each of the two flanking buildings, and also in the square-headed recess, by the sides of the central archway. The two sea-horses over the archway are the most conspicuous carved features; the only other subjects, treated in relief, occur in the tympanum of each of the flanking buildings, and also in the two panels at the sides of the central archway. The latter contain the same subject in each case, viz., a small cherub standing upon a shell, and grasping the tails of two large dolphins. The carvings in the tympana also relate to the sea, the subject being, in one case, the prow of an English man-of-war, and in the other, that of an old Roman galley."

The following extract from the autobiography of Mr. George L. Taylor, formerly civil architect to the Admiralty, explains how the two columns came to be removed:—

July 7th, 1827.

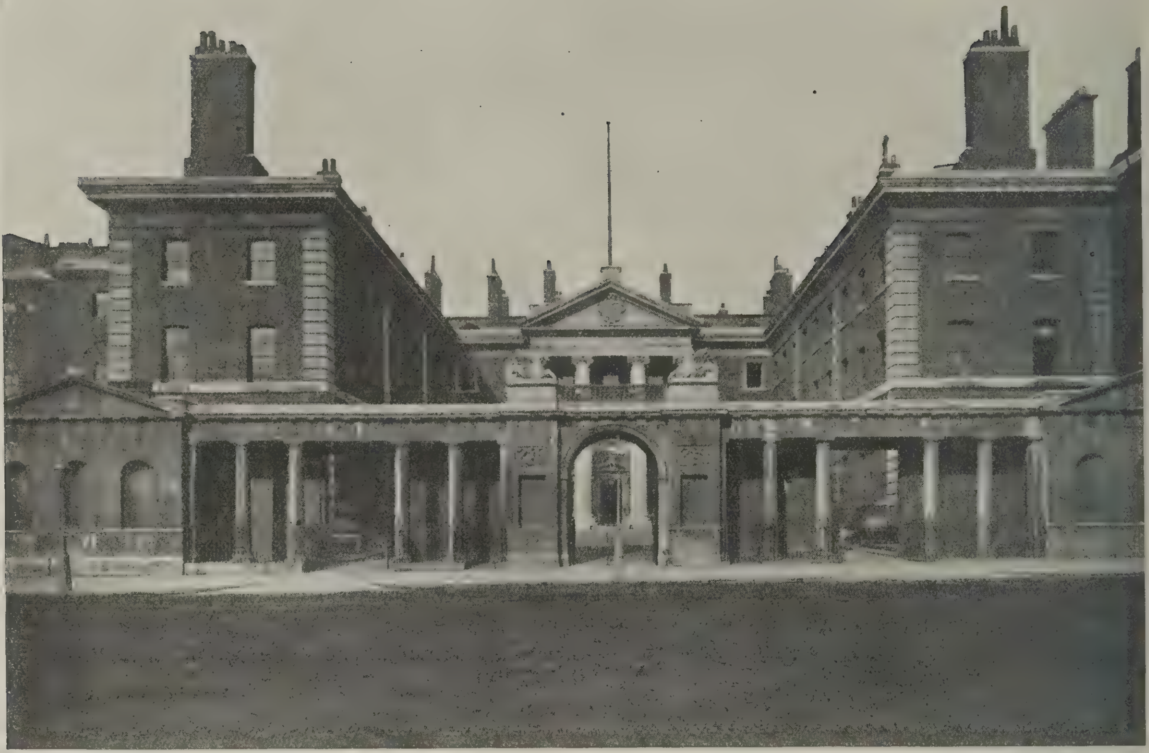
The Lord High Admiral and Admiralty Board set out on a general visitation to all the dockyards. The day before the Duke had sent for me, and said,—"When we return I am about to give a large party; there being but one carriage entrance to our court-yard and to my official residence is very inconvenient; I wish you to consult with George (Colonel Fitzclarence); he is a good architect, and between you, I daresay, you will hit upon some remedy for this on a future occasion."—"Your Royal Highness, I have thought much on this subject, and could, if you so pleased, effect this before your return in a very simple manner, not as a permanent thing, but one that would not much spoil the effect of the façade, or prevent a future more extensive alteration. I have a drawing and model of the alteration I should propose."—"Is it possible? Let me see the model at once." I soon fetched the model, which consisted in removing one column from the façade on each side of the entrance, and sustaining the entablature by an architrave of cast iron similar to that to be removed. The Duke said—"Excellent, let it be done forthwith. You say it can be done in time, which seems almost impossible."—"I am quite sure of it," said I.

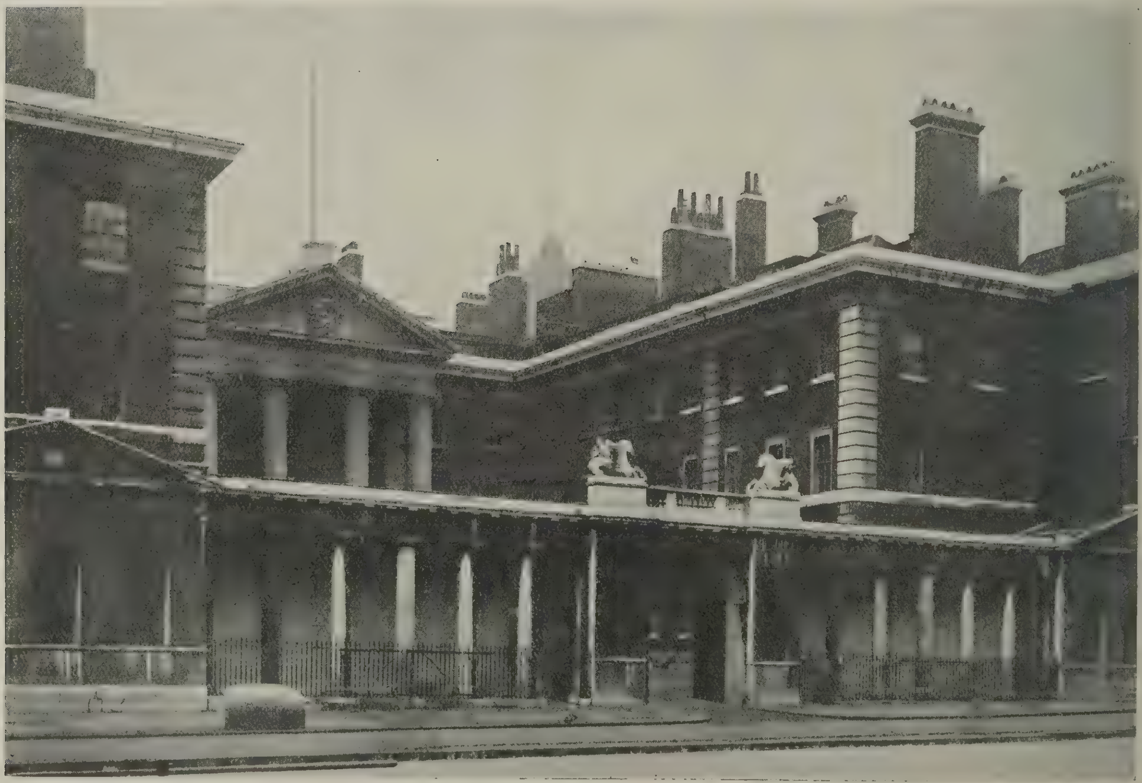
When he returned the alteration was made, and he drove in at the new entrance. Subsequently strong doors on rollers filled up the entrances when required, which the Mob Law of 1834 rendered necessary.



ROBERT ADAM'S ORIGINAL DESIGN FOR THE ADMIRALTY SCREEN.

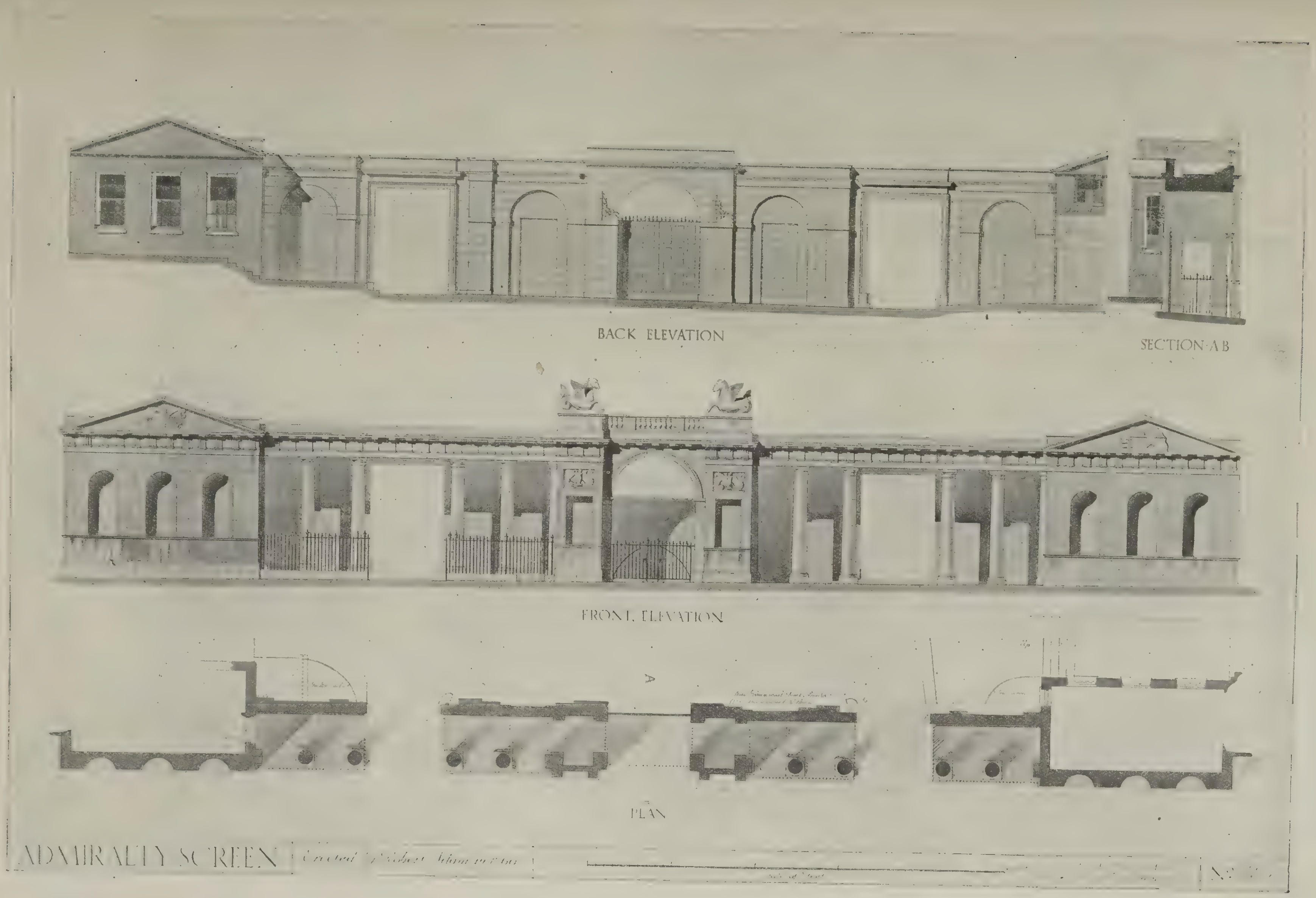
(From a Drawing in the Soane Museum.)





THE ADMIRALTY SCREEN, WHITEHALL. ROBERT ADAM, ARCHITECT.
BEFORE AND AFTER RESTORATION.

Robert Adam, Architect

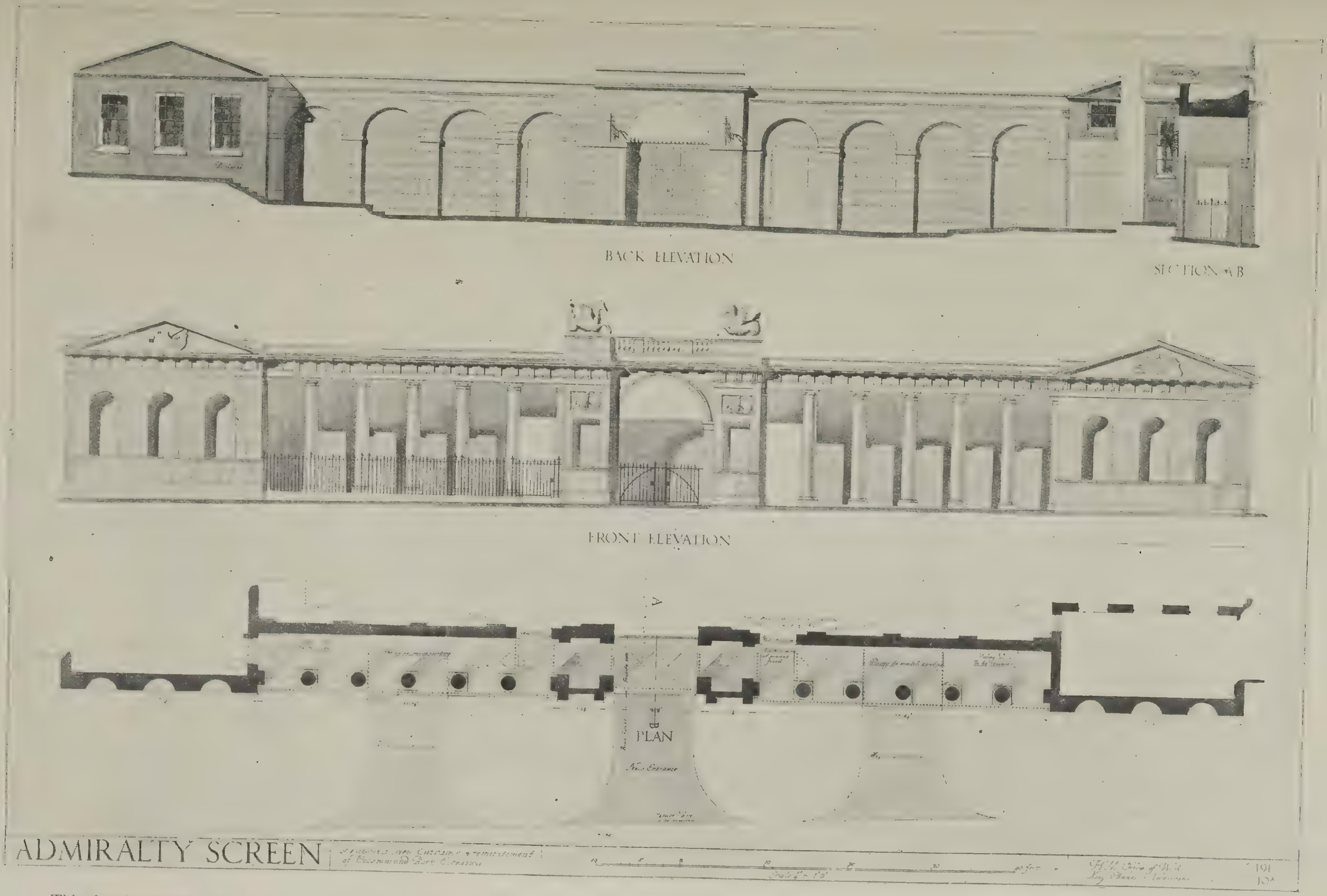


During the early years of the nineteenth century two columns were removed from the Admiralty Screen to form carriage-ways right and left of the central entrance, which was filled in with wooden doors. Under the direction of Sir Frank Baines, of H.M. Office of Works, the screen has now been restored to its original form, as shown on the succeeding plate.

THE LIBRARY
OF THE
UNIVERSITY OF ILLINOIS

Drawing". 42. The Admiralty Screen, Whitehall : As Restored

Robert Adam, Architect



This drawing shows the screen as it has been restored by H.M. Office of Works. The missing columns have been replaced, and the openings in the wall behind them have been filled in. The central entrance is again in use for vehicles, and on either side of it doorways for pedestrians have been opened.

THE LIBRARY
OF THE
UNIVERSITY OF ILLINOIS

Contemporary Art

The British Primitives

The rise of English art from its beginnings in architectural application is abundantly illustrated in the exhibition f mediæval work got together by the efforts of Lord Lee t the Royal Academy. The decoration of walls in castles, athedrals, and churches provided the first opportunities or fine art as differentiated from folk-art and the craft of he illuminator. Nothing could be more beautiful in its vay than the painted and gilded manuscripts of the tenth nd succeeding centuries in England, and their value is ufficiently indicated by the fact that they were eagerly ought by France and the Scandinavian countries and mitated there. But an indigenous architectural decorative rt developed from them, which is the genesis of the English chool of painting proper. This lasted until early in the ixteenth century from its beginnings in the twelfth, a eriod of nearly four hundred years, after which there is a lank of two hundred, when England was dominated by rtists from abroad—Holbein and others not so great. hen the eighteenth century brought its glories to the nglish school, which have hardly been dimmed since.

Few names of artists emerge from the Gothic period, one from the earlier, when Byzantine influence prevailed; ut such names as are known are likely to become more elebrated from the examples of their work shown and from e researches which must inevitably follow this exposition. otably there is William Baker, of the Eton College Chapel escoes, now being revealed. It may turn out that he was e author of even finer things, and of some works, indeed, itherto attributed to unknown Flemish painters. Other ames are Thomas Chandler and John Rous, who worked the fifteenth century; others of the preceding century ere the celebrated group of Master Hugh of St. Albans d his two relatives, Master John Cotton and Master arnaby. Still earlier were Walter of Durham, of the Westinster painted-chamber fame, who was the follower of illiam of Westminster. To Henry III's love of art and s ordinations respecting it, several other artists' names e due. None is known so well as Matthew Paris, chroni- er, sculptor and goldsmith, who, it is hoped to establish, as also the painter of some of the finest paintings on walls d altars of his time. Previous to him, the works are best hown by the schools from which they emanated—St. bans, Winchester, Colchester, Chichester, Canterbury. l these and others are represented in this most valuable d interesting exhibition of early art and modern research. me of the items are of great intrinsic beauty and lose thing by comparison with the better-known works of ly, Flanders, and other countries synchronizing with em.

Australian Art

This exhibition at the Royal Academy is not truly repre- itative of Australian art as a whole, for the pictures and nts have been restricted; those shown have all been duced in Australia! That is a sufficiently wonderful ng, but it leaves something to be desired, as many of finest works of Australian artists have been produced Europe, and some of the names included have by this triction been further restricted to the exhibition of ll and, indeed, inferior work. A glaring example of latter fate is A. Henry Fullwood, who is by no means resented by the small etching of "Sydney Harbour," ause, I suppose, he has painted less in oils since he rned to Sydney than he did while in England. I have better work by John Longstaff, George Bell, Thea cter, and Blamire Young than are shown; better even n the fine things of Lambert and Streeton. But to e out George Coates, James Quinn, Tom Roberts, a Meeson, Will Dyson, to name no others, is leaving nlet out of Shakespeare because he did not live in England! Speeches were made at the opening of the exhibition extolling the efforts that should be made to cement the Empire: this is not the way to go about it.

There are 200 exhibits in the show, and they are all good, however. There has been no exhibition of a similar character in London for many years in which the standard has been so high. Nothing bad or futile has been admitted, even if it has been painted in New South Wales! In landscape Hans Heysen and J. J. Hilden are men of whom we have seen too little. Arthur Streeton we know as one of the finest landscape painters of his time. In figure work George Lambert's "White Glove" is his most typical, most beautiful, and most accomplished work, while the late Hugh Ramsay's "Sisters" denotes an undoubted talent for portraiture. Then there are the excellent portraits of George Bell and John Longstaff to show that portraits of a high order can be painted in Australia. There are others, and many figure subjects pointing in the same direction by W. B. McInnes and his fellow residents. The interest of the show in figure work is very largely increased by Norman Lindsay's sensational work. If for no other reason, this accomplished figure draughtsmanship lets light and air into the Academy galleries, which should have its effect at the Academy's own exhibitions of the future. Its frankness in the portrayal of Nature is refreshing, and it is amusing also; but it is delicate in a way that so many modern representations of the figure are not, and consequently there is no single note of offensiveness in any of Lindsay's pictures and drawings. He is an exceptionally gifted draughtsman who has not set himself a standard impossible for his powers, and he is original in his fancy, also fecund so far as his imagination carries him. It is singular that architectural subjects have no attraction for resident Australian artists, for the exhibition of "Old Colonial Buildings" at South Kensington indicated that there is ample picturesque material of that description to hand, not to mention the picturesque quality which many of the architectural features of the cities of the Commonwealth possess. This most attractive and valuable exhibition should secure a great popularity in London this autumn.

The Royal Institute of Oil Painters

Fortunately some omissions from the Australian Exhibition at the Academy are supplied at the Institute's show, for George Coates has two portrait studies of exceptionally fine quality, and James Quinn two portraits and two landscapes which indicate his faculty for recording direct impressions, both from nature and human nature, and Dora Meeson has a striking subject picture—"Waiting for the P. & O., Colombo"—as well as two architectural studies of London Bridge. There is an exceptionally crowded collection of architectural paintings, and two of Hesketh Hubbard's, in low tones and carefully studied detail, contrast with most of the works surrounding them. Even Alfonso Toft's "Old Manor House" is in a higher key, as is also his landscape at Missenden. Graham Petrie has an effective study of "Bignasco, Val Maggia"; another Italian picture is Osmund Pittman's very pleasing "Ponte Clementino, Civita Castellana"; while Leonard Richmond's "Market Place, Siena" is a telling canvas, and so is his "Brieve Bridge, Le Puy." George C. Haite's "Old Inn, Dorchester" has a pleasant look, and W. B. Ranken's "Town Hall, Windsor" is a good work of its kind. Architecture and decoration are the combined interest of Herbert Budd's work, and his "Gala" is an excellent decorative panel. Tom Mostyn's pictures again assert themselves by their colour as decorations, and Reginald Frampton's "Elaine" and "Flora of the Fields" by their treatment. "The Compassion of the Well-Beloved" is a decorative work of some charm, but in this class Harry Morley's "Return of Persephone" claims a special place by its accomplished workmanship and imagination, and of the same kind are the two smaller studies of girls' heads set in a primitive Italian background by Bernard Munns. There are some fine decorative still lives and flower pieces by Davis Richter, Isaac Cohen, and Edward Chappel. Two works stand out in this exhibition : Sir William Orpen's decorative sunlit sketchy interior, and T. C. Dugdale's highly-wrought "Innkeeper," a portrait of great excellence, the sitter to the manner born. The President, Julius Olsson, has two of his pleasing seapieces. Each recent exhibition of the Royal Institute improves in quality and interest.

French, English, and American

There is an exceptionally fine show of modern works by French and English painters at the French Gallery. The two special collections of Charles Conder and H. B. Brabazon are representative, and include important pictures a drawings. Conder's fine series of Newquay Beach is show

At the Alpine Gallery Frank Morse-Rummel shows studies, large and small, made in Lapland, Finland a other northern countries. They are characterized by direct method of applying colour in large plain patch which is effective.

Arthur T. Nowell has been exhibiting at Messrs. Bro head, Cutts & Company's gallery his water-colour drawir of Italy and the Dolomites. Several interesting archit tural subjects are included.

Buildings, from churches to cottages, were also treat extensively and effectively by Lady Hume-Williams, M Walter St. John Mildmay, and Edith G. Houseman at th combined exhibition of water-colour drawings at Walke Galleries.

KINETON PARKES

The Conversion of Two Old Cottages

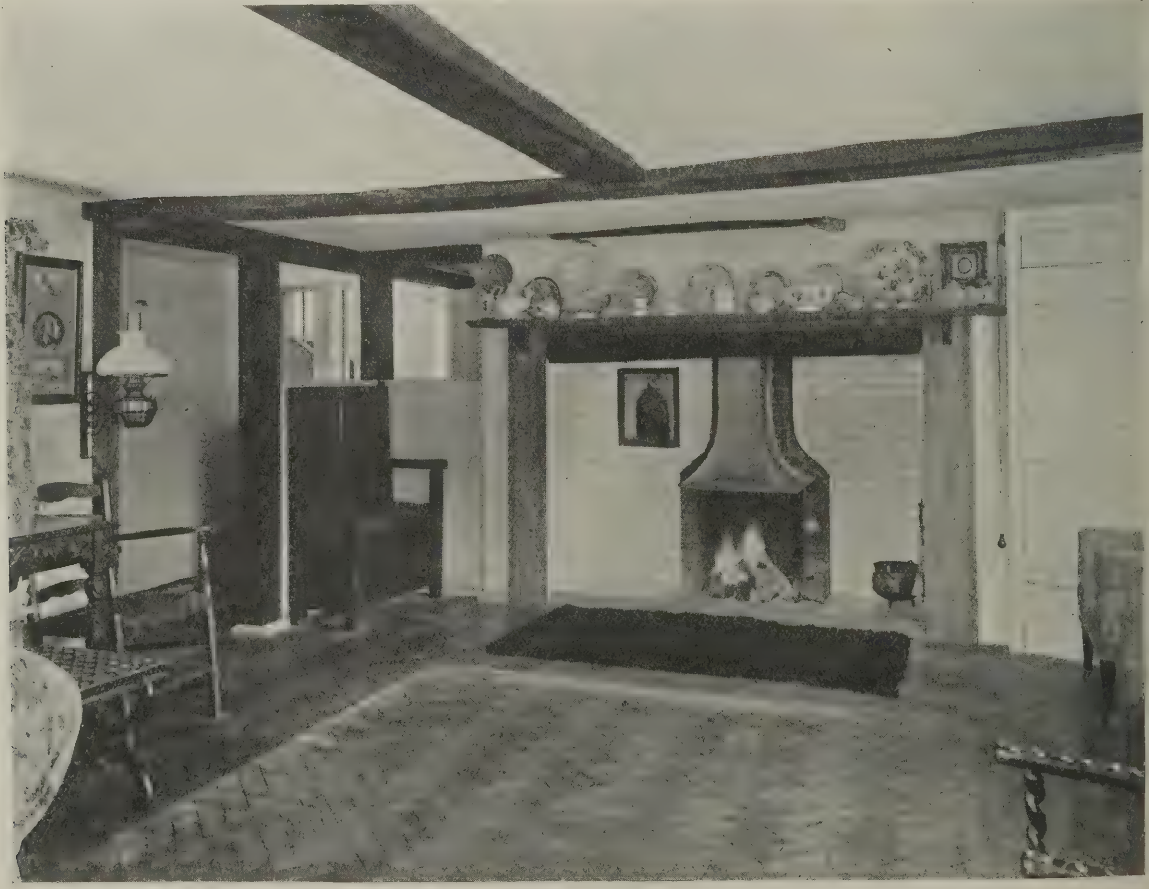
BARRY PARKER, F.R.I.B.A., Architect

THESE cottages were at Shelford, near Cambridge. The plans show the cottages before being converted into one cottage, and after such conversion. Interest perhaps attaches to this undertaking, arising from the fact that in the part of Cambridgeshire in which it was carried out, the traditions of building in clay "batts" had not died out. Men still lived in this district who had built with these sun-dried, clay "lumps," and so the additions to this cottage at Shelford were built with clay batts, and the use of clay batts proved to effect some economy over the use of burned bricks.

The batts were 9 in. by 18 in. The clay was well puddled and mixed with chopped straw, the chopped straw being introduced to bind the clay together. One wonders whether this throws any light on the passage scripture which narrates that the Israelites were compel by the Egyptians to make bricks without straw ?

When opening out the old fireplace into which had b built a comparatively modern range, there was found b up in a little niche in the brickwork an interesting old ru light holder. It is curious how a bricklayer could, in th days, be so careless as to build up a niche, leaving in it of the articles it had been prepared to receive.

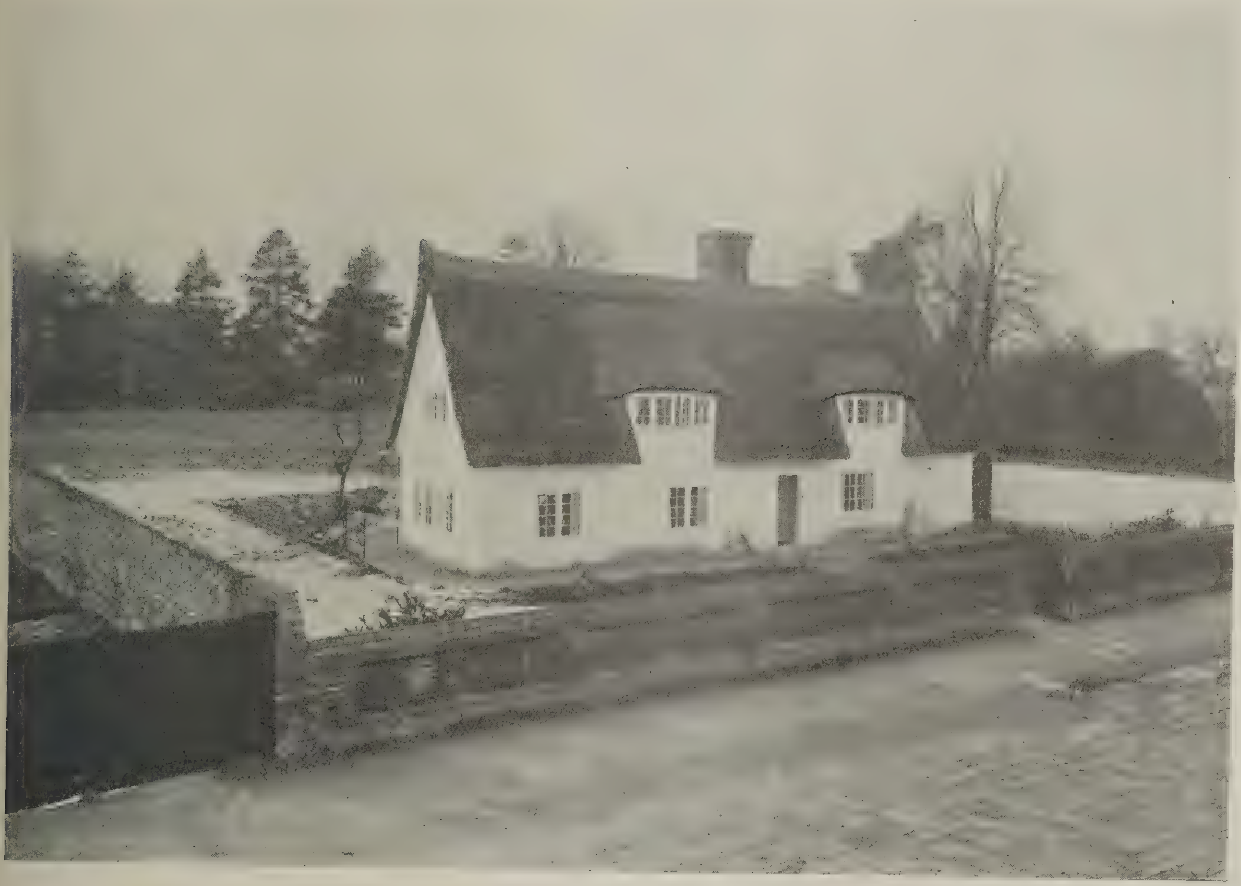
The form of mansard roof adopted for the back extens with slight change of pitch, and the angle between the t changes of pitch, merely rounded off without eaves, specially characteristic of the old buildings in this part Cambridgeshire.



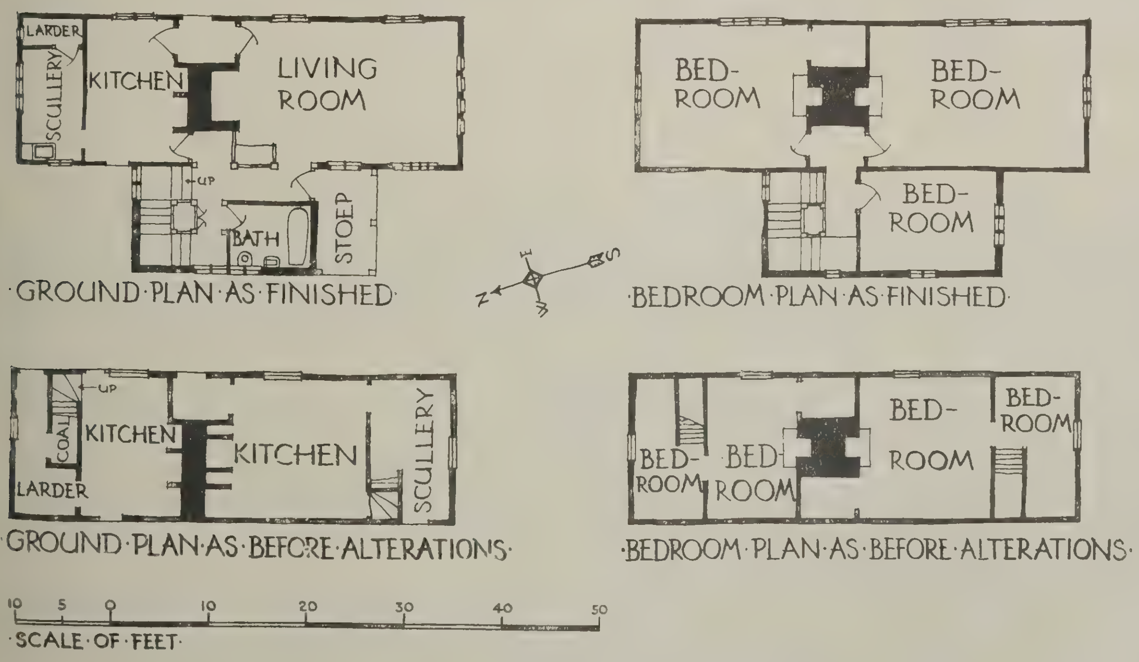
THE LIVING-ROOM.

Modern Domestic Architecture. 63.—The Conversion of Two Old Cottages

Barry Parker, F.R.I.B.A., Architect



A GENERAL VIEW FROM THE ROAD.



These two cottages at Shelford, near Cambridge, were converted into one. The form of mansard roof adopted for the back extension with slight change of pitch, and the angle between the two changes of pitch, merely rounded off without eaves, is characteristic of the old buildings in this part of the country.

THE LIBRARY
OF THE
UNIVERSITY OF ILLINOIS

The Decorators' Exhibition

The House Beautiful

THE crying need for wealthy patrons of British art was urged by Sir Edwin Lutyens, R.A., in an interview with a Press representative concerning the Decorators' Exhibition, opened at Holland Park Hall, for which he designed the "Temple of Paint," the stand of the white-lead manufacturers. Sir Edwin laid emphasis on the value of co-operative effort in architectural decoration, and referred to recent developments in this direction on the Continent. "Each trade ought to know and understand what all the others are doing," he said, "and I look forward to the time when exhibitions will be held in which all crafts and trades work together to produce a cumulative effect of righteousness. The creation of a beautiful house is the work of common effort—a work in which the coal-scuttle is as important as the chandelier, the design of the door-key of as much value as the portrait of the patron's wife."

Though attempts at co-ordination have often been made in this country, they have been stunted by lack of opportunity and financial support. "What architecture lacks in Great Britain," Sir Edwin said, "are patrons. There is at he moment a vast amount of talent and genius lying idle, nd it will continue to do so until patrons come along and ive it a chance. There has never yet been a period of great rt without great patrons, and it is not likely that there ver will be."

The Temple of Paint

Sir Edwin Lutyens, R.A., designed this stand at the pecial request of the British white-lead makers, and it an interesting and arresting example of his versatile enius. It was intended for an exhibition which was to ave been held in September, 1914, but was cancelled, ogether with a number of other arrangements at that time. ot only the elaborate carving, but nearly the whole of the tand, is built of mahogany of a quality now difficult to rocure. Sir Edwin Lutyens not only designed the stand ut also personally supervised its final decoration with hite-lead paint.

The annual meeting of the National Federation of Master ainters and Decorators, which is promoting the exhibition, as held at the Holland Park Hotel. "In the times when ade guilds held sway every employer was a master aftsman. Would it were so now," said Mr. C. E. Campbell, president of the federation. "It is one of the dearest hopes of the federation that that state of things should be re-created, for every man who is a master of his craft cannot fail to love it." Mr. Campbell mentioned that there were delegates present from all parts of England and Wales, and they had with them also the presidents of the Scottish and Irish sister federations.

Mr. John Alder (Sunderland) was elected President for the year, and Mr. J. E. Butterworth (Oldham), Vice-President. Mr. J. P. Williams welcomed the delegates to London.

The Federation's Activities

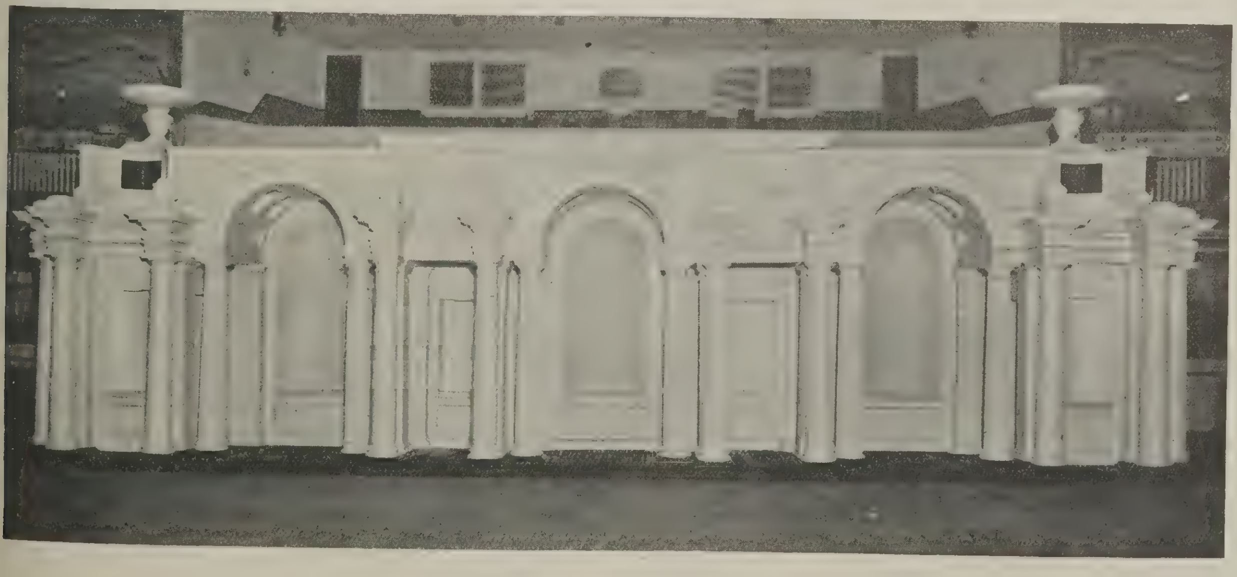
Mr. Campbell, who was accompanied by Mrs. Campbell, occupied the chair at the annual dinner, which was held in the evening at the Hotel Great Central. A large and representative company attended.

Mr. John Sibthorpe (Dublin), in proposing the toast of the evening, said that more than a generation ago a meeting was held in Painters' Hall with a view to forming a federation at which Scotland and Ireland were represented. That meeting was worse than a fiasco by reason of the jealousies and hostilities which had been left as a heritage from the bad old times. In almost every other nation that meeting would have sounded the death-knell of any united front in their trade; but there were men there who refused to accept defeat. The London failure was followed by successes in Manchester, Newcastle, and Birmingham, and he had since watched the progress of the federation with amazement and pleasure.

The President, in responding, said that the work in which the federation was engaged had many activities and was many-sided—all leading up to the ideal to which perhaps this generation might not attain, but they hoped to build—and they were in process of building—a bridge by which those who came after them might cross into the land of prosperity.

"The Guests," proposed by Mr. J. E. Butterworth, was responded to by Mr. Sheriff Dron, Mr. A. B. Cowtan, Mr. A. Gotch, and Mr. W. H. Nicholls. "The Ladies," submitted by Mr. H. S. Manning, was acknowledged by Mr. A. Andrews. Mr. D. Green gave "Kindred Associations," to which Mr. F. de Jong, Mr. D. Colquhoun, and Mr. H. Dockrell replied. Mr. T. Foster proposed "Technical Education," and Mr. J. A. Gibson replied.

Mr. J. W. Alder submitted the last toast, "The President."



THE TEMPLE OF PAINT.
SIR EDWIN LUTYENS, R.A., F.R.I.B.A., ARCHITECT.

Law Report

Quantity Surveyor's Claim—Judge and Right to Remuneration

Nixon v. *Erith Urban District Council.*

October 15. King's Bench Division. Before Mr. Justice Bailhache

This was a claim by Mr. E. D. Nixon, a quantity surveyor, to recover from the Erith Urban District Council the sum of £1,150 11s. 3d. in respect of professional services.

Mr. Hurst, K.C., appeared for the plaintiff, and Mr. Montgomery, K.C., for the defendants.

Mr. Hurst said that in 1921 the defendants were anxious to erect a number of houses on the Lisney estate. Before tenders for the houses could be obtained it was necessary that bills of quantities should be prepared, and the Council architect was instructed to secure the services of a quantity surveyor for that purpose. Mr. Nixon was approached, and agreed to do the work on a certain scale of fees. His offer was accepted, and in June, 1921, the official covering order of the Council was sent to the plaintiff. The work was done and the plaintiff had claimed his fees. They were not paid, however, and the defendants had now paid £50 into court with a denial of liability.

After Mr. Nixon had given evidence in support of his claim,

Mr. Montgomery argued that work done under the Housing Act of 1919 could only be done in the manner prescribed by the Public Health Act of 1875. That Act said that a contract could only be made with an Urban Council involving more than £50 under the seal of the Council.

His lordship, in his judgment, said that as the law stood, it was his opinion that the plaintiff could not recover, because the contract was not made with the Council seal. In any event it was his view also that the fees charged were excessive, having regard to the work done. Yet the plaintiff had given his services and done the work at the request of the Council. In that sense he certainly ought to be paid something, and in case the parties wished to come to any arrangement after his judgment was given, he thought the sum of £250 was a fair amount for the services rendered.

Judgment for the defendants with costs.

Obituary

Mr. F. Hamilton Jackson, R.B.A.

The death has occurred of Mr. F. Hamilton Jackson, R.B.A., at his home, 15 Melrose Road, West Hill, London, at the age of 75. He was well known as a designer, painter, and writer, and was a frequent exhibitor at the Royal Academy as well as at the galleries. In early life a first-class medallist at the Royal Academy Schools, he was later a master in the Antique School at the Slade School; founder and past vice-president of the Society of Designers, and vice-president of the Royal Society of British Artists, and a member of the Art Workers' Guild. Many examples of his work in ecclesiastical decoration are to be found in London and other churches, notably the mosaic reredos in St. Bartholomew's, Brighton, a semi-dome in St. Basil's, Deritend, and a reredos in St. Mary-le-Tower, Ipswich. His books on the architecture of South and South-east Europe are well known, also his handbooks on decoration and mural painting. He illustrated many books on architecture. Some of his finest work appeared in "The Architectural Review."

Mr. W. S. Braithwaite.

We regret to record the death of Mr. W. S. Braithwaite, one of the best-known Leeds architects. Mr. Braithwaite, who was sixty-eight years of age, started practice as an architect in South Parade, Leeds, when he was twenty-five. During his long professional career he designed many public buildings in the city. For several years architect to the Leeds Education Committee, he was responsible for many schools and institutions, including the Home for the Blind in Blenheim Walk. Other works include the secondary schools at Elland and Castleford, and for the Penistone Grammar School, under the West Riding Education Committee, the Storthes Hall Asylum, the Poulton School, Morecambe, and many Leeds factories.

The British School at Rome

Painting and Sculpture Scholarship Awards.

On the recommendation of the Faculties of Painting an Sculpture of the British School at Rome, the commissioners c 1851 have awarded the Rome Scholarship in Decorativ Painting to Mr. Alfred Kingsley Lawrence, a student of th Royal College of Art; and the Rome Scholarship in Sculptur to Mr. David Evans, a student of the Royal Academy School

Mr. Lawrence was born at Lewes, and is twenty-nine year of age. He commenced his art training in 1911 at the Kin Edward VII School of Art, Newcastle-on-Tyne, and in 191 won an exhibition at the Royal College of Art. He obtaine in 1921 the college diploma for painting, in 1922 the colleg travelling scholarship, and in 1923 the diploma of Associat of the Royal College of Art. He served for over four year during the war with the 19th Northumberland Fusiliers.

Mr. David Evans is thirty years of age and was born a Manchester. He received his art training at the Mancheste Municipal School of Art, the Royal College of Art, and th Royal Academy Schools. He gained the British Institutio scholarship in 1920, and the Landseer prize in 1922.

The Builders' Benevolent Institution

Mr. George M. Burt, president of the Builders' Benevolen Institution, has issued the following appeal :—

"As president of this most deserving Institution, it is m duty to earnestly solicit your generous assistance in order tha the very excellent work it is doing may be maintained. It my sincere wish that as a result of this appeal the Committe of Management will be placed in the position that it will nc have to reject during the ensuing year the application of an eligible candidate, and this can only be achieved by the whol hearted support of all firms engaged in the industry. You wil I am sure, realize what a great blessing the assistance of th institution has been to those members of our industry wh through misfortune have been unable to provide for th necessities of life in their old age, and I most sincerely appe to you to favour me with a generous donation."

The annual dinner will be held in the Edward VII Room Hotel Victoria, on Thursday, November 22.

Competition to Rebuild Tokio

There is at present going on a great scramble among th world's exporters of constructional and building materials t secure the big orders which may be expected from Japa The Federation of British Industries here is taking a hand i helping our own firms. It has put forward a scheme whereb a group of non-competing manufacturers should be forme This group would be represented by a competent salesman i Japan. It is explained that the scheme is intended for man facturers who do not maintain their own representative i Japan, and that it does not involve setting up an organizatio in opposition to the locally established merchants. Th intention is to open a sort of permanent exhibition in Toki stocked with samples of the firms represented. The Federatio of British Industries have in view a man for this job who acquainted with American methods in these trades—a poi of importance in view of the expected strength of America competition in rebuilding the ruined cities.—"The Manchest Guardian."

New Warehouses at Trafford Park

The directors of the Manchester Ship Canal Company, aft consultation with the Government, have decided to buil three large warehouses in Trafford Park adjoining the dock The estimated cost is about £500,000. The Ship Canal Con pany have long felt the want of increased warehouse accomm dation, due to the steady growth of traffic, and with a vie to finding employment for a large number of workers in th Manchester district it is understood that building operatio will begin as soon as the details of the scheme are settle In order to encourage projects of public utility and so find wor for the unemployed, the Government is granting certa financial concessions. In connection with the scheme of th Ship Canal Company an arrangement has been made by whic under certain conditions, the Government will pay part of th interest for a term of years on the capital to be raised for th undertaking.

List of Competitions Open

Date of Delivery.	COMPETITION.
Nov. 5	Art Gallery for Hull. Assessor, Mr. John W. Simpson, PP.R.I.B.A. Apply, with cheque for £2 2s., to Mr. H. A. Learoyd, Town Clerk, Guildhall, Hull.
Nov. 30	Taunton School War Memorial. The Council of the Taunton School invite designs for a War Memorial, consisting of an Art and Science Block, the cost of the building to be approximately £10,000. The Assessor is Mr. Robert Atkinson, F.R.I.B.A., who will have the power to nominate a second Assessor if desirable. Premiums first, £100; second, £50. The first premium will merge in the architect's commission. Particulars, together with photograph of the present buildings, may be obtained from the Secretary of the School, H. J. Pollard, F.C.A., 3 Hammet Street, Taunton, in return for a cheque for £2 2s.
Dec. 10	The War Memorial Committee of the Burgh of Coatbridge invite designs for the erection of a War Memorial on a site in the West End Park. The estimated cost of the work amounts to £3,000, and premiums of £75, £50, and £25 are offered for designs placed first, second, and third respectively. Assessor is Mr. James Lochhead, F.R.I.B.A., Hamilton. Apply Town Clerk. Deposit £1 1s.
Jan. 1	The Imperial War Graves Commission invite architects who served during the war as members of the Military, Naval, or Air Forces raised in any part of the British Empire to send in their names for admission to a competition for the designing of memorials to the missing to be erected by the Imperial War Graves Commission at Bethune, Armentières, Cambrai, and Soissons. Applications for particulars of premiums and other regulations from those desiring to compete are to be addressed to the Secretary (Works Branch), Imperial War Graves Commission, 82 Baker Street, London, W.1, and must be received there not later than January 1, 1924, and must be accompanied by a statement giving particulars of the war service and professional career of the applicant and clearly stating which of the memorials it is desired to compete for. Deposit, two guineas for each set of plans. The Assessor is Sir Aston Webb, K.C.V.O., P.R.A.
Jan. 5	Memorial Building and Tower, Dudley. The Council of the County Borough of Dudley invite Competitive Designs from duly qualified Architects for the "Brooke Robinson Memorial" Building and War Memorial Tower comprising a Public Hall, Coroner's Court, small museum, and a new sessions court. Premiums £300, £200, and £100. Mr. W. Curtis Green, A.R.A., F.R.I.B.A., Assessor. Conditions of competition, together with a copy of the site plan, can be obtained on application to E. W. Tame, Town Clerk, Town Clerk's Office, Dudley, with deposit of £2 2s.
No date *	The Eastleigh and Bishopstoke Urban District Council invite designs for the extension of their existing Council buildings, and the erection of an assembly hall, on the site adjacent. Premiums: 50, 30, and 20 guineas. Apply, with deposit of £1, to Mr. J. Lawrence, Clerk to the Council. Council Offices, Eastleigh.

* Indicates Competitions whose conditions are not in accordance with those laid down by the R.I.B.A. and the Society of Architects.

he Greenwich Baths and Washhouses Competition Winners

In connection with the recent award in the Greenwich
lths and Washhouses Competition, the following bio-
aphical particulars of the winners will be of interest :—

Mr. Frederick John Horth received his architectural
ucation in Birmingham at the School of Art and Archi-
tural Association, and whilst a student was awarded the
rmingham Architectural Association's Travelling Stu-
ntship and several Silver and Bronze Medals for Archi-
tural Design and Measured Drawings in the Board of
lucation's National Competitions.

In 1904 he obtained the Soane Medallion, the subject
ng a Design for a University Theatre, this carrying a
d medal and travelling studentship for study in Italy.

Amongst other successes have been second place in the
ttingham Housing Scheme (Sherwood Estate); com-
nded in the "Daily Mail" Ideal House and Labour-
ving House Competition. Mr. Horth has exhibited in the
yal Academy his Designs for a County Hall and for the
rkshire County Offices.

n October last year, conjointly with Mr. Andrew, he was
ced fifth in the Lytham Public Hall and Swimming
ths Competition.

Mr. Harry Andrew took the full course of instruction in
hitecture and building at the Municipal School of Art
l Technical College, obtaining seventh place in the
ited Kingdom in the Intermediate Examination of the
yal Institute of British Architects, and second place for
Grissell Gold Medal, awarded by the R.I.B.A., for
struction and design.

ommencing practice in 1919, he has successfully carried
the Housing Scheme of the Cottingham Urban District
ncil at a cost of £35,000; Memorial Window in St.
ustine's Church, together with a number of residences in Hull and neighbourhood; and for a period of twelve years has lectured on Building Trade subjects at the Municipal Technical College, Park Street.

He is also engaged by the Corporation of the Borough of Hedon, East Yorkshire, in a consultative capacity.

Messrs. Horth and Andrew's design for the Greenwich Baths and Washhouses was illustrated in our issue for October 10.

Coming Events

Wednesday, October 24.

Reading Society of Architects.—"The Greek Point of View." By Ronald P. Jones, F.R.I.B.A. 8 p.m.

L.C.C. Central School of Arts and Crafts.—Lecture IV: Temples, Obelisks, Dwellings. By Sir Banister Fletcher, F.R.I.B.A. 6 p.m.

Northern A.A.—"The History of the Building of St. Paul's." By Mervyn Macartney, F.R.I.B.A., F.S.A. 7.30 p.m.

Thursday, October 25.

Northern Polytechnic Institute.—"The Lighting of Buildings."

British Museum.—"This Year's Excavations at Kish, the Oldest Known Capital in the World." By Miss Claire Gaudet. 4.30 p.m.

A Private Housing Experiment

An interesting experiment in housing in America is about to be tried by Mr. Frank A. Vanderlip, the well-known American banker. He has purchased the property of the late William Rockefeller at Scarborough, on the Hudson, a few miles out of New York. This acquisition consists of fifty-five acres, and adjoins Mr. Vanderlip's own estate and country home. He proposes to erect on it medium-priced houses for families that would like to live at such an attractive place as Scarborough but who cannot afford the rents usually demanded.

This is not Mr. Vanderlip's first venture of the kind. A few years ago he bought up the little town of Sparta in the same neighbourhood. This had once been a pretty riverside town, but had greatly deteriorated through becoming the rendezvous of undesirable persons. Mr. Vanderlip succeeded in changing the character of the place, restoring the architectural beauty of many of the old buildings, and erecting new ones in place of those that were incapable of restoration.

The Board of Architectural Education

R.I.B.A. Medal for Schools of Architecture.

The R.I.B.A. Board of Architectural Education medal for the best set of drawings submitted by post-graduate students exempted from the R.I.B.A. final examination, at the exhibition recently held, has been awarded to Miss I. M. Chambers, of the Architectural Association. Miss Chambers will receive the medal at the annual presentations of prizes at the R.I.B.A. The drawings prepared by Mr. C. H. Hutton, of Liverpool University, received high commendation.

An Appointment

Mr. H. St. John Harrison, A.R.I.B.A., has been appointed to the staff of the evening school of architectural design at the Northern Polytechnic. It will be remembered that Mr. Harrison won the Victory Scholarship in 1922 and the Pugin Studentship of the R.I.B.A. in 1920. Previous to these he obtained "The Architect" travelling studentship in 1913, the Glover travelling studentship (Newcastle) in 1914, and the British Institution scholarship in 1917.

A Correction

In the article on the reinforced concrete stand at Blackheath, which appeared in our last issue, we stated that Mr. William Hide was Clerk-of-Works for the job. This position, we learn, was held by Mr. W. Weaver, Mr. Hide having acted as works foreman for the contractors.

Enquiries Answered

Enquiries from readers on points of architectural, constructional, and legal interest, etc., are cordially invited. The will be dealt with by a staff of experts, whose services are specially retained for this purpose. If desired, answer will be sent direct through the post. In no case is any charge made for this service.

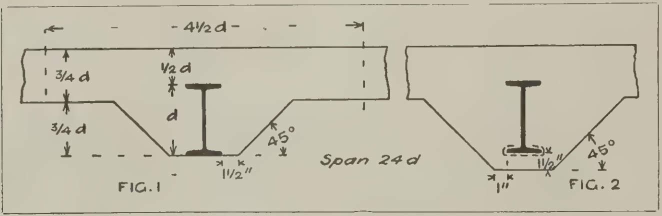
ELM BOARDING.

Architect writes : "It is proposed to erect the upper part of a house with elm boarding. The walls are 11 in. hollow. (1) What is the best and most economical method of fixing the elm boarding, and will a 9 in. wall with fixing bricks at intervals to which battens are nailed be satisfactory? (2) Will the upkeep of the frontage be much greater than if roughcast were used in lieu of elm boarding? I would welcome any other suggestions which may arise as the outcome of these questions."

—(1) The force exercised by elm boarding in twisting and warping is so considerable that I have known it draw 4 in. nails from timber, and I fear that it would not be at all secure if nailed at relatively wide intervals to breeze bricks. It would be preferable to construct the upper story in timber framing (bricknogged or filled in with concrete slabs if necessary), to the studding of which the boards should be nailed with 4 in. wrought large-headed nails. Other points are that as many as possible of the boards should be in one length without butt-joints. Butt-joints unavoidably made should meet on a stud at least 4 in. wide, as nails nearer than 1½ in. to the end of a board almost always tear or fracture a corner of board off as shrinkage takes effect. It is advisable to *drill* holes for all nails in such positions. For further points as to using elm boarding see "Little Things that Matter," No. VI, in THE ARCHITECTS' JOURNAL for March 1, 1922. (2) The eventual upkeep will undoubtedly be greater than in the case of roughcast (unless the latter is to be distempered at intervals of, say, three or four years), but with care in fixing there is no reason why any outlay should be necessary for say twenty years. G.

STRENGTH OF A CONCRETE FLOOR.

G. writes : "I should be glad of some information as to the best way of finding the strength of a concrete floor formed with r.s. joints and concrete between without expanded metal or other reinforcement. Please refer me to some book which gives this. I can find no formula for such a floor."



—Fig. 1 and Fig. 2 show standard sections for concrete floors with rolled steel joists embedded therein, which may be taken as of equal strength. Fig. 2 takes rather more concrete, but the rolled joist is better protected. The joists are four and a half times their depth from centre to centre. The strength may be obtained approximately by allowing one and a half times the supporting power of a free joist as follows : Say 6×3×12 lb., free joist = 2·8 tons distributed 12 ft. span. In concrete say 2·8×1·5 = 4·2 tons distributed = 9,408 lb. Area of slab $\frac{27}{12} \times 12 = 27$ ft. sup. $A_s = 3{\cdot}527$ sq. in.; $A^c = 131\frac{1}{2}$ sq. in. = 2·6 per cent. Weight slab and R.S.J. = 1,722 lb. Superimposed load = 2½ cwt. ft. sup. = 7,560 lb. Total load distributed = 9,282 lb. Bending moment = $\frac{Wl}{8} = \frac{9282 \times 144}{8} =$ 167,076 lb. in.

By Redpath, Brown & Co.'s rule (*see* catalogue) :—

$c = 27,\ t = 3,\ p = 1{\cdot}6719,\ q = 0{\cdot}7912,\ W_s = 2{\cdot}8.$

$$W = 2{\cdot}8 + \frac{2{\cdot}8\ (1{\cdot}6719 \times 27 + 0{\cdot}4867 \times 17 \times}{100}$$

= 2·8 + 1·96 = 4·76 tons safe load, as against 4·2 to by the approx. rule.

By a rule given in "Concrete and Constructional Engine ing" (June, 1920), when rolled joists are embedded concrete, their strength is increased in the ratio 1 to $\frac{{\cdot}88}{d}$ where D = distance top of concrete to bottom of joist a *d* = depth of joist, provided the percentage of steel in o flange does not exceed ·675 per cent. of sectional ar of concrete between joists. In the present case

$$\frac{{\cdot}88\ D}{d} = \frac{{\cdot}88 \times 9}{6} = 1{\cdot}32.$$

2·8×1·32 = 3·646 tons safe load distributed.

HENRY ADAMS.

REINFORCED CONCRETE BEAMS.

"00675" writes : "Page 355 of THE JOURNAL for Febr ary 21 contains an article entitled 'Reinforced Concrete C culations for Beginners, VIII,' by Professor Henry Adam top of third column and paragraph 'the tensile reinfor ment may be taken as 2½ per cent.' I want to know h this 2½ per cent. is arrived at or worked out. He gives t qualifying number Q = 230. I get $Q = \frac{B}{bd^2} = 275{\cdot}77$, a the value of A*t* the area of steel only about 3·91 sq. in. compared with his 8·4 sq. in. I can find nothing in P fessor Adams's book on 'Reinforced Concrete' to justify t working out or the reason why 2½ per cent. 'may be take for tension and compression rates for the example give Will Professor Adams kindly explain ?"

—The 2½ per cent. reinforcement is assumed, and sufficiency or otherwise is then worked out, showing compressive stress of 640 lb. sq. in. and tensile stress 13,714 lb. sq. in. In the same way the constant 230 is assumed value based upon experience. Working backwar after settling upon the dimensions the constant that wo give them more exactly is found to be 276, but 230 is go enough to work to. The beam being 12 in. by 28 in. t area of steel at 2½ per cent. reinforcement would $\frac{12 \times 28 \times 2\frac{1}{2}}{100} = 8{\cdot}4$ sq. in. as given.

HENRY ADAMS.

HIPS OF PANTILE ROOFS.

"A" writes : "Would it be considered practical to u the old style round-end bonnet hip tile with a pantile roo Have you seen this combination used ? Is it of good appe ance and weatherproof ?"

—It is certainly not practical, and hardly practicable, use granny bonnet hip tiles—which are made to lay in wi the courses of plain tiling—as a cover for the hip juncti in a roof which is pantiled. I have never seen it done, a should expect the appearance to be out of scale with t bold effect of pantiling. Probably they *could* be fixed, a by a liberal use of pointing made weathertight, since t hip is not a very vulnerable point; but there seems object in doing this.

G.

ARCHITECTURAL PARTNERSHIPS.

G. writes : "How are partnerships usually arrang between architects, and upon what terms ? In the case an architect joining another already established, if t incoming architect invested capital in the business, h would that capital be applied, and would it be secured any way ? In the event of a subsequent dissolution partnership would the original capital invested be return r would the amount returned vary according to the ıccess or failure of the business?"

–An established business is supposed to be worth a certain nount of money (goodwill), and if a new partner comes to the firm he may be considered as purchasing from the riginal proprietor a certain share in that goodwill. Subseuently each partner ranks equally, and has equal rights the business (unless it be agreed that some other proortion shall exist). Such an arrangement naturally puts fresh capital into the concern, and it is usually arranged hat (independently of the purchase money for his share) ıch partner provides a certain amount of cash for use as orking capital. Provision should be made in the deed of ırtnership for the distribution of the property of the firm, ıd for the disposal of the goodwill (or the buying out of ıe partner by the remaining one) in the event of a dissotion of partnership by death, agreement, or effluxion of me.

F. S. I.

FRENCH STUC.

New Zealand writes: "Please give me complete directions for finishing interior walls in 'French stuc,' particularly with regard to the method of making and filling joints."

—In doing this work it is better to start from the brickwork or concrete backing, and first of all apply about $\frac{3}{4}$-in. of ordinary Portland cement and sand. The stuc is made up of a patent plaster, and the colouring matter with a certain amount of marble or alabaster chippings and powder, the proportions varying in accordance with effect required. The jointing is entirely artificial. The work is finished plain as a plaster wall, and the joints are cut in and left or filled with colouring. There should not be any great difficulty in making the materials in New Zealand, but there would, however, be trouble in carrying out the work. Unless the men know exactly when to carry out the various operations failure is almost sure to result.

"Rubber Floors and Rubber Roadways"

By EVAN J. EDWARDS

THE question of rubber roadways at the present time is attracting a great deal of interest, not only amongst surveyors and other officials interested in the upkeep our roads, but also the general public. We, as a nation, are equently told that we are behind the times, and we let other untries get in front of us, but rubber roadways are a good ample of British enterprise, for I think it is admitted that we e the only nation that has seriously considered this problem. elieve I am correct in stating that the first rubber roadway er to be constructed was invented by Mr. Morland M. ssau, and this was in 1913 in Southwark, at the junction the New and Old Kent Roads. The construction employed this case was the mounting of a yarrah wood block—3 in. de and 8 in. in length—with a pure plantation rubber facing n. thick. Naturally, the war hindered experiments, but during last few years much time and attention have been given the question of rubber roadways. In addition to the method Mr. Dossau, to which I have referred, several others have en used.

Unquestionably rubber roadways have a great future, but is unfortunate that so much time must necessarily elapse ore any authentic data can be acquired so as to prove the im made by the great majority of those engaged in the ber industry—that in cities and large towns where there is tinual heavy traffic, rubber roadways will be found to sess many advantages in addition to the reduction of noise the absolute minimum. My personal opinion is that the atest point in favour of rubber roadways will be proved to economy, and by economy I mean *ultimate* economy. It is only road material which will absorb and distribute the ght of the traffic carried.

he different types of rubber flooring may be roughly ssified into four.

nterlocking tiling consists of separate tiles which interlock, h one being kept in position by the others. These are largely d in the smoke-rooms and dining-saloons of ships.

he second form is solid tiles, not interlocking, but owing to iculties connected with laying, it is not found to be quite satisfactory.

third type which is far and away the most popular, and ch personally I consider to be the best, is what is known as id tiling. The tiling consists of two separate qualities of ber, which are put together before vulcanization, and which r they have been in the hydraulic press cannot be separated n each other. The bottom layer is made of a grey resilient lity, while the top half is harder so as to withstand wear. s top layer can be made in any pattern, and practically ny colour, and I think this forms one of the many arguments avour of the use of rubber flooring.

may be argued that the cost of rubber flooring is high, I would emphasize the fact that it is solely an initial cost; e first cost is to be low and no concession made to length ervice or beauty of appearance, by all means have some r kind of flooring, but when it is remembered that with er the first cost is the last, and that it will last for a ration or probably several, at the same time always looking beautiful, the ultimate cost unquestionably makes rubber a most inexpensive flooring. Other advantages—that it is noiseless, non-slipping, and beautifully soft to walk upon, and it cannot possibly harbour dust or dirt—all help to render it a perfect flooring.

I now come to a comparatively new development in rubber flooring, viz., rubber carpeting. This was originated by a British manufacturer, but has since been copied with more or less success by other manufacturers in this country, as well as in various parts of the world, including Germany. This rubber carpeting must not be confused with rubber tiling. Without going into technical details, it has to be explained that rubber tiling is vulcanized in a press, whereas rubber carpeting is made on a calender machine. The former process is comparatively slow, and consequently requires a great deal of expensive plant. By the latter method, it is possible to turn out rubber carpeting by the mile, more or less. In consequence of this, there is a difference in the cost, rubber carpeting being roughly a third the price of rubber tiling.

I should like to mention something about the methods of cleaning. A good soap powder, or a slightly abrasive soap, such as Brooke's Monkey Brand, should be used with very hot water—not boiling, but near boiling point. Soft soap has also been used with good effect, and in time gives a slight polish to the surface of the rubber. At first the rubber will require frequent cleaning—about once every day—but after it has been laid a few weeks, a cleaning once or twice a week will be found sufficient. In cases where the surface of the rubber has "bloomed" very badly owing to the floor not being cleaned after laying, the sulphur may be somewhat difficult to remove with soap—in such a case paraffin has been found to give good results, but this must be very carefully applied, and only a small quantity used: one application or, at the most, two, is all that is necessary. I have heard the complaint that rubber carpeting is dirty, or rather shows the dirt much more than linoleum. If this is so, it is an argument in favour of rubber carpeting. With rubber carpeting the dirt remains on the surface, from which it is easily cleaned. It is thus specially suitable for use in hospitals and in buildings where the public congregate, such as churches, theatres, music-halls, cinemas, public libraries, etc.

Not only in this country, but also in our overseas dominions and colonies, as well as in most foreign countries, a great and growing market has been developed for rubber carpeting. Cases which have come under my own personal observation show that the naval and railway authorities as far apart as Norway and Brazil, have adopted British rubber carpeting after exhaustive tests with all other materials.

Only last week I had a call from the vice-president of one of the largest American companies manufacturing rubber floorings. He stated that his call was to obtain information, for he frankly admitted that in the States they were rather in the position that we occupied a few years ago in regard to rubber carpeting.

[The above extracts are from a paper read before the Institution of Rubber Industry.]

Book Reviews

Window Design and the Measurement of Daylight Illumination

At a recent meeting of the Illuminating Engineering Society a paper on "Window Design and the Measurement and Predetermination of Daylight Illumination" was read by Messrs. P. J. and J. M. Waldram before members of the society and representatives of the R.I.B.A. and the Surveyors' Institution. This may now be obtained in pamphlet form (see footnote, p. 625). The great importance of this paper to the architect lies in the fact that the authors describe a method by which the lighting efficiency of any given window or combination of windows may be predicted solely from the drawings and plans and from a knowledge of the position and extent of any neighbouring obstructions.

The Measurement of Daylight Factor.

After pointing out the great and often unsuspected variations which take place in daylight illumination, even during quite brief periods of time, the authors describe the method of expressing the daylight illumination at any position in a room by means of a ratio known as the "daylight factor." They point out that anyone working in a room judges the conditions of natural lighting at the point of work not so much by the actual value of the illumination prevailing at that point at any given instant, but by the brightness of the particular patch of sky which is visible from the point in question. Moreover, the interior illumination at any point is dependent mainly on the brightness of that same patch of sky and is not affected by the brightness of any other part of the sky. The authors, therefore, give the following definition of the "daylight factor" for a point within a room: "The ratio of the illumination at the point to the illumination obtainable from a complete unobstructed hemisphere (or quartersphere) of sky, of the same brightness as that of the portion of sky which can throw light on the point under consideration."

The authors adopt the quartersphere in their work, and term the resulting factor the "sill ratio" as more self-explanatory, since the light reaching a point on the sill of an unobstructed window is that received from a quartersphere of sky.

If the illumination at any point in a room be measured by means of a portable illumination photometer with a detached test surface (e.g., the lumeter or the luxometer), the illumination of a horizontal surface under a complete hemisphere of sky of the same brightness as that effective in lighting the point under consideration may be obtaine by turning the photometer towards the sky visible throug the window, and making a measurement in the usu manner, but with the sky substituted for the test surfac The value thus found must be multiplied by the co-efficier of reflection of the test surface used for the illuminatio measurement. If it is necessary to measure the sky brigh ness through a window the value must also be divided b the co-efficient of transmission of the window glass. Th daylight factor (sill ratio) is the ratio of the interior illumin tion to one half the value of exterior illumination measure in the manner just described.

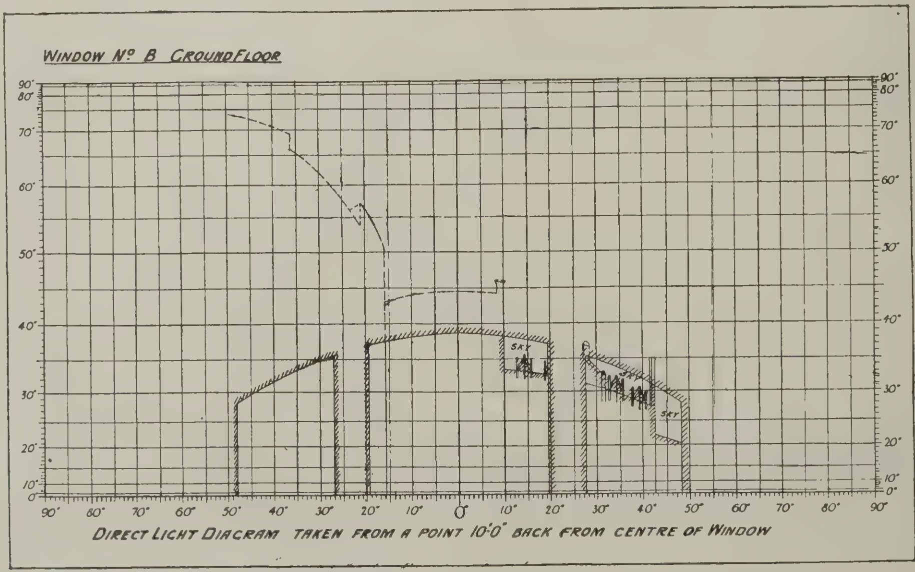
The authors have found that the "grumble point" reasonable people is at a sill ratio of 0·4 per cent., i.e., th lighting is generally regarded as inadequate when th illumination of a horizontal surface at the working point less than $\frac{1}{250}$ of that of a similar surface receiving light fro an unobstructed quartersphere of sky of the same brigh ness as that from which the working point in questio receives most of its light.

The Measurement of Diffuse Illumination.

The illumination at any point in a room is the result the light received: (a) directly from the sky by way of th windows; and (b) indirectly by diffuse reflection from th walls and ceiling of the room. The latter part, expresse as a fraction of the exterior illumination, is termed by th authors the "diffused light factor," and may be conven ently measured by means of apparatus which they describ Essentially this depends on the use of a black screen shield the test surface of the photometer from the dire light admitted by the windows. The difference between th total and the diffused light factors may be called the dire light factor. The value of the diffused light factor has bee found by the authors to be generally less than 1 per cen and in all cases where the total light factor is low, th diffused light factor lies below the "grumble point" 0·4 per cent.

The Predetermination of the Direct Light Factor.

The authors show how, by a simple graphical method, is possible to determine the direct light factor due to a given window arrangement with any form of exteri obstruction. The lines of the effective edge of the wind and of the exterior obstructions are first traced on a d gram in which the abscissæ are angles of azimuth (from a convenient zero direction), and the ordinates angles altitude from the horizontal as zero. In the case of a p



TYPICAL DIAGRAM FOR THE CALCULATION OF DIRECT LIGHT FACTOR.

osed structure this angular diagram may be prepared om the plans; in the case of an existing structure a simple ptical projection method described by the authors may be sed.

The simple angular plot thus obtained is then transrred to a specially constructed measuring diagram as own in the figure. The vertical scale of angles of altitude an uneven one, and is, in fact, so constructed that the ngth of the ordinate corresponding to an altitude of $x°$ proportional to the value of $(1-\cos 2x°)$. It is shown in appendix to the paper that the use of this vertical scale ables the direct light factor to be obtained at once by easuring on this diagram the area of the patches of sky isible through the window, the area of the whole diagram eing taken as 100. Thus the sill ratio for a point having e view plotted in the figure is 100 times the ratio of the tal area of the three parts marked "sky" to the whole ea of the divided rectangle.

Other Problems.

The authors suggest that the predetermination of the ffused light factor may be most conveniently carried out means of scale models which can be decorated in a anner similar to that proposed for the final building. he illumination of a vertical surface in a room may, they oint out, be found in a manner analogous to that used for e horizontal surface. The measuring diagram, however, quires to be reconstructed to allow for the alteration in fect of obliquity of the light. It is reproduced in the ppendix to the paper in which the mathematical theory nderlying the whole method is given.

The determination of the number of hours of sunlight hich will, in fine days, enter a room through a given ndow arrangement at different times of the year, has been escribed previously by one of the authors before the Suryors' Institution. The description is reprinted from the ansactions of the Institution as another appendix to e present paper.

Conclusions.

There can be no doubt that the authors, in the paper iefly summarized above, have made a most valuable ntribution to the study of natural lighting. They have aced in the hands of the architect and the illuminating gineer an exceedingly powerful weapon by means of ich a given lighting efficiency may be aimed at with tle less than mathematical precision. It is in the solution the really difficult problems of window design, e.g., the ep room with low ceiling, or the much obstructed outlook, at every aid is needed, and it is in just these problems at the new element of certainty which the authors have roduced into the subject will prove most valuable.

JOHN W. T. WALSH.

Window Design and the Measurement and Predetermination of Daylight Illumiion," by P. J. Waldram, F.S.I., and J. M. Waldram, B.Sc., Proc. Ill. Engineering . The Illuminating Engineer, Vol. XVI, Nos. 4–5, April–May, 1923. Illuminating gineering Publishing Co., 32 Victoria Street, S.W. 1. Price 1s. 6d. Copies can be obtained from Messrs. Batsford.

Wallpaper

The interior decoration of walls has always been one of stiffest problems of the domestic architect. William rris even could not solve it. A book about wallpapers, refore, attacks a very serious problem. Dr. Phyllis kerman provides some excellent prescriptions. If llpaper is a disease, then its treatment is admirably set in the chapters composing this treatise. The problem colour in relation to the apparent variations in the sizes rooms, for instance, is particularly well handled; not te so well the pattern complaint. The book, however, s actually tackle the evil of wallpaper, as well as relate the trouble arose and, indeed, the way it is fostered sedulous and well-meaning manufacturers all the world r.

t first the wall was regarded as something to be hidden, ndly, as something to be made use of as decoration; thirdly, as a field for pattern-making. The first idea was mistaken so far as vision is concerned, because the walls of ancient buildings were generally nice to look at, but it was a matter of heating—they were cold. The second was all right when you have no pictures, and no wonder the pictorial wall-covering in American colonial homes was popular in this fashion.

The fifteenth century saw the advent of the wallpaper in Europe; it was painted at the beginning of the sixteenth, it was used as decorations on a special scale and for such exceptional and important functions as those designed to welcome royalty, and it was used in the monasteries. The oldest papers have been preserved in England, and Christ's College Lodge at Cambridge has the honour. In the Victoria and Albert Museum there is a heraldic patterned Elizabethan paper which has never been surpassed by subsequent designers. It was no virtue of paper designing as such, but happened because the designs were copied from beautiful textiles; witness those at Cambridge, and this is the sort of thing in which Morris nearly succeeded in rendering wallpaper tolerable. Wall decoration as painted papers persisted down to the nineteenth century, including Chinese derivations and geographical motives, but when printed papers came in—printed by hand blocks—just at the end of the sixteenth century, smaller designs were also largely made use of.

The decay of the art of printing wallpapers began when machine printing came in, and the papers of the Victorian period were deplorable in every country in Europe. Morris and Crane and Haité, and others, set about improving things, a movement which has resulted in the mechanical making of wallpapers to-day.

This book is a timely document covering the whole field, and so drawing direct attention to a hygienic, as well as artistic, problem of prime importance to the daily life of the community. There are very few books for the general reader on the subject at all, and the bibliography provided by the author is a very meagre affair. It is a book that every domestic decorator must possess, for it is not written by a master of the craft, but from a wider and more intelligent standpoint. It is by no means a pattern book, it is a treatise, and therefore much more valuable, as it deals in principle. It is comforting to think that immense strides have been made in the craft in recent years, and that not only the designer but the manufacturer now realize its extreme importance.

KINETON PARKES.

"Wallpaper: Its History, Design, and Use," by Phyllis Ackerman, Ph.D. Frontispiece in colours and numerous illustrations. London: William Heinemann. 8vo. pp. xx+268. Cloth, 12s. 6d. net.

The Work of the Building Research Board

The programme of the Building Research Board for the current year includes a further study of different kinds of cement and cement concretes, of paints and varnishes, of the economical use of fuel in brick-burning, of the use of new materials and of by-products and waste materials, and of certain problems of construction.

Having regard to the immediate importance of the housing question, the efforts of the Board at first were directed to research into building materials and methods of construction suitable for small houses; but the Board always considered that its most useful function lay in the "conduct of research on building materials" so as to effect, as far as possible, economies and improvement in building of all types and for all purposes. The work of the Board has fallen naturally into two categories: (*a*) fundamental researches of an almost purely scientific nature, and (*b*) the attack of practical problems where economic considerations enter or are even paramount.

Of the fundamental researches, the chief has been that into the setting and hardening of cements by Miss E. T. Bradbury, B.Sc., who has been working at the Building Research Station under the supervision of Professor C. H.

Desch, F.R.S., of Sheffield University. Other investigators have taken part, not only at the station, but at other centres, and have been able to use the knowledge and technique so acquired in dealing with other immediate and practical difficulties which have arisen.

Another research of a fundamental character has been that into the decay and preservation of stone. In this instance work on the main problem was for a time deferred, in order to deal with certain practical aspects of it, but a special committee has now been formed after conference with H.M. Office of Works to investigate the matter from the beginning; and fundamental work—chemical, physical, and biological—will be pursued.

A third research of importance—originated by the earlier Building Materials Research Committee of the department and taken over from that committee by the Board—was that into paint technology. This was suspended for financial reasons and until the report of the Home Office Industrial Paints Committee was available. This report, now published, and under consideration by the Home Office, recommends that extensive trials of a practical nature be undertaken. It is hoped to make a beginning with these shortly, but it will almost certainly be found that, for effective work in this direction, parallel fundamental research will be necessary.

An axiom of the Board's policy is that fundamental research and research into immediate practical problems are mutually dependent, and that the latter cannot be of permanent value unless it is related at some stage to first principles.

The Board has been asked by the R.I.B.A. to give some attention to the acoustics of large buildings, but has not yet been able to deal with the problem on any large scale. Some tests on the lines of work done by the late Professor Sabine, U.S.A., have been asked for by the Government of India, who are finding funds for the work, and these are being carried out under the supervision of the Board with the assistance of an architect expert in the subject. The wider aspects of the problem are being considered by the Physics Co-ordinating Research Board.

The policy of the Board hitherto has been to review all the problems itself rather than to parcel out the work to committees, calling in for help and advice on each problem the outstanding expert or experts whose services are available. A departure from this general policy has been made by the formation of the Stone Preservation Committee. It is possible that as the work of the Board expands it may be found necessary to set up similar committees on subjects such as paint technology, etc.

Beyond some investigations of special building systems and the study of failures, on which much interesting information is being accumulated, little work has been done under the head "Methods of Construction." The reason for this is almost wholly financial as funds have not been available for extensive researches of this kind.

As will be observed, a good deal of work is being done extramurally. By following this course in suitable cases not only is the Board enabled to draw upon expert assistance which would not otherwise be available, and to take up problems beyond the laboratory stage (for example, the economic firing of brick kilns), but the work can be overtaken in a more economical fashion, since the capital outlay necessary to provide additional accommodation is largely avoided. Moreover, the modest limits within which the establishment of the Building Research Station has thus been kept makes for the close co-ordination of the work of the chemist, physicist and engineer, which is so important in all scientific work of this kind, and so much more difficult of attainment in larger establishments. The concentrated work of a relatively small station proves especially valuable when working on a standard specification—a direction in which the work of the Board seems likely to extend.

Report of the Committee of the Privy Council for Scientific and Industrial Research for the year 1922–23. Presented to Parliament by Command of His Majesty. Price 4s. net, 4s. 2d. post free. H.M. Stationery Office, Imperial House, Kingsway, W.C. 2; 28 Abingdon Street, S.W. 1.

Ancient Town Planning

Mr. William Haywood has delivered the first lecture o "Civic Design and Town Planning," at Birmingha University, in the course of which he said :

Town planning has been practised more or less sinc neolithic man first abandoned nomadism, and settled i primitive colonies near to abundant food, water, and th means of shelter. These factors are essential to the tow idea, whether primitive or modern; but it is surprising t find that, in the first traces of collective existence in Egypt Assyria, and Crete, and even in the pre-historic Terramar of Central Europe, there is usually more evidence of preconceived and comprehensive planning of streets an buildings, than is to be found in our industrial cities of th nineteenth century. Many early towns were planned a rigidly as those of modern America, at a time when th deficiencies of that method were of less importance tha they are to-day.

It is indicative of the eastern origin of formal tow arrangement in Greece, that Hippodamus—the first know professional town planner—and a resident in Athens in th fifth century B.C., was an Ionian of Miletus, and it is fron the Asiatic cities of the Macedonian age (commencin 300 B.C.), that we date our first really adequate records o completely planned towns. The conquests of Alexander le to the building of many such towns in Asia Minor, unde conditions favourable to a complete and artificial design and there is a marked increase in the adoption of th gridiron type of street planning from this time onwards.

An interesting aspect of town government is indicate by the building laws of this period. An imperfect inscriptio at Pergamon contains part of a Royal law, to the effect tha dangerous structures could be taken in hand by officer appointed for the purpose, and repaired at the owner' expense, plus fines for neglect. The same officers controlle street cleaning and scavenging. Party walls had by-law governing their repair and the exclusion of damp. Brick making was regarded as an obnoxious trade, and was n permitted in the city. Outside the city, widths of road were fixed, and adjacent owners were held responsible f road maintenance. Within the city, street control w probably even more precise, but of this we have no certai data; it probably resembled that of Priene, which w controlled by the municipality.

While the Greeks were not uniformly appreciative formal town planning, they were constant in a highl fastidious attitude towards their public buildings. The liked their temples always in view; but not so easil accessible as to permit an immediate passing from a worldl to a spiritual environment. Their sanctuaries, therefor occupy sites which are as conspicuous and isolated possible.

Grecian temples were not built to house congregation The building itself was literally the House of a God, and t worshippers assembled about the altars which stood befo it. Hence the great terraces at Pergamon and simil precincts about Grecian temples generally, which serve t double purpose of accommodating ritual, and of emphasi ing the importance of public ceremony in the life of t community.

Publications Received

"Cardiff Castle : Its History and Architecture." By Jo P. Grant, A.R.I.B.A. Price 2s. 6d. net. John P. Gra Bute Estate Chambers, Castle Street, Cardiff.

"Home and Country Arts." By Professor W. R. Lethab F.S.A. Price 1s. net; 1s. 3d. post free. Reprinted from a published by "Home and Country," 26 Eccleston Stre London, S.W.1.

"Painters' and Decorators' Materials : A Practical Han book of their Sources, Properties, and Distinguishing Test By Ransome W. Cooper, F.C.S. Price 6s. net. The Tra Papers Publishing Co., Ltd., 326 Bank Chambers, 329 H Holborn, W.C.1.

The Week's News

Wandsworth Town Hall Scheme.

The Wandsworth Borough Council are considering a scheme r rebuilding the Town Hall.

Bedford Coroner on Staircases.

The Bedford coroner condemns the building of steep and rrow staircases without handrails in cottages.

New Esplanade for Seaton.

The Seaton Urban District Council have accepted a £3,500 heme for the provision of a new esplanade.

More Houses for Jarrow.

The Jarrow Town Council have adopted a scheme for the ection of 100 additional houses.

Belfast War Memorial.

£2,000 more is required to defray the cost of erecting the lfast war memorial. £8,000 has been subscribed.

Proposed Dock Extension at Bristol.

A scheme to extend the docks at a cost of £1,000,000 is being nsidered by the Bristol Corporation.

London Memorial Cottages Demolished.

A row of cottages at Fulham built as a memorial to the nce Consort in 1863 has been pulled down.

Cenotaph for Hull.

he design of Mr. Hughes, of Glasgow, for the Hull Cenotaph, been accepted. The cost is estimated at £3,700.

Flintshire's New Highway.

lintshire's first reinforced concrete highway, seven miles g, made at a cost of £36,000, has been opened at Rhyl.

Proposed Swimming Bath for Carlton.

he Carlton (Nottinghamshire) Urban District Council are sidering the provision of a swimming bath.

New Cottage Hospital for Devon.

egotiations are proceeding at Okehampton, Devon, for a for a new cottage hospital.

Okehampton Market Extension.

he Okehampton Urban District Council have purchased a t of over half an acre upon which to extend the market.

The Church of St. Margaret's, Lothbury.

he Court of Common Council have granted 100 guineas ards the preservation of the church of St. Margaret's, hbury.

Totnes Town Planning Scheme.

otnes Town Council have decided to adopt a town planning me in connection with the lay-out of the Priory Estate building purposes.

Yeadon Housing Schemes.

hemes for the provision of a minimum of 100 houses have approved by the Yeadon Urban District Council for nission to the Ministry of Health.

More Houses for Newcastle.

ans for the erection of eighty-five self-contained houses in ous parts of Newcastle have been approved by the City oration Town Improvement Committee.

New Hotel for Prague.

is reported that a New York hotel company intends to l a ten-story hotel at Prague, the capital of Czecho- kia.

The Brighton Aquarium Site.

is proposed by Councillor H. B. Lewis that the Brighton rium should be demolished, thus making a wide road. uggests that the present Madeira Terrace, which ends at n Pier Lodge, should be continued westwards, so that it the Marine Parade at the point which is now the entrance e Aquarium. Shops, a bandstand, and a restaurant also in the scheme. He estimates the cost at between 00 and £40,000.

Bristol Dock Improvements.

Bristol Corporation have sanctioned an expenditure of £1,000,000 for extending and improving the equipment of the docks.

The New Lord Mayor of Newcastle.

Councillor Stephen Eastern, President of the Master Builders' Federation, has been selected as Lord Mayor-Elect for Newcastle-on-Tyne.

Staveley Housing Scheme.

A start is to be made by the Industrial Housing Association upon the erection of fifty-nine houses at Staveley, near Chesterfield. The complete scheme will provide 1,000 houses.

Bristol's Unemployment Schemes.

Road and sanitary schemes, estimated to cost £200,000, are being considered by the local authority to provide work for the unemployed during the coming winter.

New Church for Ely.

Messrs. E. C. M. Willmott, A.R.I.B.A., and T. Edgar Smith, of 4 Park Place, Cardiff, have been appointed by the Cardiff Board of Guardians as architects for a new church at Ely.

Whitby Spa Improvements.

Whitby Urban District Council have received the sanction of the Ministry of Health to a loan of £7,367 for Spa improvements—an extended promenade, a new music pavilion, and a colonnade.

The Port of Yokohama.

According to a statement of the Japanese Minister of Foreign Affairs, it has definitely been decided to reconstruct Yokohama as a port, the damage to the harbour works having proved less extensive than was originally estimated.

London Church to Disappear.

Having stood idle and empty for seven years, the Church of St. Olave, Southwark, is about to be demolished. The tower only will remain. A considerable portion of the site fronting the river will be turned into a public garden.

Ashington House Shortage.

At a public meeting convened by the Urban District Council to hear the views of the inhabitants of Ashington with regard to housing, it was stated that approximately 250 houses had been built and 2,000 were required.

More Houses for Nuneaton.

The Nuneaton Urban District Council are applying to the Ministry of Health for sanction to a loan of £16,800 to defray the cost of erecting forty houses. At the last meeting of the Council a tender was accepted for the execution of the work.

New School Buildings for Bath.

Mr. T. R. Ferens, formerly member of Parliament for East Hull, has made a gift of £15,000 to Kingswood School, Bath, for the erection of new buildings. The school is for the sons of Wesleyan ministers.

Middle Temple Hall.

It is announced that the hammer-beam-roof of Tudor Hall, Temple, is in no immediate danger, and that no drastic reconstruction is needed. There are no wood-worms or "death beetles" at work. Some minor repairs are all that are necessary.

Sunderland Electricity Works Extension.

Sunderland Electricity Committee is to launch a scheme for the extension of the electricity works in Hylton Road, at a cost of between £130,000 and £140,000. It is proposed to install a new turbo-generator to carry a load of 10,000 kilowatts.

Bradford Housing Progress.

The Ministry of Health have sanctioned the borrowing of £94,500 for the erection of 270 houses at Odsal. A proposal is further put forward for the erection of forty-eight additional houses on the Scholemoor estate.

St. Clement's Church, Eastcheap.

The roof of St. Clement's Church, Eastcheap, has been attacked by the "death watch," and it is reported that the insects have rendered it unsafe. Large portions will have to be renewed. The church was destroyed in the Great Fire, and was rebuilt by Sir Christopher Wren.

(*Continued on page* 628.)

The Week's News—*continued.*

£2,000,000 Road Scheme.

At the conference in Glasgow between Sir Henry Maybury and Scottish Labour M.P.'s on the proposed Glasgow to Edinburgh highway scheme, costing £2,000,000, for relieving unemployment, the members agreed to press the Government to augment to half the cost the grant to be made.

The B.R.C. Film.

The B.R.C. film showing the construction of seven miles of reinforced concrete roads at Tilbury at present nearing completion, was shown at the Royal Cinema, Belfast, on October 10. The British Reinforced Concrete Engineering Co.'s Offices at Belfast are situated at Mayfair Buildings, Arthur Square.

Public Shelters for Bridlington.

A Ministry of Health enquiry has been held into the application of Bridlington Town Council for sanction to borrow £6,400 for the provision of public shelters on the Beaconsfield Promenade, on the north sea front. The proposed shelter will extend to 750 ft. and be 10 ft. deep.

Housing at Mexborough.

Mexborough Urban District Council have decided to ask the Ministry of Health to sanction the completion of their original housing scheme for 100 houses under the provisions of the new Housing Act. They have also decided to draw up another building scheme under this Act.

Pier for Hove.

An early start is promised with the new pier for Hove. It is expected to cost £180,000, will be a quarter of a mile long, and 50 ft. wide, with a theatre, dancing hall, restaurant, and residential club. Facilities for sea bathing and medical baths will also figure in the scheme.

House Building at Hull.

Hull is very active with house building. Plans for 303 new houses have been submitted to the Council, together with applications for the Government subsidy. The city architect also has been instructed to prepare plans for 600 additional houses on the Corporation's three Housing Estates.

Proposed Sewerage Scheme for Beeston.

The Beeston (Notts) Urban District Council have decided to consider certain alterations and extensions to their system of sewerage. The work would be undertaken for the relief of unemployment. Messrs. W. H. Radford & Son, of Nottingham, are the Council's consulting engineers.

The Institution of Sanitary Engineers Gold Medal.

At the opening sessional meeting of the Institution of Sanitary Engineers, held in London, Mr. H. Percy Boulnois was presented with the gold medal of the Institution "in recognition of his long and distinguished public service and unsparing devotion to the interests of the profession."

Architect as Mayor of Huddersfield.

Alderman Joseph Berry has formally accepted the invitation of members of the Town Council to become the Mayor-elect. He is an architect, and has completed close upon a quarter of a century's public service on the Town Council. He was elected to the Council in 1899, was made an alderman in 1912, and his name was added to the Commission of the Peace in 1920.

Suggested Municipal Bank for Leeds.

At the next meeting of the Leeds City Council, one of the Socialist members will move that a clause be inserted in the Corporation's Parliamentary Bill empowering the establishment of a municipal savings bank in the city. The proposal has been previously mooted from the same quarter, but has been turned down.

Proposed Orthopædic Hospital for Staffordshire.

Wolverhampton Education Committee are recommended to co-operate with the Staffordshire County Council to establish an orthopædic hospital at Biddulph. The Education Committee suggest that a conference of the larger local authorities in South Staffordshire be called to discuss the problem in all its aspects.

L.C.C. Housing Scheme.

Up to March 31 last the London County Council had provided housing accommodation for 114,500 persons in 17,174 dwellings, containing 56,833 rooms (in addition to sculleries and domestic offices) and in three lodging houses, containing 1,878 cubicles. There were also at various estates 118 sho 97 workshops, and 273 sheds. The actual population at end of the year was approximately 73,500 persons, which greater than the population of Bath or Lincoln, and almost much as that of West Bromwich or Barrow-in-Furness. Un the State-assisted housing scheme undertaken by the Cou since the war, 7,604 houses and tenements have been co pleted. They are distributed as follows: Becontree, 2,9 Bellingham, 2,090; White Hart Lane, 710; Norbury, 218; Oak, 724; Roehampton, 624; Tabard Garden, 262; Colli wood, 45; Whiston House, 12.

Whitley's Housing Scheme.

Whitley and Monkseaton Urban District Council's hous schemes embrace the erection of 300 houses. Of that numb 200 represent the Council's scheme of working-class dwelli while the remaining 100 are a measure to assist private en prise, for which £7,500 is to be borrowed in order to m grants of £75 to help intending purchasers.

Historic Scottish Estate for Sale.

Darn Hall, Peeblesshire, owned by the Murray family more than 400 years, is for sale. The present owner, Visco Elibank of Elibank, is a descendant of John Murray, wh 1513 died fighting for King James IV at the battle of Flod Field. The estate, with its picturesque old castle, extends nearly 2,000 acres.

Renovation of Buckingham Palace.

For the first time for nearly twenty years the gates railings of the forecourt of Buckingham Palace have regilded. During the absence of the Royal family at Balm the mews at the Palace are also being repainted. The last t the gates and railings were gilded was in 1904, when work in progress on the Queen Victoria Memorial.

New Cinema for Falmouth.

Plans have been passed by the Falmouth Town Council a theatre cinema to be erected in Market Street by Me Harris Brothers, the owners of two other picture theatres in town. The new building, work on which is to be commen at once, has been designed to seat 750 people, and wil equipped in the most up-to-date manner. It is to cost £15,

New Premises for Manchester.

The Improvements and Buildings Committee of the chester Corporation have passed the plans of the first pa the scheme for the extension of Messrs. Lewis's premises. is estimated that the work, when completed, will have more than a million pounds. From two to three years wi necessary to carry it through.

New Miners' Institute for Ilkeston.

A new Miners' Institute is to be erected at Ilkeston. estimated cost is £14,000, irrespective of furnishing and laying-out of the grounds. A main hall will accommo 500 persons, and a large clubroom a similar number. A reading-room, ladies' room, bathrooms, large billiard roo lecture-hall to accommodate 80 persons, and other rooms, be provided.

Harrogate Hospital Extension.

Colonel Sir Edward Brotherton, Bart., of The Hall, Ro hay, Leeds, has promised a donation of £500 towards equipment of the new bacteriological department in conne with the Royal Bath Hospital, Harrogate. The buildi estimated to cost £3,000, for which the committee are appe for subscriptions, and towards which they have about £1 in hand.

Thanet Railway.

The Southern Railway Company's project to centraliz Thanet railway system at a cost approximating to £75 will not differ as regards Margate from the South-Eastern Chatham's improvement scheme held up by the war. latest plan, however, will involve the abolition of the har station at Ramsgate and the construction of new ce stations at St. Lawrence and Dumpton, near Broadstairs.

Wandsworth Housing Scheme.

An important building scheme, under which it is hop provide housing accommodation for several thousand fan at a cost of about £250,000, is contemplated by Wandsw Borough Council. The work will probably be undertaken year. Houses will be built on undeveloped land on the F down and Southfields estates, and building plots will be to persons who wish to build their own houses.

(*Continued on page* xxvii.)

The Week's News—*continued.*

Coalville Subsidy Scheme.

The scheme of the Coalville Urban District Council to add 5 to the Government subsidy of £75 to the builders of private uses, making £100 in all, has been approved by the Ministry. pproval is given on the understanding that the houses comply all respects with the conditions prescribed in the Act and e completed within the prescribed period. The subsidy will e on a sliding scale in accordance with the size of the house.

Westbury Water Supply Scheme.

The Westbury and Dilton Marsh Joint Water Committee ve decided to proceed with a scheme for procuring an ineased supply of water for the Westbury district of Wiltshire. essrs. W. H. Radford and Son, of Nottingham, civil engineers, e the Council's consulting engineers, and they have been structed to prepare the necessary plans and estimates for bmission to the Ministry of Health.

New Crossings over the Tyne.

The proposal to provide four new crossings over the Tyne tween Newburn and the sea—three bridges and a tunnel to nnect North and South Shields—was approved at a conrence of the North Tyneside and South Tyneside Joint Town anning Committees, held at the Town Hall, Newcastle, under e presidency of Mr. G. Montagu Harris, of the Town Planning epartment of the Ministry of Health.

Improvement of Aston Park.

A scheme has been prepared for the improvement of Aston rk in order that the grounds may be more in keeping with e Elizabethan character of Aston Hall. The proposals have en put forward by the Birmingham Civic Society, and will submitted to the City Council by the Parks Committee with view to the work being carried out at convenient times and funds permit.

Town Planning and the Railways.

A conference has been arranged between Lancashire, eshire, Derbyshire, and Yorkshire Town-Planning Comttees—upon which Manchester and Salford are represented nd the London Midland and Scottish Railway Company to cuss the new arterial and other town-planning roads and general question of transport. It is probable that the ference will be held at the Manchester Town Hall.

Change of Name.

The firm of Messrs. Armstrongs and Main, Limited, has been rganized and the old title of the company, Messrs. A. and J. lin & Company, Limited, has been resumed. All the comy's branches are retained, and the Clydesdale Works in sgow, and Calcutta Bridge and Roof Works in Calcutta, now more fully equipped than before to deal with the same ses of steel structural work as in the past, as well as fencing, ings, and gates of every description.

Mersey Tunnel Scheme.

he experts asked to advise upon the best means of facilitat transit between the Liverpool and Birkenhead sides of the sey have decided that a tunnel would be preferable to a ge. The question has resolved itself into one of finance, eing found that the cost of a bridge would be £10,000,000, nst that for a tunnel of £6,400,000. Details of the scheme to be considered at the next meeting of the Merseyside rdination Committee.

New "Underground" Offices.

new office building is being erected at St. James's Park ion, where the various office staffs of the Underground ways and allied companies, which are now scattered about lon, are to be concentrated. It is hoped that the new ling will be ready by the end of the present year. The site usual. Twenty-two girders, totalling 550 tons in weight, supported on reinforced concrete piers, have been placed the platforms of St. James's Park District Railway on, and upon these a six-story building is being erected. cupies an area of about 45,000 sq. ft.

New Western Suburb for Glasgow.

g housing schemes are contemplated by the Glasgow Cortion on the western fringe of the city, north of the Clyde. sites of the schemes, which will comprise a total of about houses, are the lands of Knightswood, Cloberhill, and head, which extend in all to 582 acres. Of this area the head estate, the proposal to acquire which was adopted e last meeting of the Corporation, represents almost cres, its exact area being 195¼ acres.

Hough End Hall.

Manchester Corporation's Town Planning Committee have taken a step which promises the saving of Hough End Hall, the finest relic of Elizabethan domestic architecture in the locality. Road 22 is to give it a wider berth than was at first intended, it being feared that heavy traffic might endanger the building. The committee has asked the city architect to prepare plans for a wider detour. Hough End Hall was built in the sixteenth century, and has many historic associations.

The Condition of Stoke Poges Church.

Already £800 has been promised towards the £6,000 required for the restoration of Stoke Poges Church, immortalized as the place where the "Elegy in a Country Churchyard" was written. Half the money is needed for the fabric, and the other half is to be used to purchase ten acres of ground to preserve for all time the rural surroundings of the church. The first mention of Stoke Poges goes back to Anglo-Saxon times, and there are some remains of the Saxon church in the building.

Reigate Hill Saved.

Part of Reigate Hill, including the site of the Old Fort, has been bought at auction by the local Open Spaces Committee. The price was £2,500. This portion of the hill has an area of about 18 acres lying alongside Queen's Park. The fort, which is about 700 ft. above sea level, runs along a frontage leading to the Pilgrim's Way, which commands fine views of Surrey and Sussex. It was feared that the land might be bought up by builders.

The House of Lords' War Memorial.

An alternative suggestion has been made that the war memorial of the House of Lords should be set up in the Great Hall. It was originally intended, on the suggestion of Lord Curzon, to erect it in the Princes Chamber, but this would have meant the removal of the statue of Queen Victoria. Peers are now voting upon the Great Hall site, and the decision should be known about the middle of this month. The memorial has been designed by John Tweed.

Proposed New Schools for Birmingham.

The provision of increased school accommodation for Birmingham is engaging the attention of the Education Committee. The proposals include the erection of a secondary school for the Saltley area; an elementary school for 250 scholars at Stechford, to cost £9,000; and the erection of a new school at Bordesley Green. Plans have been prepared for the remodelling of the infants' departments of the Council schools at Nechells and Cowper Street, and the whole of the premises of the Upper Thomas Street Council school.

Proposed Rebuilding of the Menai Bridge.

Among the projects for the relief of unemployment which are receiving consideration by the Cabinet Committee is one for the rebuilding of the great suspension bridge over the Menai Straits, linking Anglesey with the mainland. The Menai suspension bridge, which carried the Holyhead road to Bangor, was designed by Telford, and was opened for traffic at the beginning of 1826. The bridge is hung on sixteen chains, the suspending power of which is calculated to be over 2,000 tons. The total length of the chains is 1,715 ft., and the total length of the roadway is 1,000 ft. The original cost was £120,000.

Newcastle War Memorial.

At Newcastle the city's war memorial was unveiled by Lord Haig. The design of the memorial symbolizes the traditions of the County Regiment, the Northumberland Fusiliers, with St. George, the patron saint, as the chief figure in massive bronze supported by a stone pedestal. The inscription reads: "A Tribute of Affection to the Men of Newcastle and District Who Gave Their Lives in the Cause of Freedom. Their Name Liveth for Evermore. Memory Lingers Here." The total height of the memorial is 32 ft., including 11 ft. 6 in. for the bronze, and the cost has been approximately £13,200. The sculptor is Mr. C. L. Hartwell, A.R.A.

Trade and Craft

Bell's United Asbestos Co., Ltd.

The directors of Messrs. Bell's United Asbestos Co., Ltd., have declared an interim dividend on the ordinary shares of sixpence per share, less Income Tax, on account of the profits of the current year. The dividend will be paid on October 22 to shareholders on the register on October 6. The ordinary share transfer books are closed from October 6 to 19, both dates inclusive.

The Decorators' Exhibition.

At the Decorators' Exhibition, at Olympia, the island stand of Messrs. John Line and Sons, Ltd. (incorporating John Dunn

Trade and Craft—*continued.*

and Son) consists of a simple but well-designed wooden erection, having a flat semicircular roof with cornices and fascia supported on two columns finished with "Triamel" enamel. A special feature of the stand is the brilliant note of colour in the wreaths and illuminated poster. Interesting wallpaper and paint schemes are also displayed. Messrs. John Line and Sons, Ltd., are themselves colour grinders and makers of oil paints, and are also sole agents for "Duresco" over a large area of England and Wales. They have recently acquired the sole rights for Great Britain and the City of Belfast for "Koverflor," which, although originally designed as a liquid floor covering for outside or inside floors of wood or cement, has proved itself suitable for many other purposes. The floor of the stand has been treated solely with this material. Visitors to the exhibition should make a special point of visiting the firm's London showrooms and galleries at 213 to 215 Tottenham Court Road, W. (opposite Goodge Street Tube Station).

A New Material for Door Furniture.

Architects should be interested in a new material for door furniture which has recently been put on the market by Messrs. Roanoid, Ltd.

"Roanoid" fittings are made of a patent material having a high gloss and capable of being manufactured in a wide range of plain and mottled colours—colours which are actually in the material and not merely a surface finish. The colours are permanent and will not fade.

"Roanoid" door furniture is stated to be durable, not subject to chipping, cracks, discolouration, or deterioration.

Architects will no doubt appreciate the advantages of "Roanoid" door furniture over the old-fashioned door furniture made of metal, wood, porcelain, crystal, horn, etc. Any colour scheme can be worked to, even to the very screw-heads in the finger-plates, and the fittings are no more expensive than good-class door furniture of other materials.

A contract was secured recently for Welwyn Garden City scheme for the supply of "Roanoid" door mountings.

The sole manufacturers are Messrs. Roanoid, Ltd., 29 West George Street, Glasgow.

New Inventions

Latest Patent Applications.

24511.—Calthrop, E. R.—Reinforced concrete structures October 2.

24895.—Hartmann, O.—Slab ceiling. October 6.

24479.—Hurden, E.—Tiles, etc., for roofs, walls, etc. October

24549.—Rings, F. C. C.—Sectional reinforced concrete build ings, etc. October 3.

24345.—Shebo, N. H.—Protection and covering of surface an plastering of building material, etc. October 1.

24837.—Titjen, H.—Buildings, etc. October 5.

Specifications Published.

204083.—Swanton, W. H., and Echberg, A. F.—Machine fo moulding building blocks.

204125.—Fenney, T. F.—Means for cleaning bricks, pavin blocks and setts, and the like.

204210.—Mitchell, C. G.—Wall ventilators and the like.

204263.—Abrams, J. E.—Building blocks.

204269.—Ross, W. L.—Portable buildings.

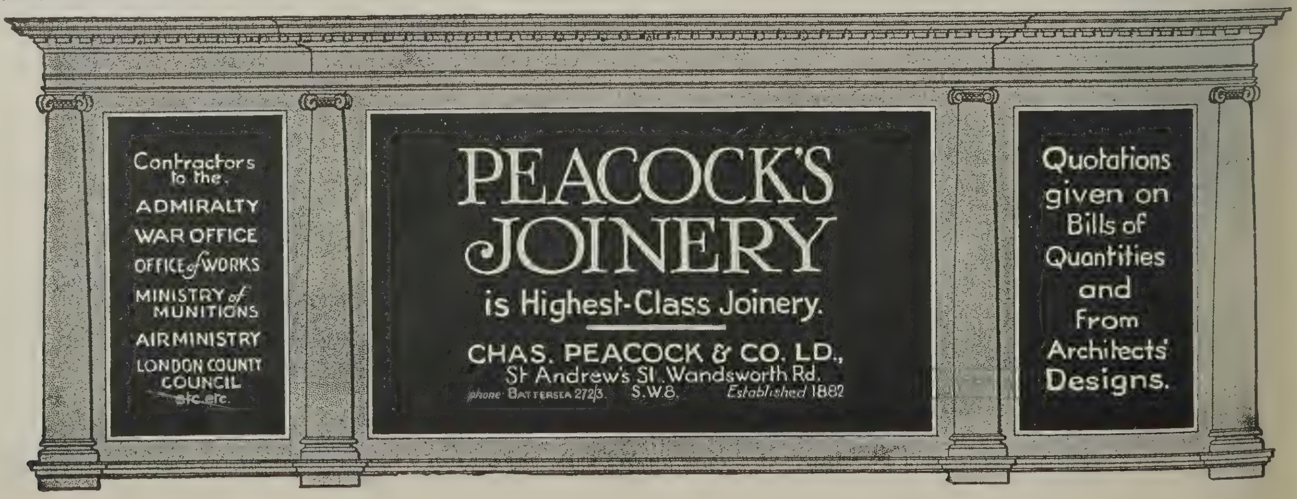
Abstract Published.

202518.—Roofing Tiles.—Commin, F. J., 5 Victoria Street Westminster.—*Roofs; slating.*—Corrugated roofin sheets or tiles of galvanized iron, asbestos-cement, o the like are formed with longitudinally tapere corrugations in order that the overlapping ends ma have the same curative of corrugation on top an bottom respectively to form a good joint. The sid overlaps are formed in a similar manner and at th corners, where there are four thicknesses to th overlap, the edge corrugations are formed so that th curvature of the top of the ridge on one is the sam as the curvature of the bottom of the overlappin ridge and the edge corrugations of the two oute overlaps are out of the plane of the rest of th corrugations; by this means it is ensured that th remainder of the sheets or tiles set evenly on th supports.

The above particulars are specially prepared by Messrs. Rayner & Co., registere patent agents, of 5 Chancery Lane, London, W.C.2, from whom readers of th JOURNAL may obtain all information free on matters relating to patents, trade mark and designs. Messrs. Rayner & Co. will obtain printed copies of the publishe specifications and abstract only, and forward on post free for the price of 1/6 each.

G. JACKSON & SONS, Ltd.,
49 RATHBONE PLACE, LONDON, W. 1.
FIBROUS PLASTER,
FRENCH "STUC," CARTON-PIERRE, WOODWORK, &c.

SUSPENDED SCAFFOLDING | **TUBULAR SCAFFOLDING AND CRANE STAGINGS.** | **"SCAFFIXER" SCAFFOLD TIES**
(For Sale) BUILDERS' PLANT (For Hire)
SCAFFOLDING (GREAT BRITAIN) LTD.
Incorporating—
The Tubular Scaffolding Co., Ltd., and The Patent Rapid Scaffold Tie Co., Ltd.
Telegrams: "Scaffixer, Claproad, London."
43 LANSDOWNE ROAD, STOCKWELL, LONDON, S.W.8.
Telephones: LONDON—BRIXTON 330. BIRMINGHAM—VICTORIA 1


PEACOCK'S JOINERY
is Highest-Class Joinery.
CHAS. PEACOCK & CO. LD.,
St Andrew's St, Wandsworth Rd.
phone BATTERSEA 272/3. S.W.8. Established 1882
Contractors to the
ADMIRALTY
WAR OFFICE
OFFICE of WORKS
MINISTRY of MUNITIONS
AIR MINISTRY
LONDON COUNTY COUNCIL
etc. etc.
Quotations given on Bills of Quantities and From Architects' Designs.

dnesday, October 31, 1923.
Vol. LVIII. No. 1504.

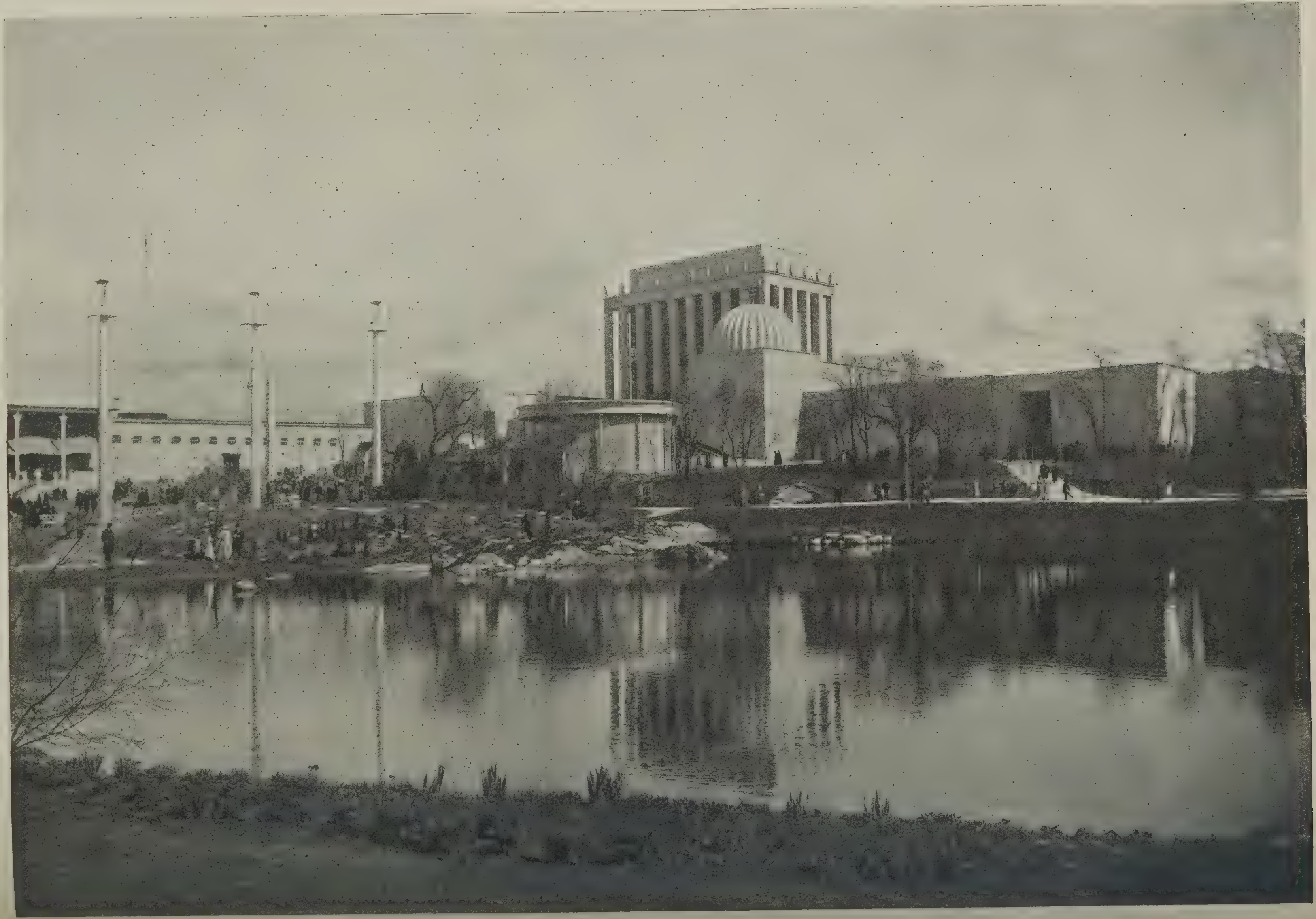
THE ARCHITECTS' JOURNAL & Architectural Engineer

With which is incorporated "The Builders' Journal."

THE GOTHENBURG JUBILEE EXHIBITION: THE MAIN COURT.
(*See Article on page 633.*)

27-29 Tothill Street, Westminster, S.W. 1.

The Gothenburg Jubilee Exhibition : The Lily Pond and Memorial Hall.



The vertical note is here again stressed, and the effect is curious and striking."

THE
ARCHITECTS' JOURNAL
27-29 Tothill Street, Westminster, S.W.1.

nesday, October 31, 1923
Volume LVIII. No. 1504

The Unwanted Country House

Some Suggested Uses

THE subject of the preservation of ancient, historical, and beautiful buildings has many aspects. Where such buildings are so placed in a town that they become part of its structure they are me extent public property, and it is, therefore, only that the community should have some control over . How this control is to be acquired and exercised already been the subject of articles in these columns. it is only a proportion of the buildings meriting pretion that are so placed. What is to be done with the s? We know that certain historic monuments are over by His Majesty's Office of Works. This is as it d be, especially when we remember with what great consideration, and skill they are treated. But such a e can absorb only a very few of the many buildings e loss would be deplored. The kind of buildings which ave particularly in mind are fine country houses and ions, with which England is so superbly and richly wed. Changing economic conditions are making it ssible for the owners of these buildings to maintain . Indeed, the very leisured life which they express is assing away. They are becoming a page in the past y of the nation, but they are a richly illuminated which should be preserved. How can this be done?

have just witnessed one very creditable solution of roblem. Owing to the generosity of the Hon. Edward —the Minister of Education—and the sound sense Leeds Corporation, Temple Newsam is, from now rds, a national monument in public custody, for the ation of all who come to see it. Not only the house rounds, but many of its valuable and beautiful con- are included in the gift, so that posterity will see the , more or less equipped as it was in its days of active Municipal enterprise is constantly extending, and the Corporation are wisely exploiting the park by instal- herd of cattle, and by setting up a model municipal farm. It is obvious that this solution, splendid as it nnot be adopted everywhere. In the first place, s cannot always afford to be so generous; and in the l, the building may not be so situated as to be easily ible for a large population. Fortunately there are ratives; perhaps, on the whole, less satisfactory since ntail some adaptation of the building to serve some se other than the one for which it was originally ed. There are many examples of such adaptations been successfully accomplished, not only in England, sewhere, and although the spectacle may, at certain evoke thoughts of melancholy, it cannot be denied reservation at such a cost is preferable to demolition. nt example in London is Stafford House, which has ecome one of the most interesting of the smaller ms in the country; previously there was Hertford now known as the Wallace Collection. But Stowe the most recent example. Here a beautiful and house is adapted to the needs of a school. True, requirements of a modern school cannot be satisfactorily met in an old building; nevertheless, the extreme beauty of the building and its historic significance cannot altogether be without a compensating beneficial effect in the moulding of young character.

But even these alternatives have by no means exhausted the possible purposes which such houses may with advantage be made to serve. Let us consider some others. Surely no great mutilation would be incurred in transforming such a building into a nursing or a convalescent home, and what, indeed, would be more conducive to a rapid restoration to health than a leisured period of gentle valetudinarianism among the sweet and peaceful surroundings of an old country seat?

Where such houses are situated on the outskirts of a growing town they might be acquired, together with their grounds, as an open space. The building might then be used as a museum, public library, or for some other municipal activity, while the gardens might be preserved, and some of the park land laid out for public games, including a municipal golf course. Some such suggestion has been made already by Professor Abercrombie in his Regional Report on the Deeside, and the purpose would certainly harmonize with the democratic ideals of the age.

Another purpose, and one which, as far as we know, has never been attempted, is the conversion of a building of this kind into a country club. The steady growth of motor transport is tending towards a more general exodus of the town population into the country at the week ends. It would seem, therefore, that a club which would provide facilities for every kind of sport, with adequate accommodation for its members, for their cars, and set in beautiful surroundings, would meet with an immediate success. We have in mind a club providing golf and tennis facilities, with, perhaps, fives and racquet courts, and with hunting, shooting, and fishing available in the neighbourhood, the whole housed in a beautiful building in beautiful grounds. This we think suggests an institution which would meet a demand. The trust and combine tendency in business affairs is extending to private life, and is actuated by the same desire; namely, to avoid the duplication of activities, and dissipation of energy. But whether the disadvantages do not outweigh the advantages it is not for us, at the moment, to consider.

And this suggests yet another purpose, perhaps even more heterodox; the transformation of such a house into a group of self-contained dwellings, arranged on commercial lines, with central heating and hot water supply, common dining-room, and, perhaps, billiard-room, garage, and stables. A compulsory subscription would cover the upkeep of the gardens, which would be in the charge of an elected committee, and the park lands might be let.

Even such a list of purposes to which these houses might be put in order to preserve their lives can by no means be exhaustive. The alterations would need to be executed with great care, and by one who had real knowledge of and sympathy with the building. The aim should be to interfere as little as possible with the main fabric and its embellishments, the necessary alterations being undertaken, as far as possible, by means of removable additions and partitions rather than by structural alterations. The task is both a difficult and a delicate one requiring a combination of scholarly discrimination and constructive ability.

The point that we desire to emphasize is that before it is decided to destroy a building of this kind, or even to allow it to sink into senile decay, thorough consideration should be given to all the useful purposes to which it might be adapted so that it may continue to serve mankind in a new, perhaps less congenial, but not less useful capacity. In this way such records of our history may not be for ever obliterated, but will remain to delight, to instruct, and, not least, to serve posterity.

In Defence of the City Churches

"The London City Churches; Their Use, Their Preservation, and Their Extended Use" is the title of a handbook that has just been issued (price 1s.) by the London Society, through Mr. Fisher Unwin. It is a useful book, not only because of the excellent summarized histories contributed by Dr. Philip Norman, F.S.A., but because it provides many powerful arguments against the destruction of the churches. Several pages are devoted to scheduled information relating to the work of the churches, and from this the reader obtains an astonishing insight into the real practical usefulness of these buildings, many of which are threatened with destruction because they are alleged to serve no useful purpose! Every church except one has Sunday services, and all except two have week-day services; while in most cases the churches are used for a variety of other purposes, such as organ, instrumental, and vocal recitals, for classes and lectures, and for social work. In most cases, also, the buildings are associated with a City company or some civic organization, which gives them a further hold upon the community. The Rev. Arthur G. B. West contributes a section which sets forth the work that the churches are doing at the present moment in the way of rendering financial help to church work in the Metropolis and elsewhere, and he offers some thoughtful suggestions for making still further use of them. On the score of utility a strong case is thus made out for their preservation. But when all is said and done, the strongest argument for the retention of the City churches is that they are historical monuments of great architectural value. This is the consideration that should count most of all. Shall it ever be said that the richest city in the world was too poor in spirit to preserve them?

Sky-signs and Architecture

If the sky-sign has come to stay, and apparently it has, architects are confronted with the unenviable task of providing for it in their elevations. Seen by daylight it is not a thing of beauty, with its ugly iron frame (often obscuring features of architectural value), its equally ugly lettering, figures, and devices. By night it pierces the darkness with its horrid brilliance, and causes the heads of respectable citizens to whirl, their eyes to ache, with the polychromatic vigour of its movement. Wheels that everlastingly revolve without making any forward progress; ladies that dance with limbs that disappear before they change position; streams of light that rush into one another and never meet; bottles of wine that rival the widow's cruse of oil in their limitless content; these and other devices may make a brighter—a madder—London, but they do nothing to improve the architectural amenities. If sky-signs are to remain they should be designed by architects, who at least could place them where they would least interfere with architectural effect. But will they remain? The increase in street casualties due to sky-sign-bewildered people standing helplessly in the middle of the road may possibly put an end to them.

Discoveries at St. Helen's, Bishopsgate

Demolitions and rebuildings, though often deplor
sometimes have their uses archæologically. A cas
point is that of St. Helen's Place, Bishopsgate, on
whose rows of mellow early nineteenth-century ho
has lately been demolished to make way for new
buildings. The excavations which had to be n
provided an excellent opportunity for archæolo
research in connection with the church of St. Hel
As a result, the site of the nunnery which formerly s
adjacent to the church has been revealed in detail.
excavators, it is stated, have discovered the sites of
cloister, dormitory undercrofts, chapter house, and n
chapel, north of the church, all at a distance of n
feet below the present ground level. It is of course
known that the church, as it at present exists, act
contains part of the nunnery; what is apparently
northern aisle being actually a separate church in w
the nuns used to worship. The conventual buil
stood beyond it. A new alley-way has been excav
at the side of the church, from which it is possible cl
to examine the "finds," which include (in the ch
wall) the outside of the door which connected the
quarters with the chapel, and two "squint-holes."
buildings of St. Helen's Priory were demolished in
and upon their site the houses lately destroyed were
We understand that the church is to be thoroughly
with in a volume to be issued by the London Co
Council and the London Survey Committee.

The Dearth of Skilled Labour

Gilbert himself never conceived a more absurdly
crous situation than that which is provided by the bui
trade at the present moment. On the one hand we
work in plenty waiting to be done, and on the oth
army of idle hands that would be only too willing to
were they allowed to. And why are they not? M
because officialdom stands in the way. "There
said an authority last week, "swarms of brickla
labourers who, after a short period of training, woul
proficient bricklayers, but the trade unions are still st
opposed to a dilution policy; and therefore appar
the only remedy is to train more apprentices." In
meantime large numbers of bricklayers, attracted b
reports of high wages, are emigrating to the United S
with the result that the situation here grows steadily
If the building industry is to arrest the progress o
creeping paralysis before it has done irremediable
not only to the trade itself but, what is more impo
still, to the national interest, it will have to find a w
providing a great increase in pivotal operatives.
resources of industrial statesmanship should not be un
to the occasion.

A Question of Taste

"The East Sussex News" for October 12th co
an illustrated article that, if it is allowed to go unchalle
may conceivably mislead the good burgesses of
on a question of local amenity. The article is he
"Business Enterprise at Lewes," and below are
side by side, views in Fisher Street before and after
recent building operations. The first view shows
picturesque old buildings of Tudor character, part
and weather-tiled; the second, the modern building
has taken their place—a plate-glass and sham half-t
frontage. This is said to be "appropriate in a tow
Lewes," and to have "earned the commendation
who have the interests of the amenities of Lewes at h
It is possible that the writer of the article is doin
inhabitants of Lewes an injustice. We do not
If they do really prefer the new building to the old
the local architectural society should waste no ti
providing the necessary enlightenment.

The Gothenburg Jubilee Exhibition

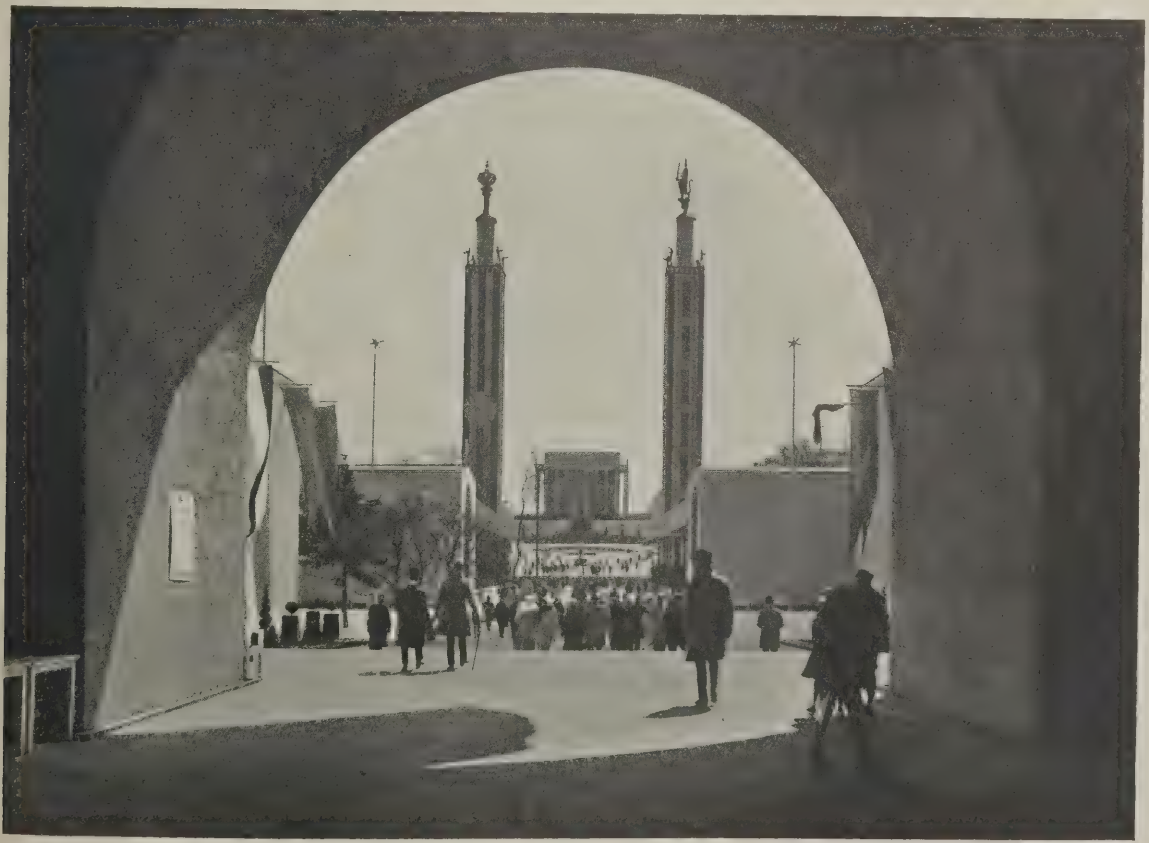
By J. MURRAY EASTON, A.R.I.B.A.

THE holding of a public exhibition is a severe test for all those concerned in it—a test more especially of their sense of the fitness of things. Gothenburg is a prosperous city, the second in Sweden, ut it numbers only 230,000 inhabitants, and granted the ourage and energy required for such an undertaking, it night still have fallen a victim to the rival claims of ostenation or parsimony or of that combination of both to which xhibitions are peculiarly liable. The city, however, has ome through the test triumphantly, and has fittingly elebrated the three-hundredth anniversary of its foundaion by Gustavus Adolphus—a result due in large measure o the architects, Messrs. Arvid Bjerke and Sigfried Grieson. heir appointment was the result of a competition and, as vas to be expected, the original lay-out was considerably nodified in execution.

It would be more accurate to use the past tense, since the xhibition is now closed and doubtless in the hands of the xhibition-breaker (if such a trade category exists), but it s hard and somewhat sad to realize. The mouldering esolation of the "White City" proclaims it the better way, ut for the purpose of description it is less funereal to speak f things as if they still existed.

The exhibition ground lies on the south-eastern outskirts of e city, and by reason of its irregular shape and hilly nature resented problems of planning whose solution demanded onsiderable ingenuity. As the accompanying plan shows, the y-out of the main portion is formal without being symetrical. The *Place* in which is the main entrance is axial ith the principal avenue of approach, whose vista is closed y a permanent building—the new art gallery—and it is tended ultimately to form here the artistic centre of the ty, with a concert hall and a theatre, one on either side. his first glimpse of the exhibition is characteristic of the hole. Reproduction of historical styles is completely absent, but indebtedness to them is not. Shapes tend to be fanciful, and proportions show a bias in favour of the tall and narrow, sometimes of the low and broad. The relation of pier to opening in the art building is too equal to be quite happy, but there is no question of the vigour and dignity of the whole, and the treatment of the terrace and its flights of steps is quite admirable. Its huge granite blocks roughly hewn with strongly-marked channelings have a powerful effect in themselves, and contrast well with the small yellow bricks of the main structure. Inside, the rooms are kept extremely simple, and problems of lighting are not so troublesome as in London since few of the pictures are glazed.

The change of axis necessitated by the nature of the site and the placing of the permanent art gallery is effected by means of a short entrance hall on a cross axis. This terminates in a domed space from which there is an uninterrupted vista up to the Memorial Hall, which dominates the whole ground. The vertical note is here again stressed, and the effect is curious and striking. It is better, however, seen in perspective, for it then loses the slight air of hesitating whether to be high or long, which a front view produces, and it becomes definitely a tall, thin building. Exhibition structures stand half-way between stage scenery and architecture proper. Functionally they are subject to the same rules of criticism as the latter, but not structurally. For example, we accept without question their right to simulate masses of stone provided they do not labour the deception. Nevertheless, it is refreshing to find a treatment that reflects in some degree the construction, and that takes advantage of its very limitations to produce gay and even *bizarre* effects, unsuited to permanent buildings. The piers of this Memorial Hall, for instance, are thoroughly in accord with their wooden construction, and the pattern of the wall surface behind relieves a mass of plain stucco from dullness

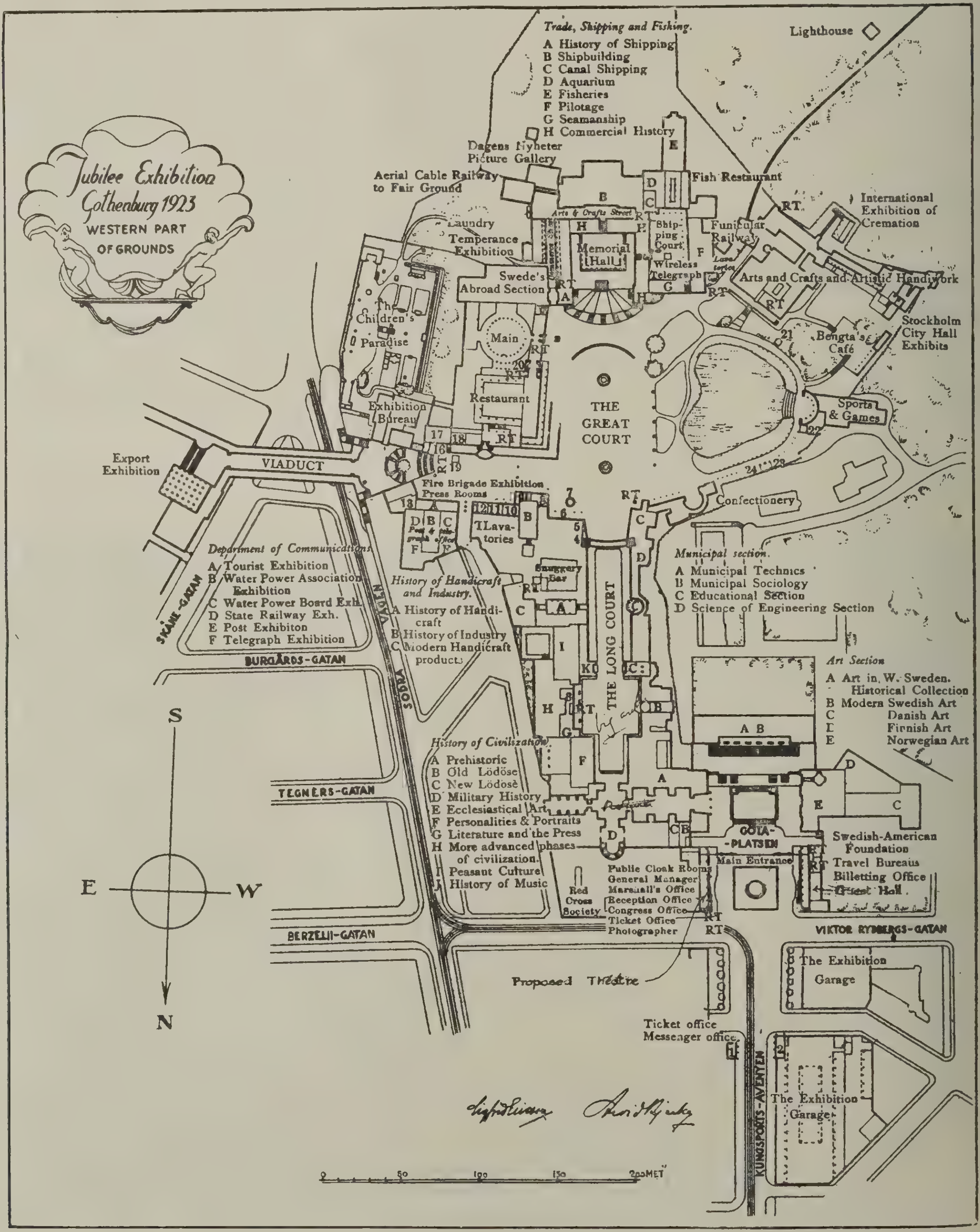


THE MINARETS FROM THE "ENTRANCE CUPOLA."

or the alternative obligation to break out into masonry details. The restaurant, too, on the west side of the great court, is frankly wooden design, and it is probably the most completely satisfying of all the buildings. Light and shade and colour have here been used with delightful results. The blinds are orange, and reflect a warm light on the soffit and the loggia, and the interior is extraordinarily well lit in spite of the cutting off of so much direct light. Great play has been made with drapings of all kinds. In the circular dance hall adjoining the restaurant, for example, the bell-shaped velarium with its radial lines is the very focus of the design, and the supporting columns with lighting caps (somewhat on the lines of those in the Grosse Schauspielhaus, Berlin) echo its form so that the whole room rejoices in the gaiety of these sweeping curves that recall Chinese roofs.

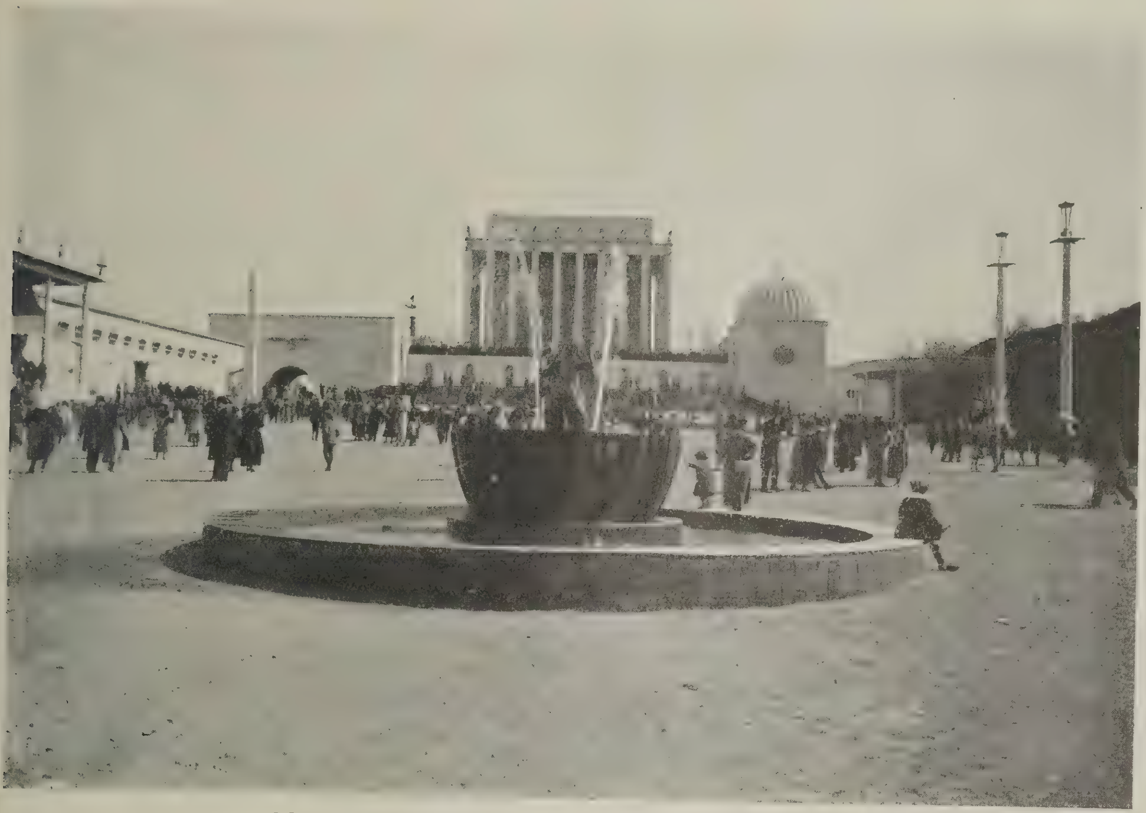
To the east of the great court a bulge in the shape of the site suggested one of the happiest features, a large lily por (it had to be excavated) surrounded by rock gardens an pergolas, and flanked by buildings, the most importar of which is that devoted to the Arts and Crafts Sectio This was designed by Mr. Hakon Ahlberg, of Stockholn and its front has a less architectonic, but a more delica quality than the other buildings—more art-and-crafty, one says. A little Roman atrium within is very charmin and the collection of furniture, metal, and glass, etc., mak it one of the best exhibits.

On the farther side of the pool from the great court columned structure, segmental in plan, closes the vist The reflection in the water of its tall, slim columns and of i supporting pergolas is delightful, but in itself the con position is deficient in the horizontality necessary to counte balance so much vertical movement. Recrossing the grea court one may well pause to enjoy the two bowl-like four

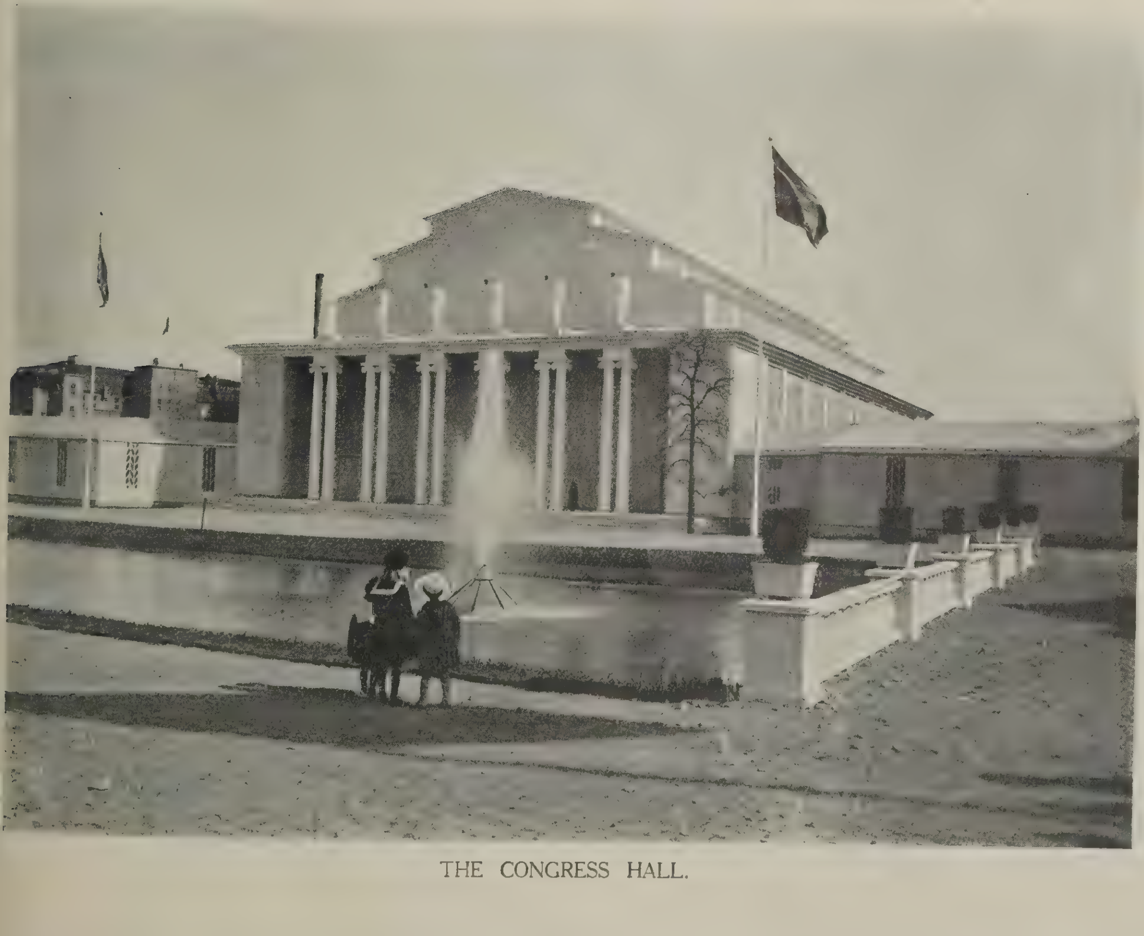


THE GOTHENBURG JUBILEE EXHIBITION: PLAN OF THE WESTERN PART OF THE GROUNDS.

The Gothenburg Jubilee Exhibition : The Memorial and the Congress Halls



THE GREAT COURT AND THE MEMORIAL HALL.



THE CONGRESS HALL.

THE LIBRARY
OF THE
UNIVERSITY OF ILLINOIS

ins with bronze figures. The basins are of black concrete, ıd the figures, their patina a vivid green, are vital and ·corative modelling—the work of Mr. Carl Milles.

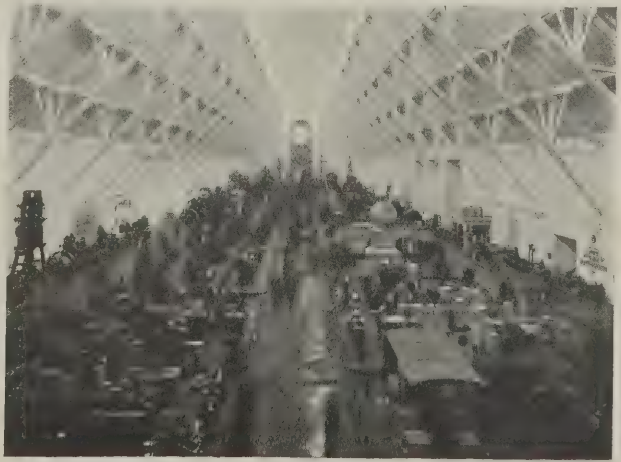
To the north of the restaurant building a viaduct leads the industrial section, which lies in a separate wing of the ›unds, separated by streets. This viaduct is of wooden ›nstruction, and is fringed with shops, but it is paved with icks, and has all the appearance of a permanent road. debouches into a right-angled space divided into courts own as the Iron, the Stone, and the Timber, and, fronting first-mentioned, is the Machinery Hall, the largest single ilding in the exhibition. Austere, as befits its contents, it yet in some respects the finest interior. The length is over ›ft., the width about 115 ft., and this great space is covered a pointed roof supported on timber trusses. These nsist of upper and lower beams, with struts between them d to the purlins. No tie beams of any kind are used, and roof seems to be a development of the primitive form of ıstruction that consists of leaning two beams against h other. Make the beams huge wooden girders and build wall a little distance from their base, and you have the chinery Hall. But the simplicity of the idea is the simcity of a great idea, and the effect is remarkable. The er beams are bowed, and this adds to the impression of ality and strength. One thinks of Westminster Hall and St. Pancras Station, and then, with strong feelings of enthusiasm, one recollects Olympia, and marvels at the erence that imaginative handling can make in a plain blem of construction. Here the lighting adds to the ct. A continuous range of vertical lantern lights, small xtent compared to the space lighted, gives just the right mination and avoids the glare produced by large areas of f glazing. The machinery is interesting to those inested in machinery. We others may at least testify to being very nicely polished and most profuse; and our ineer companion, who was observed to be yawning find his hand in the Arts and Crafts Section, is now transned. A large section devoted to various industries oins, and the exhibits here, as everywhere, are admirably nged. Stands are widely and formally spaced, and ly all are pleasing in design.

he non-technical man is not forgotten. A little hall, ifiably known as the "Oasis," greets him as he emerges the Machinery Hall, and farther on, in the Fabrics ion, a fantasy is staged. The walls are decorated by a -known painter, Mr. Isaac Grimewald, with pictures in advanced" style in the gayest of colours, all produced of pieces of cloth. These crazy-quilt pictures are tions of real humour and gaiety. Much sound matter ws of wool and wood, stone and clay, glass and chemi- and then across another bridge is the fair ground. A sant formal eighteenth-century house stood here, and as been preserved and used as the basis of the design for an equally pleasant and formal court with rectangular pond, on one long side of which stands a restaurant, on the other the Congress Hall. The latter, used also for concerts, is another example of an interior conceived in terms of imaginative construction. Wooden roof trusses are again used, this time elliptical in shape and close-boarded so as to present a series of solid arches which spring from the ground. The roof itself is stepped back in a series of rectangles, as it were, the extrados of a masonry arch bonded into brickwork. The vertical surfaces of these steppings are glazed, the lowest forming a series of (probably) the largest double-hung sashes extant. Acoustically this hall has been a great success in spite of the very large area of glass. The solid projection of the roof trusses breaks up the sound waves and prevents echo—masking, as it does, the windows, and the back of the hall is lined with felt for absorption.

Reasons of space forbid mention of the more hilarious attractions provided, but economy of time urges a return to the central part by means of the overhead cable railway. To dine at the Central Restaurant is to receive confirmation of the excellence of Swedish catering; further, it provides an opportunity to see the illuminations, which are handled with an intelligent regard to values. The minarets which flank the entrance to the great court and the Memorial Hall are the most brilliant, and they dominate the scene. Round the pond lesser lights lend gaiety without destroying the charm of darkness and, as we return to the domed entrance vestibule, we see one of the best contrived effects —the dim lights before the altar in the chapel devoted to Ecclesiastical Art.

This description is confined to the Jubilee Exhibition. The short period exhibitions devoted to aviation, automobiles, and town planning would demand separate notice. Reference has been made to the skilful use of timber construction, and it may be added that nearly all the buildings are so constructed, the plastering being done on expanded metal or reed lathing. Many of the roofs are covered with iron plates, not in the corrugated form we are familiar with, but closely resembling copper roofing. These plates are painted and their appearance is exceedingly pleasant. To an architect nothing could have been more interesting and stimulating than a visit to this exhibition. The various buildings, by the very freshness of their design, gave scope for criticism, but they were never dull, never were mindless repetition of plasterers' detail, and never exposed even to the inquisitive eye the hideous rawness of backs or flanks that make many exhibition buildings a nightmare when seen from unanticipated viewpoints. To have conceived and carried out all this is matter for the warmest congratulation to the architects, the contractors, and, not least, to the vigorous civic spirit which organized and paid for it.

THE EXPORT SECTION



THE GREAT MACHINERY HALL.

The Caird Hall, Dundee

JAMES THOMSON, F.R.I.B.A., City Architect

THE Caird Hall and Council Chamber, opened on Friday last by the Prince of Wales, is a gift to the citizens by the late Sir James K. Caird, Bart., LL.D., and his sister, Mrs. Emma Grace Marryat.

The building occupies the entire south frontage of a future square, a large part of which was formerly the Greenmarket. The two wings yet to be built form the east and west sides of the square, and the north side is open to the High Street. In the future the Hall will have its entrance from this square. Statuary groups are proposed for the large pedestals terminating the steps, and these groups will be on the centre line of each of the footways of the square. The colonnade has been left plain and severe, of monumental aspect and of great scale, as befitting its commanding position. There are ten Doric columns in the colonnade, each 4 ft. diameter, and 32 ft. high, the bases being of a somewhat novel design so that circulation of crowds may not be impeded. The square pillars terminating the colonnade form the background for the statuary groups. The doorways are plain with circled heads filled with stone panelling, the rustication and the shadow cast by the circular recess being in keeping with the colonnade. The columns are each in seventeen stones, the bases weighing nearly two tons each. The lighting of the colonnade is by lamps in the ceiling.

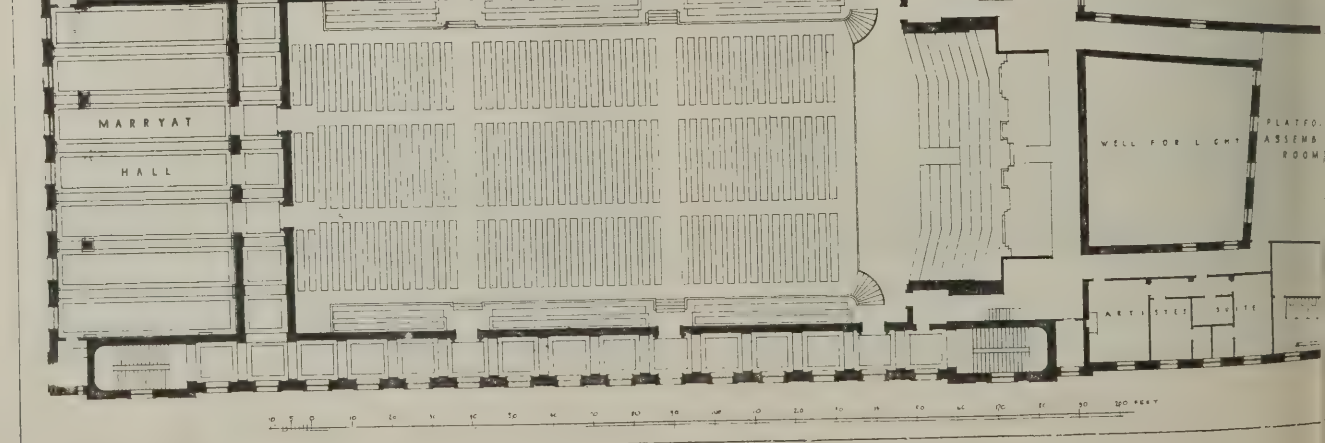
Through the three doorways in the centre of the front is reached the main entrance vestibule. This is floored with marble and encloses a marble stairway. The ceiling decoration consists of five coffers with fine moulded cornices enriched with modelled work, and the capitals to the pilasters are based on one of the best Roman models. The corridors are of ample width and are carried round three sides of the hall. They are designed on simple lines, occupy an area of nearly a quarter of an acre, and form excellent promenading spaces during concert intervals. In the south wall of the north corridor facing the main entrance is the bust of Sir James Caird with an inscribed record plate below.

The hall is spacious and monumental. The ceiling is divided into three great coffers, in which are the ventilating grills, and is heavily moulded and enriched, the des
being suggested by the lay-out of the steel work s
porting the roof. The walls of the hall reflect the ceil
in that the enriched doorways correspond to the beams
the ceiling, and the panel between the doorways to
ceiling panels. The positions of the doorways are ag
accentuated by the enriched panels in the balcony fro
Natural lighting is by clerestory windows, and artifi
lighting by means of electroliers suspended near
ceiling and forming part of the decorative scheme.
the centre of the organ case and above the manu
in the most distinctive position in the hall is set a
presentation of the Coat of Arms of Dundee. The seati
which consists of tip-up chairs, is removable in the ev
of its being necessary to clear the floor at any time.
platform can accommodate an orchestra numbering
and in addition a choir of 300 voices can be seated
the chorus seats. The acoustics of the hall are regar
by speakers, singers, and instrumentalists as practic
perfect. The hall will accommodate an audience of 3,3
It is anticipated that at a future time the hall will
worthily decorated in colour, and the great panels beh
the side balconies and elsewhere will be filled with sce
relating to the history of Dundee.

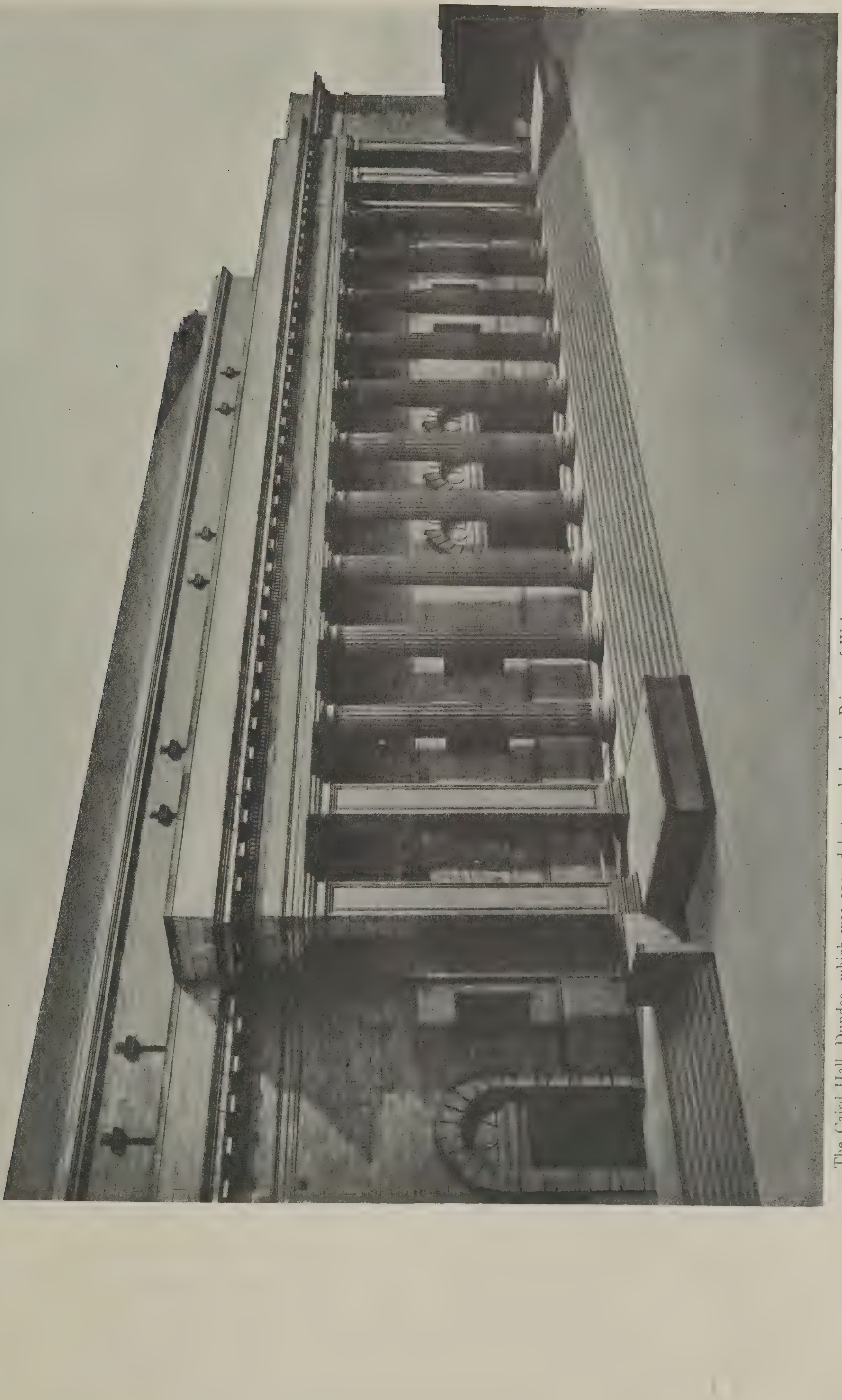
From the west corridor, by the curtained doorways
entered the Marryat Hall, which is intended for the
receptions, banquets, private dances, etc. It is decora
in the Louis XV period, with mirrored ends. This hall
be seated for chamber concerts, accommodating an audie
of 550. Beneath the Marryat Hall is the Lord Provo
Room and the council chamber, both decorated in
Adam period.

Mr. James Thomson, F.R.I.B.A., the architect,
assisted by Mr. Vernon Constable, A.R.I.B.A., who
general charge of the work, including the decoration of
hall; by Mr. James M'Lellan Brown, A.R.I.B.A., who
charge of the council suite and offices, by Mr. Percy Ton
engineer for the reinforced concrete work, and by
John Darge, clerk of works.

We shall illustrate the building more fully in a fu
issue.



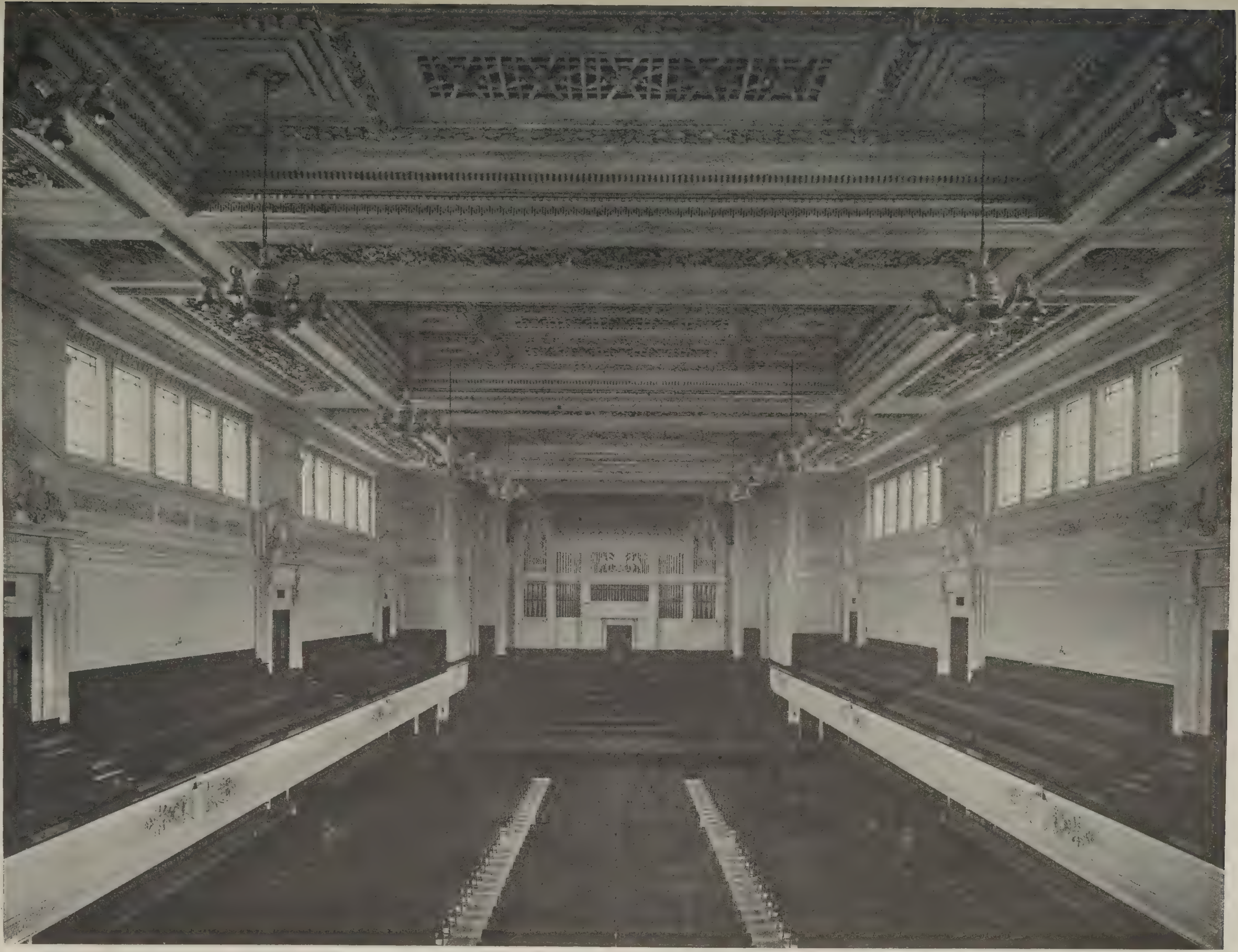
PLAN.



The Caird Hall, Dundee, which was opened last week by the Prince of Wales, occupies the entire south frontage of a future square, a large part of which was formerly the Greenmarket. The two wings yet to be built will form the east and west sides of the square, and the north side is open to the High Street.

THE LIBRARY
OF THE
UNIVERSITY OF ILLINOIS

James Thomson, F.R.I.B.A., City Architect



The hall is spacious and monumental. The ceiling is divided into three great coffers, and is heavily moulded and enriched. The walls of the hall are in harmony with the ceiling. The positions of the doorways are accentuated by the enriched panels in the balcony front. In the centre of the organ case are set the Arms of Dundee.

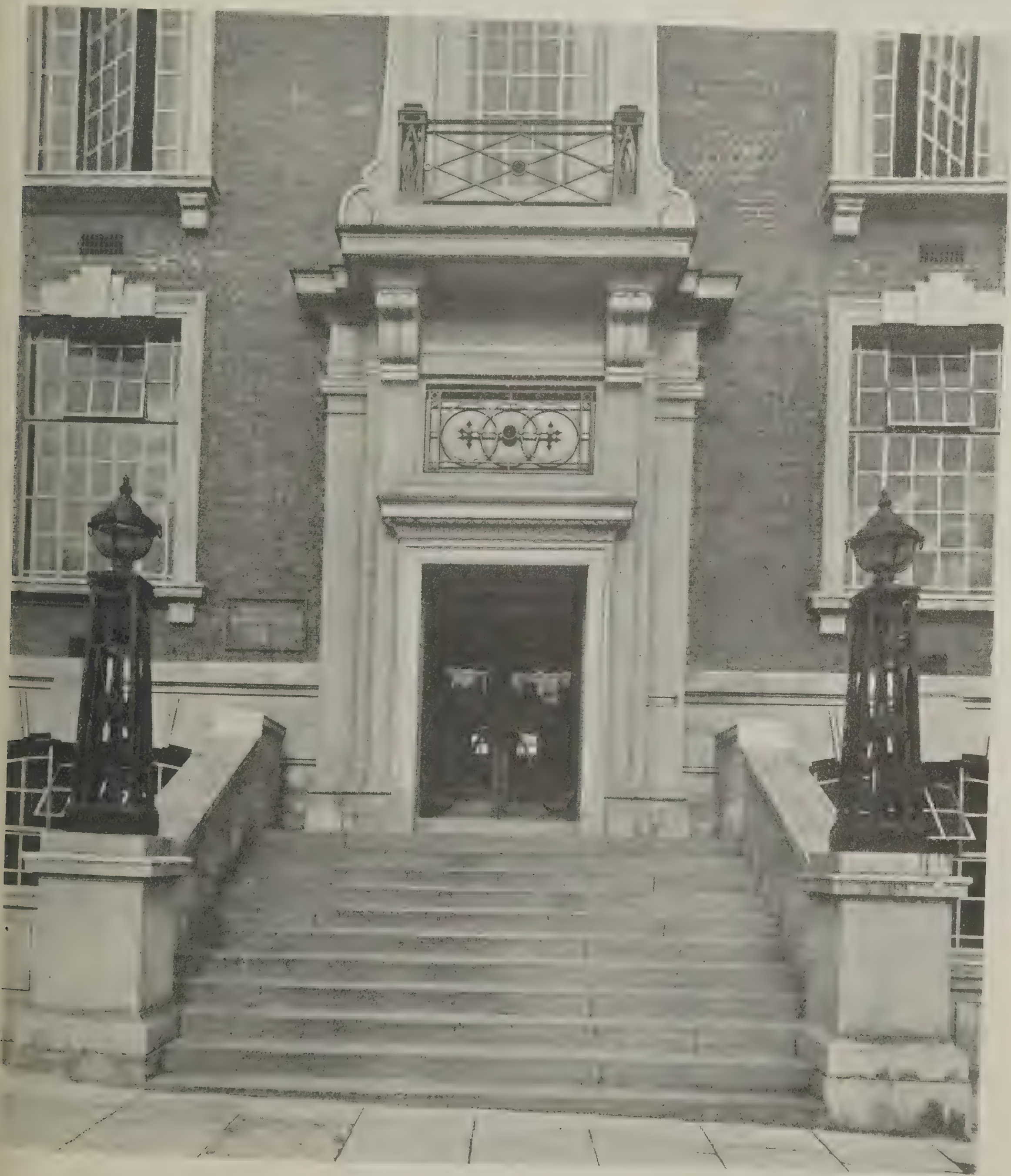
THE LIBRARY
OF THE
UNIVERSITY OF ILLINOIS

Islington Municipal Buildings

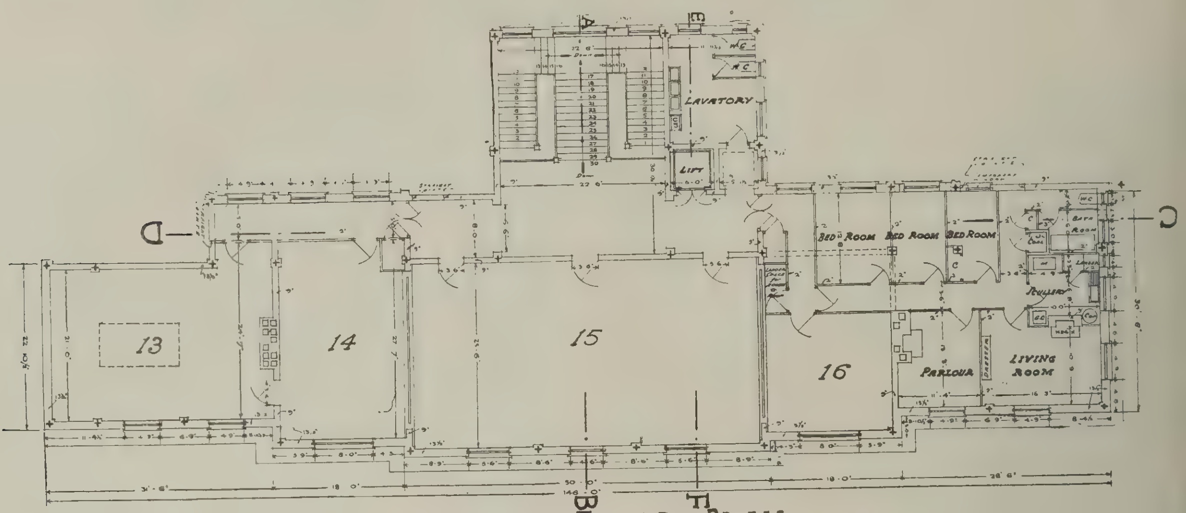
E. C. P. MONSON, F.R.I.B.A., Architect

THE first portion of the new municipal buildings for Islington has been erected with a frontage to the southern part of Tyndale Place, Upper Street, N.1. It is four stories high, and comprises ound floor, entrance floor, and first and second floors. e spacious forecourt is laid out with grass and flower ls and enclosed with a massive stone wall. The building steel-framed, and all the steelwork is enclosed either in id concrete or brickwork in cement. The floors, roofs, l stairs are of concrete reinforced with rods and expanded tal; the roofs are covered with asphalt; and outside escape stairs and balconies are provided to comply with requirements of the London County Council under the ndon Building Acts Amendment Acts. The yard at the l of the building, for the unloading of material and the ivery of coals, etc., has been paved with tar macadam. he façade of the building is designed in the free Renaissance style. It has a rusticated Portland stone base to the lowest story, and the upper part is faced with mulberry-coloured Luton bricks, with Portland stone dressings to the windows and surmounted with a bold moulded cornice. The carving on this front, which is very good, was done locally.

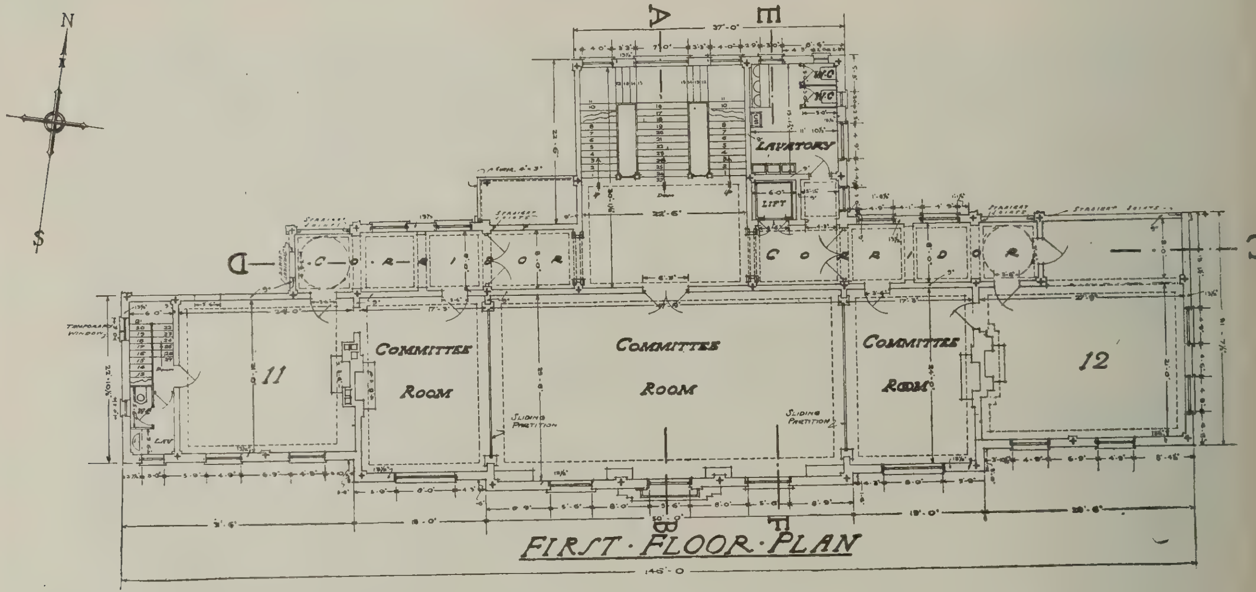
The main entrance is approached by a flight of blue Forest of Dean stone steps, and the front doors, which are of solid teak, lead to a marble-lined vestibule. Up a few more steps and past black and gold marble monolithic columns entrance is gained to the entrance hall, and right opposite are the staircases leading downwards to the ground floor and upwards to the first and second floors. The main staircase has marble treads with inserted carborundum strips, and the walls are finished in "stuc" plaster, jointed to imitate stone. The balustrade is of ornamental wrought iron with a solid bronze handrail. Each floor is designed so



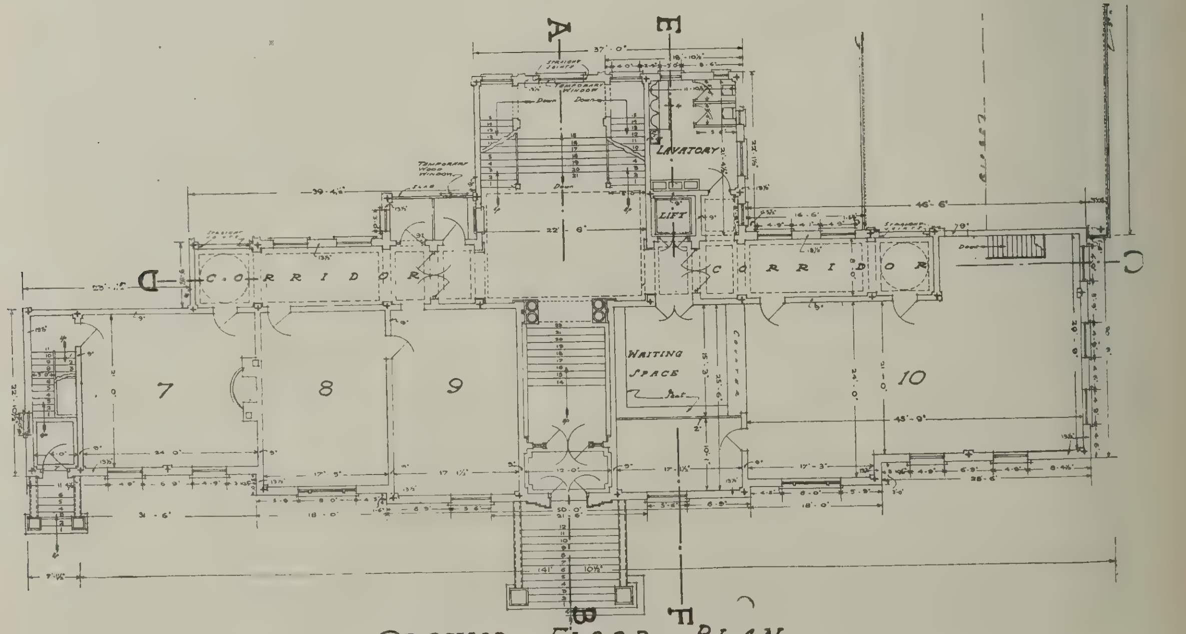
A DETAIL OF THE ENTRANCE.



SECOND · FLOOR · PLAN



FIRST · FLOOR · PLAN

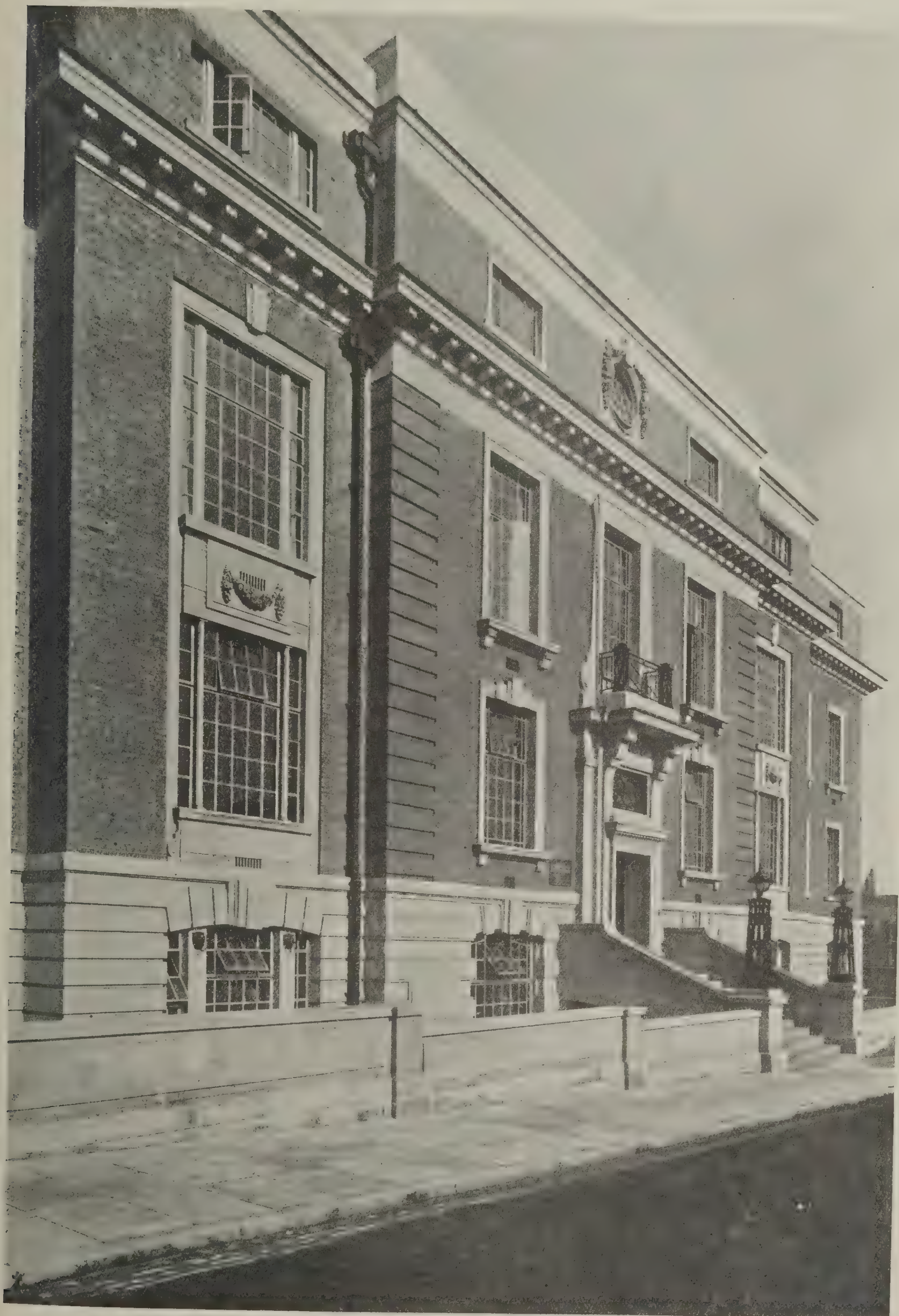


GROUND · FLOOR · PLAN

ISLINGTON MUNICIPAL BUILDINGS: PLANS OF THE GROUND, FIRST, AND SECOND FLOORS

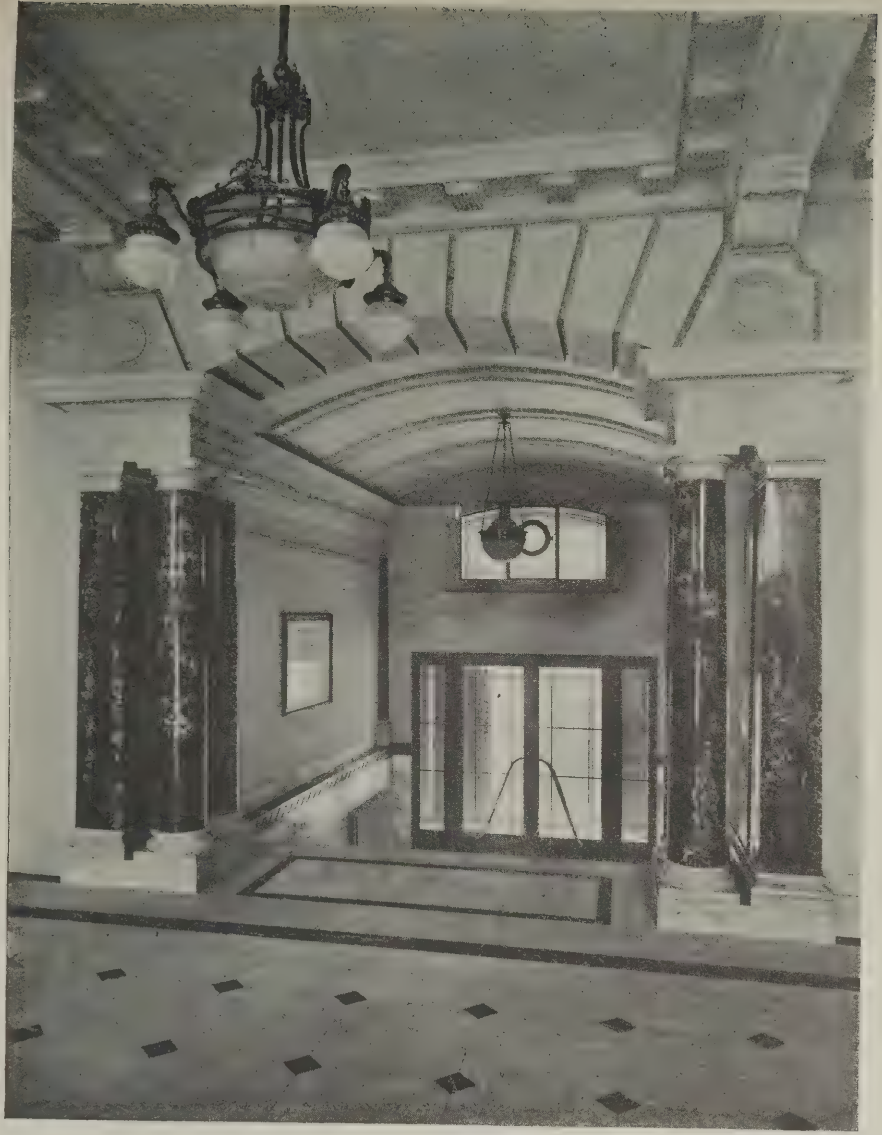
Current Architecture. 206.—Islington Municipal Buildings: The Main Front

E. C. P. Monson, F.R.I.B.A., Architect

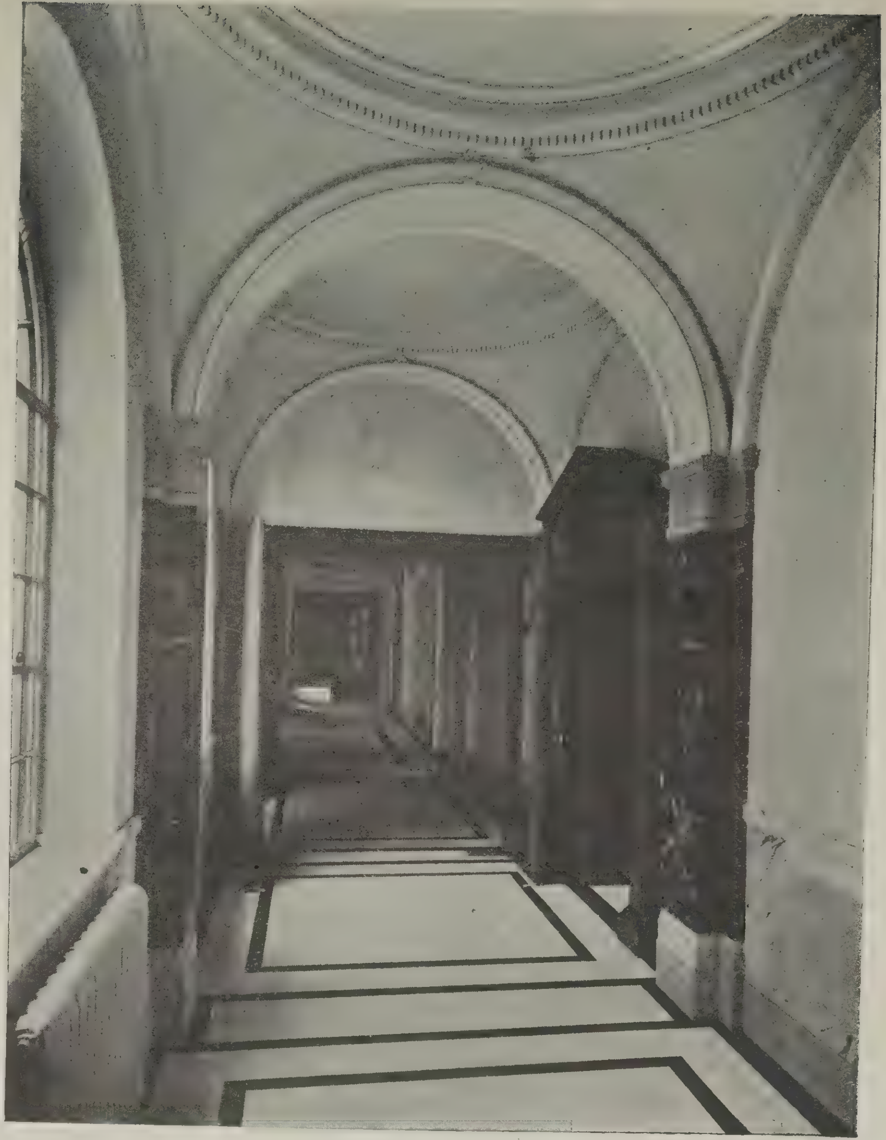


This façade, which follows the free Renaissance tradition, has a rusticated Portland stone base to the lowest story, and the upper part is faced with mulberry-coloured Luton bricks.

THE LIBRARY
OF THE
UNIVERSITY OF ILLINOIS



THE ENTRANCE HALL.



A GROUND-FLOOR CORRIDOR.

ISLINGTON MUNICIPAL BUILDINGS. E. C. P. MONSON, F.R.I.B.A., ARCHITECT.

as to obtain the maximum amount of light, and has a corridor from which the several rooms and offices are approached running the entire length of the building. All the rooms have either an east or south aspect.

The ground floor provides accommodation for the borough engineer's general office, the assistant engineer's, the road and sewer inspectors, the cemetery department, the special inspectors under the medical officer of health, and the boiler-room and strongrooms, etc.

The entrance floor is set apart for the town clerk and his department, including those dealing with valuation, registration, and housing.

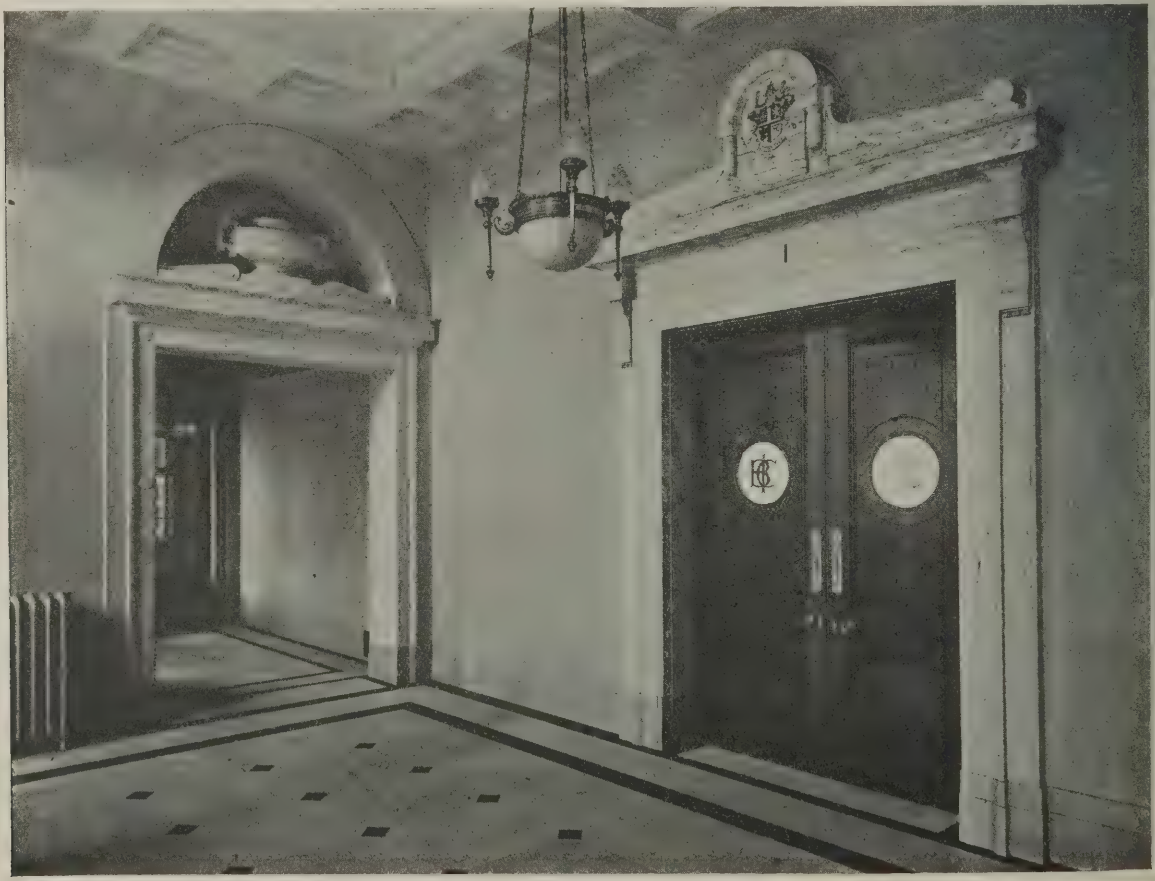
The first floor accommodates the mayor's parlour, the medical officer of health and the assistant medical officer of health, and three committee rooms, which by the use of rising partitions can be made into one large room when desired. There is a private staircase and entrance from the mayor's parlour and town clerk's room direct to the street. The mayor's parlour is lined throughout in polished English oak, and has a fitted bookcase and a side table. The oak is handsomely carved and finished, and over the fireplace are the mantled arms of the borough standing out in relief. The ceiling is enriched and slightly domed. Each of the three committee rooms has a polished English oak dado 7 ft. high all round, carved oak chimneypieces, enriched doorways, and ornamental ceilings in fibrous plaster. The fireplaces in the mayor's parlour and committee rooms are fitted with dog grates. The corridor outside the committee rooms has a marble dado, the doors have pediments and architraves in polished English oak, and the ceiling is ornamentally treated with pendentives. The floors in the mayor's parlour, the three committee-rooms, and the town clerk's rooms are of polished oak. The floors of the other rooms are of red "impervious" paving, and those of the corridors and landings are either of marble tiles or terrazzo mosaic.

The second floor provides accommodation for the borough engineer and his drawing office, for the medical officer of health's general and statistical offices, for the sanitary inspectors and health visitors, and for the hall keeper.

At their last meeting the Islington Borough Counc agreed to an extension of the buildings to provide a depar ment for the borough treasurer, a council chamber, separa members' rooms for male and female councillors, and robin rooms, etc.

The first part of the building was erected by dire labour, mostly from Islington, but the following specialis were employed :—

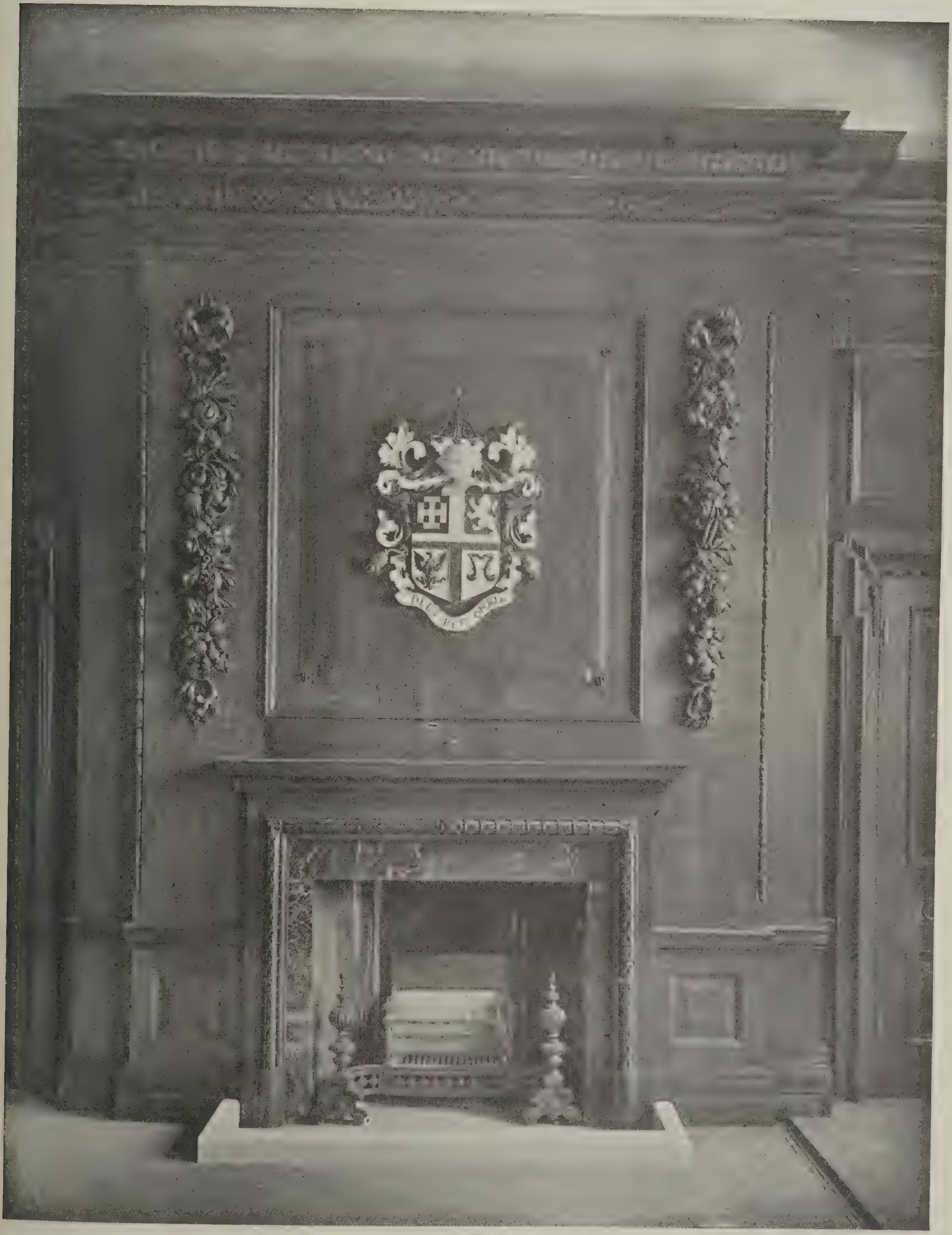
Dorman, Long & Co. Ltd. (steelwork) ; Frank Mortimer ar Son (stonework) ; Boekbinder and Sons (carving for ston work) ; Crittall Manufacturing Co., Ltd. (steel sashes Johnson Reinforced Concrete Engineering Co., Ltd. (rei forced floors, etc.) ; Salter, Edwards & Co., Ltd. (aspha work) ; Clark, Hunt & Co., Ltd. (fire-escape stairs) ; Samu Elliott and Sons (Reading), Ltd. (hardwood joinery) ; H. Martyn & Co., Ltd. (stuc and fibrous plaster) ; Anselr Odling and Sons, Ltd. (marble wall lining and staircase marble and terrazzo mosaic floors); Medway's Safety Lift Co Ltd. (Lift) ; Thomas Shillitoe (jointless flooring) ; Easte Armature Winding Co. (electric lighting) ; Haywards, Lt (copper glazing) ; Furse & Co., Ltd. (Lightning conductors Rosser and Russell, Ltd. (Heating) ; Jones and Willis, Lt (metalwork) ; Wm. E. Farrer, Ltd. (sanitary fittings Stuart's Granolithic Co., Ltd. (granolithic paving) ; Josi Smart and Son (tarmac paving) ; Carron Co., Falkirk Ir Co., Ltd. (stoves, etc.) ; W. R. Leggot, Ltd. (ironmongery H. W. Wilkins and Sons, Ltd. (marble memorial tablets Merryweather and Sons, Ltd. (rising partitions) ; T Luxfer Co., Ltd. (patent glazing) ; John Tann, Ltd. (stron room doors and grilles) ; Art Metal Equipment Co., Lt (metal lockers and shelving) ; Mather and Platt, Ltd. (fi extinguishers) ; Synchronome Co., Ltd. (clocks) ; Automa Telephone Co., Ltd. (internal telephones) ; J. P. White a Sons, Ltd. (furniture) ; Geo. Slade & Co., Ltd. (office fittings Thos. Glenister & Co., Ltd. (office chairs and stool Archer & Co., Ltd. (carpets and curtains) ; Comyn Chi & Co., Ltd. (bronze war memorial) ; Tidmarch and So Ltd. (blinds) ; Peyton and Peyton, Birmingham (elect light fittings).



ISLINGTON MUNICIPAL BUILDINGS: A VIEW ON THE STAIRCASE LANDING, FIRST FLOOR.
E. C. P. MONSON, F.R.I.B.A., ARCHITECT.

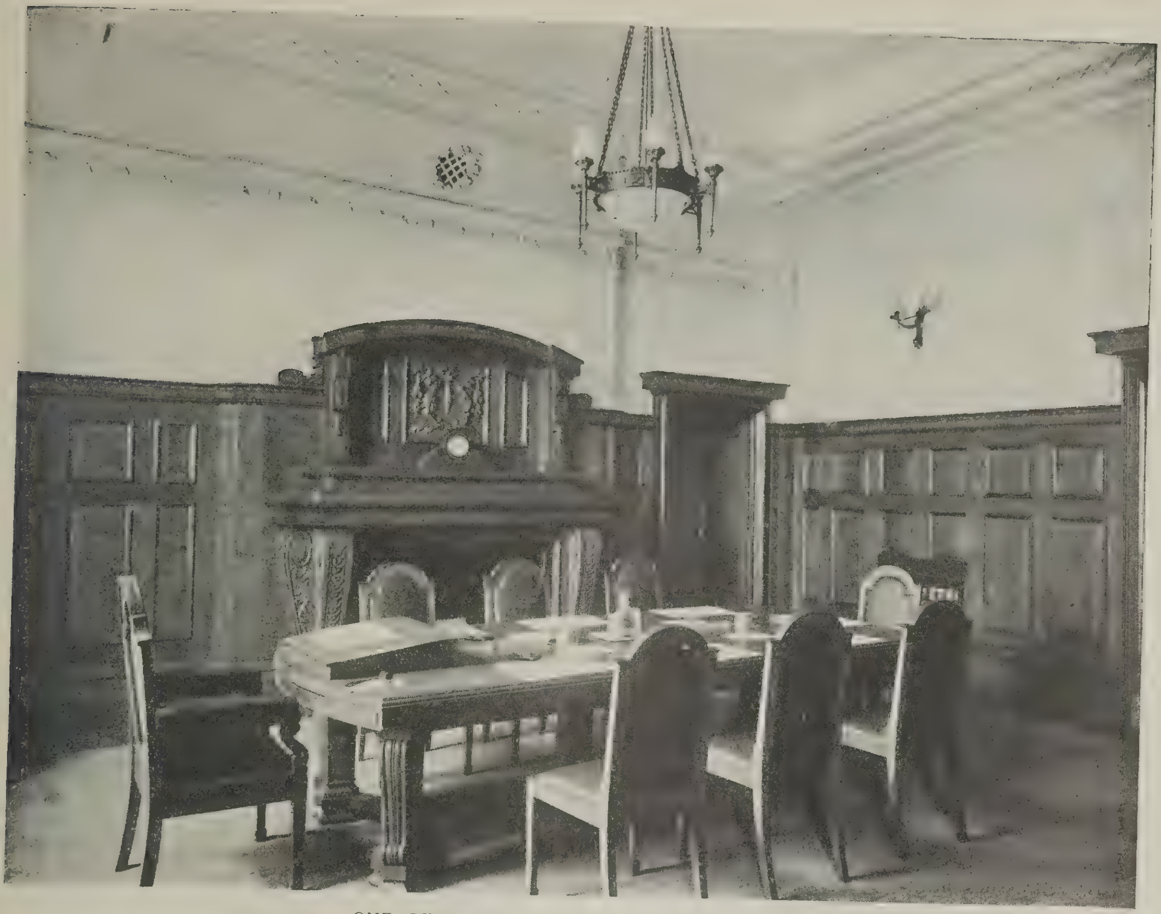
urrent Architecture. 207.—Islington Municipal Buildings: The Chimney-piece in the Mayor's Parlour

E. C. P. Monson, F.R.I.B.A., Architect

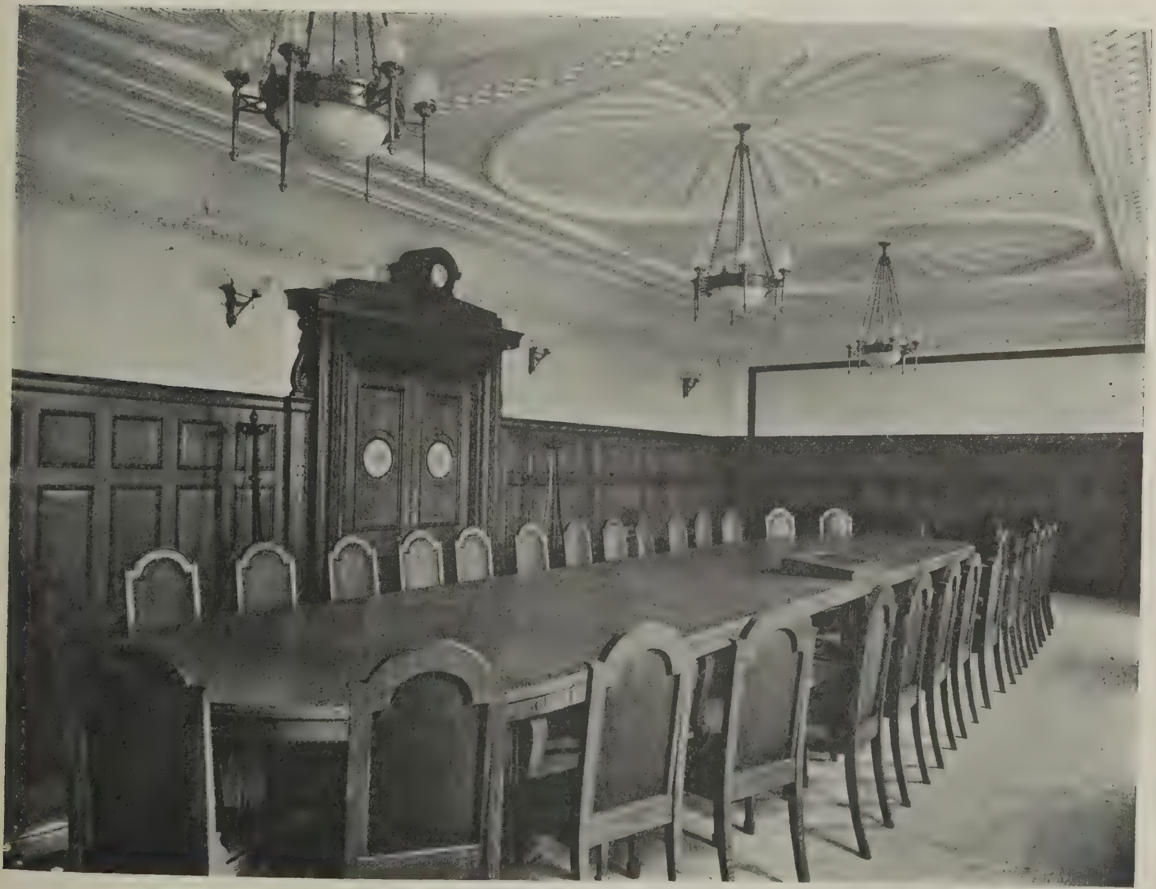


The Mayor's Parlour (room 11 on plan) is lined throughout in polished English oak, handsomely carved and finished, and over the fireplace are the mantled arms of the borough in relief.

THE LIBRARY
OF THE
UNIVERSITY OF ILLINOIS



ONE OF THE SMALL COMMITTEE ROOMS.

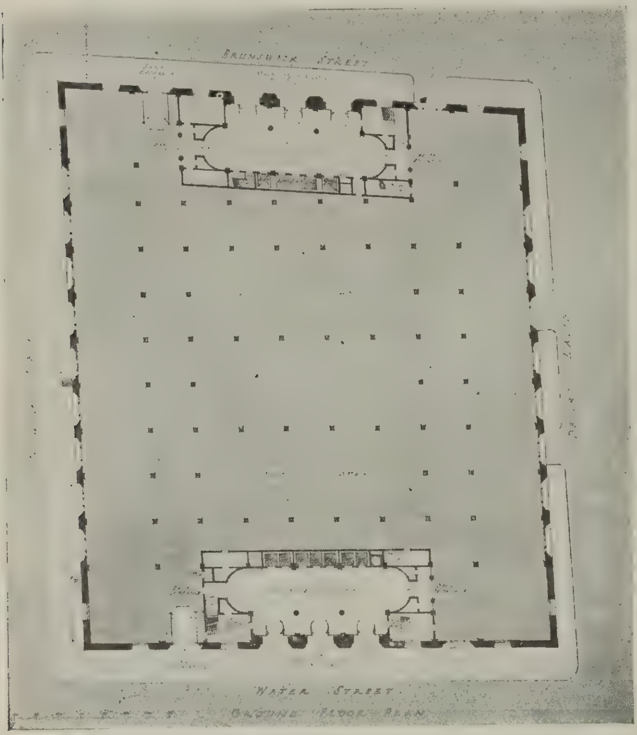


THE LARGE COMMITTEE ROOM.

ISLINGTON MUNICIPAL BUILDINGS E. C. P. MONSON, F.R.I.B.A., ARCHITECT.

The Liverpool Shipping Office Competitio

Messrs. Willink and Dod's Design

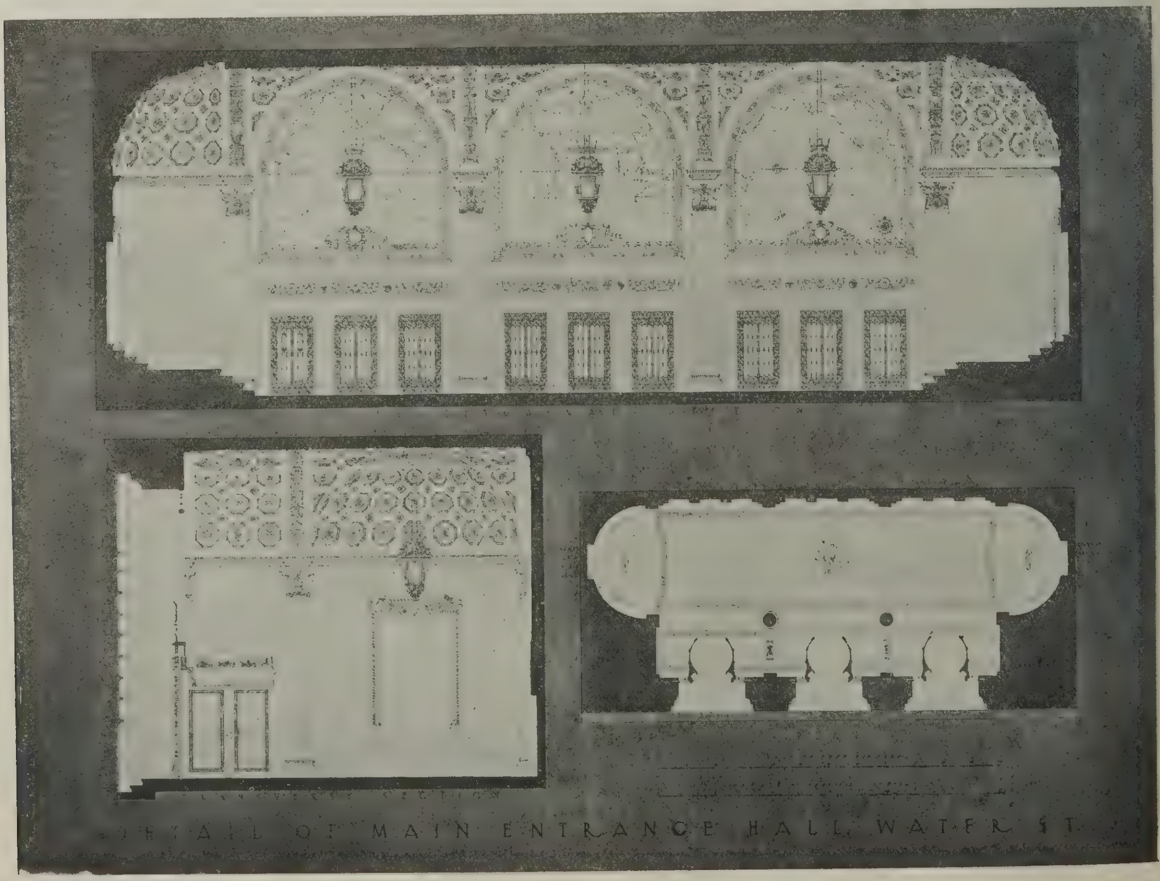


GROUND-FLOOR PLAN.

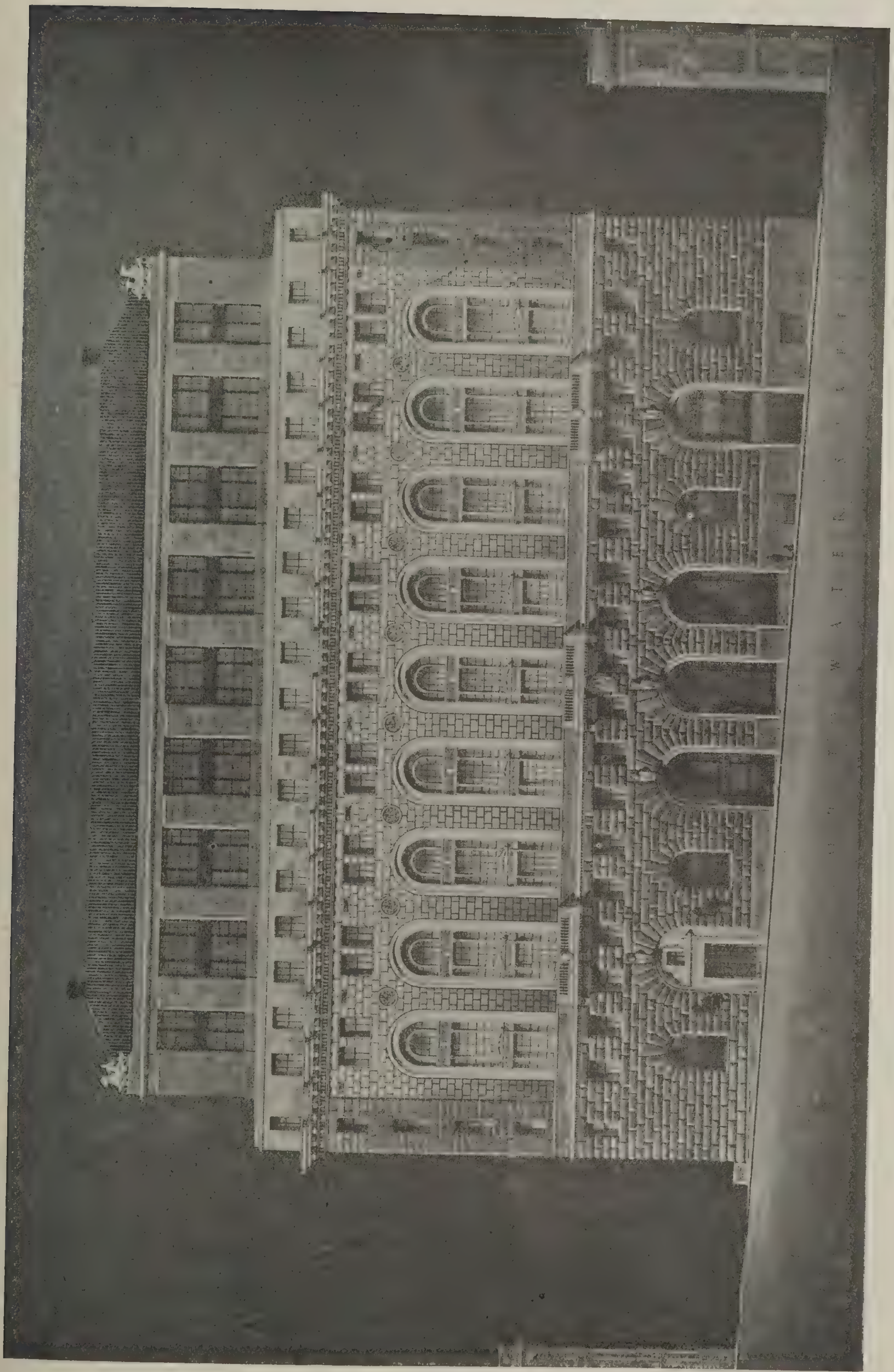
THE design submitted by Messrs. Willink and Dod in the limited competition for a new building to be erected at Liverpool for the Ocean Steamship Co., Ltd. (Messrs. Alfred Holt & Co.) is illustrated herewith. The winning design—by Messrs. Arnold Thornely, F.R.I.B.A., and Herbert J. Rows A.R.I.B.A.—was illustrated in our issue for 17 Octobe Mr. Gilbert Scott, R.A., was the assessor, and t building will cost over a million pounds.

In the course of a criticism of the designs, published in recent issue of the JOURNAL, Mr. Lionel B. Budden, M.A A.R.I.B.A., said: "In the elevational treatment of the building, Messrs. Willink and Dod have produced a desig of great interest. The façades up to the main cornice a inspired by Florentine models of the type of the Palaz Pitti, Strozzi, and Riccardi; and the effect up to and inclu ing the cornice is one of great force and decision. Yet may be doubted whether the massive external form of a early Italian palace, with its widely-spaced windows a great expanses of rustication, can satisfactorily be utiliz as the envelope of a modern shipping office on the scale he attempted. For a building of this size the elevations see to have too few parts, the distances between some of t windows appear to be too great, and the general impressi is that the motives employed have been over-inflate Assuming, however, that a prodigious effect was delibe ately aimed at, there has been a curiously gratuitous lo of scale in the placing of the main cornice a story lower th it need have been. Above the cornice the design chang rather abruptly in character and modelling.

"When all criticisms have been made this design, neve theless, remains unquestionably the second best sent in. an efficient proposition, its plan entitles it to that plac and the virtues of its elevations do so still more emphati ally. Regarded from the point of view of abstract co position each façade exhibits a fine feeling for the broad qualities of architecture, whilst the half-inch details—ve large sheets admirably drawn and rendered—displ unusual resources of scholarship."



A DETAIL OF THE MAIN ENTRANCE HALL, WATER STREET



THE LIVERPOOL SHIPPING OFFICE COMPETITION : THE DESIGN SUBMITTED BY MESSRS. WILLINK AND DOD, F. & A.R.I.B.A., ARCHITECTS.

The Empire Style in Decoration

By F. DE JONG

As the Empire style has been revived a good deal lately, I think that a general review of its origin and of its creators may be of interest to our members and open a wide field for discussion and criticism on the merits and beauty or otherwise of this style for present-day decoration.

Empire decoration is attributed to Percier and Fontaine, whose names have remained inseparable in the history of Art. They are known principally as architects, but they took as much interest in the interior decoration of their buildings as in their exterior, and we may therefore compare them in their work to the Brothers Adam, as they also designed all the interior details, such as ceiling and wall decoration, furniture, fittings, carpets, hangings, so as to make the whole apartment or interior one harmonious scheme.

Maurice Fouche tells us in his *biographie* of these two artists that the beginning of their career was a very difficult and laborious one, but after their first struggles their enterprises were favoured by the fashion of the day which they were able to guide in the way of good taste and on a sound basis.

Percier was born in Paris in 1764 and died in 1838.

Fontaine was born in 1762 in Pontoise and died in 1853. His father was also an architect. He sent his son to Paris in 1779, and it was here that Percier and Fontaine met, and a very strong friendship sprang up between them. Circumstances allowed them afterwards to continue their studies at the School of Art in Rome, founded by Colbert in 1666. In the presence of the masterpieces of the antiques, Percier and Fontaine were struck with the character of calmness and severity which gives such majestic impression to the works of the old Greeks and Romans. It is one of their greatest achievements to have been able to render the antique beauty and specially to have impressed their contemporaries by showing them the way in which it could be adapted to the artistic ideal and to the requirements of their time. They were very passionate in the study of these old masterpieces, and they accumulated a lot of studies and documents. They wanted to see everything, to know everything; they were united by a sincere friendship, they agreed upon a course of study, and after their attendance at the School of Art would continue their studies at their studio, or explore the country.

Although very devoted to the antiques, they did not fail to explore the marvels of Rome in its more recent or Renaissance buildings, palaces, churches, mansions, etc.

They returned to Paris in 1790.

The principal cabinet-maker of the time was a man named Jacob, who had executed the furniture designed by David and Moreau, and who had received orders for the furniture of the Convention. He entrusted Percier and Fontaine with the designs; they adopted the antique style, and this was so successful and so much admired and favoured, that they received several other orders for designs from gold and silver smiths, brass founders, carpet and textile manufacturers at home and abroad. This sort of work pleased Percier, but Fontaine preferred architecture to decoration.

Soon afterwards we find them engaged on sketches for some theatrical scenery for the *Comedie Française*. At that time Percier was twenty-nine years old, and Fontaine thirty-one; their success increased rapidly; they were in the fashion, and it was quite a craze to possess furniture designed by Percier and Fontaine; it was considered to be the last word of elegance and good taste.

Without giving up their work for the opera decorations and applied art, they carried out a good deal of architectural work, and the Arc de Triomphe du Carousel is c sidered one of their masterpieces.

In 1799 they were given orders by Napoleon to carry the alterations to Malmaison, also the restoration of Palace of St. Cloud, of which nothing remains at present, this palace was destroyed during the war in 1870. Wh Napoleon stopped at St. Cloud on September 24, 1802, declared himself well satisfied with their planning, and recognition of their services appointed them architects the Tuileries and the Louvre. The amount of work th had to carry out for Napoleon did not leave them mu time to undertake any private work for which they were well predisposed. They always had to carry out the deco tion to all the edifices or public places for any ceremon or public fêtes of which Napoleon was so fond, and to wh he attached so much importance. The principal of th fêtes being the consecration and the crowning of Napole A book of these designs containing some fifty-four pla was published in 1807.

Amongst other festivities towards which Percier a Fontaine contributed their talents was the celebration the marriage of Napoleon to Marie Louise. A book decorative designs was published in 1810 entitled "T Marriage of H.M. the Emperor Napoleon with H.M. Archduchess Marie Louise of Austria." This book conta thirteen plates representing the work carried out for civil marriage at St. Cloud, also for the religious marri at the Louvre, and for the banquet at the Tuileries.

Then again, the following year in celebration of the bi of the King of Rome (March 20, 1811) the feast of the E peror was celebrated on August 15 at St. Cloud with unusual pomp. Galleries, porticoes, colonnades, temp with fountains and waterfalls, illuminations, etc., w erected at an enormous cost, and ten days afterwa similar festivities took place in honour of Marie Louise the gardens of the Trianon.

The restorations which Percier and Fontaine had execute during the imperial period have been described themselves in a work published in 1833. Besides the Louv the Tuileries, and Versailles, to which I will refer later, principal restorations are those at Laeken in Belgium, Compiegne, at Fontainebleau, and at the Pitti Palace Florence.

The Château of Compiegne had been constructed by or of Louis XV from plans by the architect Gabriel.

Amongst the improvements carried out by Percier a Fontaine in 1806 was a large ballroom ornamented w columns, a small chapel, a principal staircase, and so rooms adjoining the Empress's apartments. They had alter the interior planning to enable them to enlarge rooms, redecorate, and refurnish them.

The works carried out at Fontainebleau are principa connected with the interior. Napoleon spent large sums money in redecorating and refurnishing the rooms. T Salle du Throne is still much admired nowadays, and a the apartments in which the Emperor kept the Pope P VII prisoner at the end of 1812, and the small apartme called *petits apartements* of the Emperor and Empress, which I will show you some slides.

We all know of the changes brought about at the end the eighteenth century in the forms or shapes of the f niture and the subjects of interior decoration. Un Louis XV the general lines were rounded and soft, grac and pretty, the colours light and delicate. After Revolution the forms were severe, the colours warm even violent; this change started already under the re of Louis XVI.

The principal subjects used under the Empire are fo in the furniture and decoration executed before the Rev

---

The above paper was read by Mr. F. De Jong before a meeting of the Institute of British Decorators.

n, such as the eagle and sphinx. It is, therefore, admitted at the Empire style is only a continuation of the Louis VI style.

'ercier and Fontaine were very fond of the antique, but y were not antiquarians. They considered that the ssical forms were the purest and their work was inspired these lines without absolutely copying them, but they ked at the antique monuments as men of the eighteenth ntury and not as *archéologues.* They were preoccupied much with their elegance as with the severity of the early es.

They considered that the interior decoration and furniture d fittings were so closely allied with construction and hitecture that they could not look upon the results with ifference. The rule not to cover up the construction plies as much to furniture as to a building, and the choice ornamentation must be subservient to the architecture.

This is the secret of the influence which these two artists ve exercised, and the true origin of the perfect adaption a style which they guided so well and of which they erve to be called the creators.

his style after meeting with an enormous success all r Europe at the time of Napoleon for about fifteen years was afterwards discarded under Louis Philippe; it was considered harsh and stiff, lacking in grace and imagination. The abuse of geometrical forms, the peculiar designs of monsters, chimeras, and the want of comfort in the furniture all added to its abandonment.

If some of their furniture or seats are considered too severe, or uncomfortable, we must not forget that they were not exactly made for rest and comfort, but that they were made for the use of men of action, for receptions, and other stately requirements.

To-day the Empire style is favoured again, but modernized, and adapted to up-to-date requirements; the forms and ornamentation less harsh; the furniture, especially the seats, more comfortable, and yet retaining that classical appearance, that feeling and dignity so well interpreted by Percier and Fontaine.

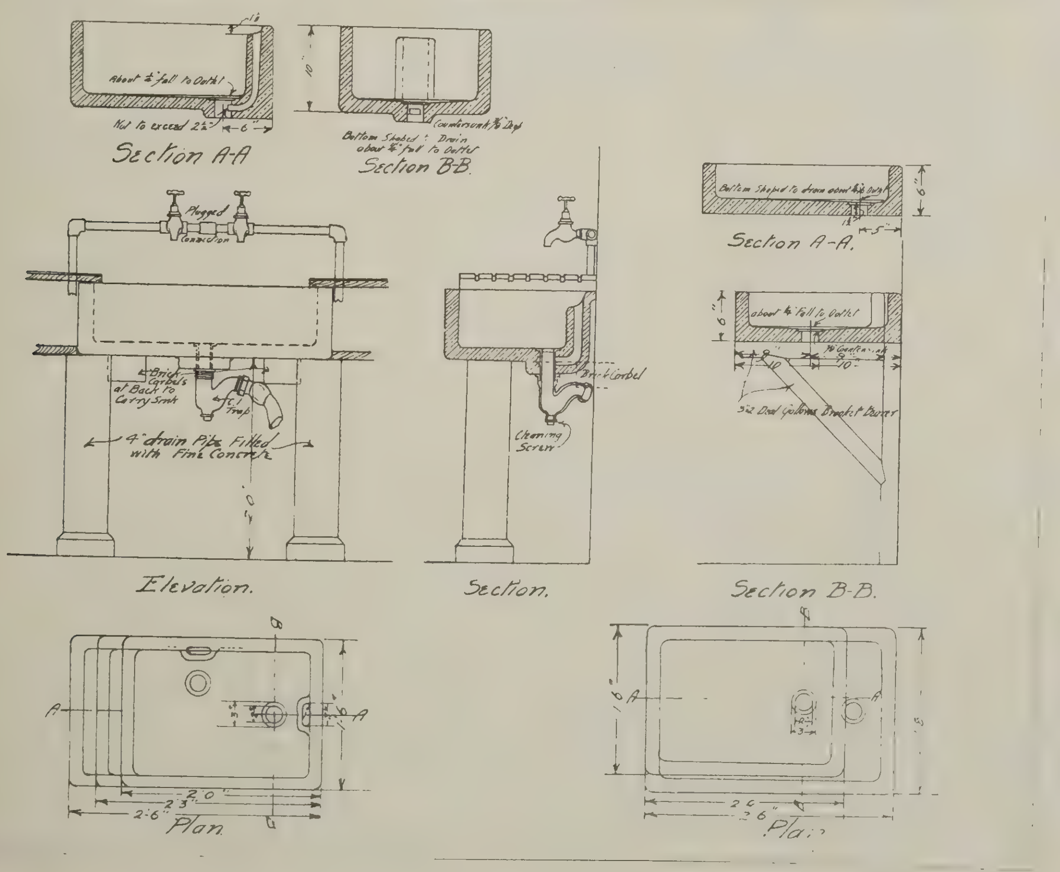
Mr. De Jong then proceeded to show a few slides of some of the rooms at Fontainebleau with their furniture and details, also interiors of some of the private residences in Empire style, and lastly, some of the interiors of the Capitol in New York, which, he said, had been very successfully treated in Empire style, and had been very greatly admired by the architectural profession and the public.

---

ittle Things that Matter. XXII—Sanitary Fittings

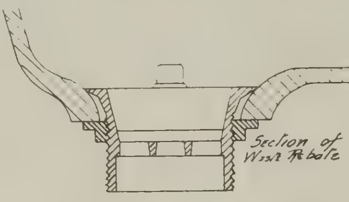
By HARVEY R. SAYER, Assoc.M.Inst.C.E., A.R.I.B.A., F.S.I.

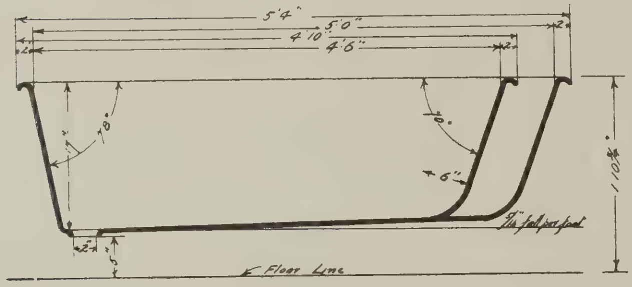
inks.—It appears that the Belfast pattern sink is nearly ys preferred to the London pattern. The former has overall depth of about 10 in., and the London pattern of about 6 in. In Scotland a sink, and a tub for washing poses—really a double sink—are generally used. The ast pattern sink is carried usually on cast-iron canti- r brackets built into the wall. These brackets always have the appearance of being liable to crack if they receive a sudden blow. By their use, however, a clear space is obtained on the floor under the sink. The late Local Government Board recommended that Belfast pattern sinks should be supported on two 4 in. drain pipes filled with fine cement. These drain pipes appear clumsy, and block up the floor space under the sink. Wrought-iron built



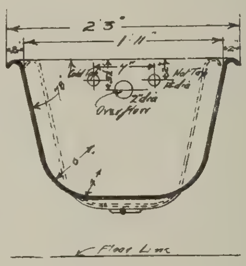
in brackets have not the same disadvantage as those of cast-iron. Old fashioned deal gallows brackets have been used lately to carry small sinks, and have always met with the approval of both the plumbers carrying out the work, and the occupiers. As an alternative the sink could be carried on brick corbels built out under the sink.

The sink should be about 26 in. from the floor, should be glazed inside and out, and have smooth rounded corners. It is a great advantage, both for appearance and cleanliness, to cover the wall at the back of the sink with either glazed tiles or cement. The taps should be a convenient height above the sink, about 12 to 15 in. A draining board should be placed to the left of the sink and should be made of hard wood. It should be 30 in. long, grooved, and laid on the slope. If the board is removable it can easily be cleaned, but if it is fixed there should be a red-lead flush joint at the front, where the drainer meets the sink to prevent the accumulation of dirt. On the other side of the sink a plain level board may be placed, upon which the crockery can be stacked ready for washing. A wooden plate rack will not chip the crockery, but it may become foul with soapy water unless the rinsing is carefully done. A metal rack is more sanitary, and should be placed above the drainer.

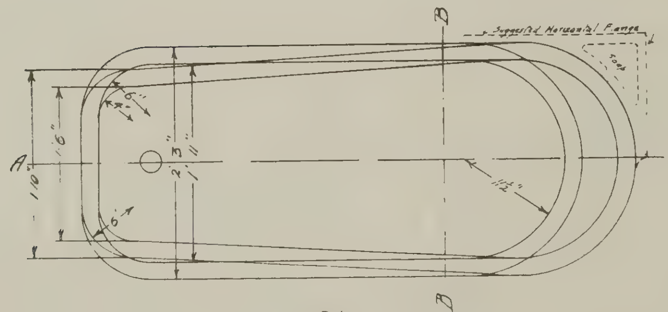




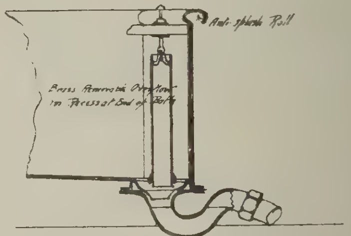
Section through A-A



Section through B-B.



Plan:



Expensive but Un-Sanitary Overflow against Water Regulations

Lavatory Basins.—A lavatory basin should, if possible, always be fitted in the bathroom, as it is a great labour saver, doing away with the necessity of carrying water to and from the bedrooms. The basin should be placed on cantilever brackets built into the wall, provide a clear floor space and have an overflow of the visible type. The basin should be made of glazed earthenware, with the soap dishes sloped to empty. Lavatory basins have a great tendency to become foul and the waste pipe and trap are liable to become choked. If the blockage is slight it can be ov come by creating suction from the basin, by the use o flannel plunger, or a forcing cup. When the blocka cannot be removed by this method, the clearing cap the underside of the trap should be opened, but in turni this cap there is danger that the whole cap and socket w come off the lead trap. For this reason the careful plumb when fixing will re-solder on the clearing cap in the trap a lavatory basin or a sink. A good plumber will also supp his waste-pipe between the floor and the trap under t fitting by a block joint at the floor level.

Baths.—The choice of a bath depends largely upon t requirements of the purchaser. The Ministry of Healt standard taper bath, and the Local Government Boar standard parallel bath are both satisfactory, although th are on the small side. The overflow is well situated a sanitary, and the baths comply with the water regulati if the overflow is made to discharge direct through the v into the external air as a warning pipe. In no case sho overflow be connected direct to a drain, or to the drain s of the trap of the bath waste-pipe. If it is not possible treat the overflow as a warning pipe, it is better for overflow to be sealed off altogether; thus should the b overflow it would go over the floor, making a mess wh the housewife soon detects. It is unfortunate that one s and one end of the bath usually has to be placed in cl proximity with the wall of the room, as the wall is v liable to be splashed or injured, and the space under rim of the bath is difficult to keep clean. If the ledge the bath next the wall could be kept horizontal and b into the plaster, an improvement might be obtained.

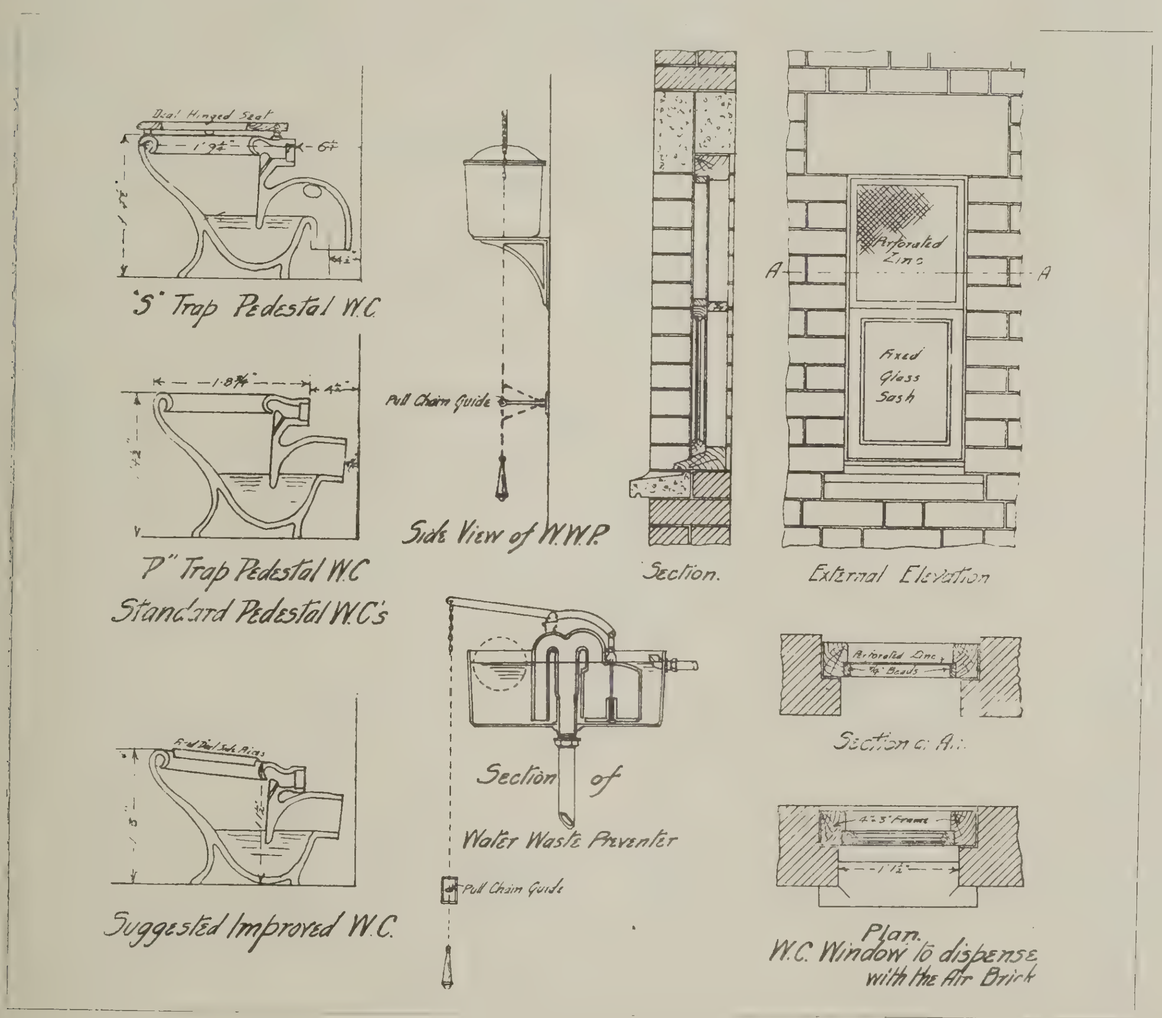
When the bath, or lavatory basin, is near to the discha to an open hopper-head or over a trapped gully, it seems a ty to go to the expense of inserting a trap under the ting. This trap may cause more smell and trouble than short pipe, which, when untrapped, is more easily cleaned. the fitting is so placed that it involves a considerable ngth of pipe, then the trap under the fitting must be sisted on. A scullery sink must always be trapped just nderneath, as the pipe in that case may be very foul and easy.

Water Closets.—There is room for considerable improveent in the D.B.M.S. fireclay, washdown, buff, and white edestal closet. The large variety of shapes, good, bad, and different, which are submitted as samples to this specifition, is surprising. The pan is better when made of oneware instead of fireclay, and a sloping top to the asin would be a great improvement. This form has been n the market for over fifteen years, but it seems to be ery little used, although the price could be the same as a horizontal top. The unpolished hard whitewood, nged seat would be much better if polished, and better ll if the seat was not hinged or continuous, but fixed to pan.

p to the present time a fool-proof water waste preventer not been invented. This sanitary appliance seems to be jobbing plumber's special "happy hunting ground." chief difficulty with the water waste preventer is that average person does not take the trouble to pull the in properly. Instead of a direct downward pull with a rp let-go, a sideward pull is given, which works at an le on the lever carrying the dome and soon causes uble. This trouble could be prevented if a short lever attached to the chain just above the handle and hinged he wall behind, thus ensuring a direct downward pull. e of the flush pipes supplied are "cheap and nasty." vanized steel, bent for side-wall fixing (not exceeding 24 in. from side-wall to the centre of the pan) is sometimes specified. In some cases, the metal supplied has been as thin as possible, and the bending so bad, although a template was supplied, that the plumbers engaged on the erection have had to heat the pipes again and rebend them. The result being that the galvanizing, which often costs the most and takes the longest time, has been useless.

Many manufacturers, in bending flush pipes to suit certain positions between the walls carrying the water waste preventer and the w.c. pan seem to forget to allow for the extra projection due to the thickness of the board, to which the brackets of the water waste preventer are fixed. They may claim that the brackets should not be fixed on boards, but that the brackets should be plugged direct into the wall. It is found in practice, however, that a much better job is made by first plugging a board to the wall, and then fixing the brackets on the board. Some authorities claim that the best joint between the flush pipe and the w.c. pan is made by an indiarubber cone, secured by two or three turns of copper wire wound tightly round each end of the cone and fastened off. They claim that this joint is watertight, and that being flexible, it will permit a certain amount of movement without leakage if the flush pipe should be jarred; some plumbers claim that the rubber cones soon perish, and that the old fashioned red lead, putty canvas, and string joint is still the best. This joint will not allow any movement after it has once set.

The expense of the air brick can be overcome in an external water closet by cutting off the top and bottom of the door, and in an internal one by filling in half or more of the window with perforated zinc instead of glass. An ordinary window, made to open, would be kept closed in cold, wet, or windy weather, with the result that the water closet would be unventilated.



"S" Trap Pedestal W.C

"P" Trap Pedestal W.C

Standard Pedestal W.C's

Suggested Improved W.C.

Side View of W.W.P.

Section of Water Waste Preventer

Section.

External Elevation

Section on A.A.

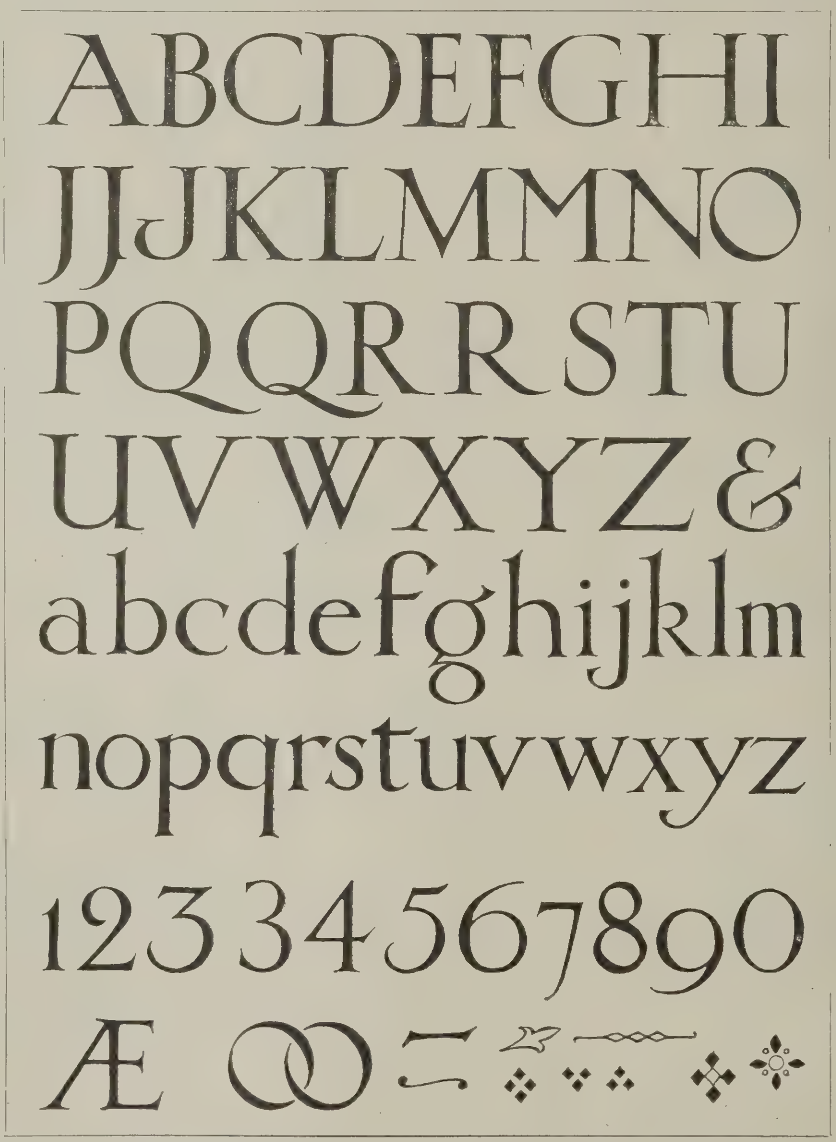
Plan.

W.C. Window to dispense with the Air Brick

Book Reviews

The Modern Sign Writer

THE object of the authors of this book is to explain the technique of signwriting, the formation of letters and numerals, the subtleties of spacing and lay-out, and the hundred and one details that make for proficiency in the craft of signwriting. The book is edited by Mr. W. G. Sutherland, and contains contributions from Messrs. W. H. Cantrill, Herbert Cole, W. W. Davidson, E. Dinkel, L. Drinkwater, E. Fairhurst, J. Lawrence, Will Mellor, E. Sanderson, and the editor, all the names of whom are well known in the craft.



ROMAN LETTERS AND NUMERALS. BY HERBERT COLE.
(*From "The Modern Signwriter.*")

A perusal of the book can bring the reader to only one conclusion, which is that the signwriter should be urged to use the purer types of letter. Unfortunately there are still many people whose views with regard to good lettering accord with those of the Victorian age, when every kind of design became debased; at the same time, curiously enough, the standard of craftsmanship reached an astonishingly high level. In the words of Mr. Sutherland, "craftsmanship as such got out of hand, and so defeated its own purpose. Craftsmen seemed to argue that because a certain result was difficult of attainment, it was for that reason praiseworthy. The result of this faulty reasoning was probably as bad in its effect on lettering and signwriting as in any other direction. Signwriters discovered that by making letters written on a flat surface appear as though they were raised from that surface, and by imitating the shadows which raised letters would cast, they were able to develop and display a truly marvellous skill. They went further and imitated the effect of letters carved out of wood, tilted in various directions, bent and curved in a variety of ways, chained together, or suspended by painted loops. Beyond all doubt a very wonderful standard of skill was apparent in this work. But these fine old craftsmen—and fine they were in their way—forgot one rather important thing. Letters are intended to be read, and every complication of form makes it harder to read them."

Of late there has been a marked improvement in lettering, with Roman as the predominant type. Mr. Sutherland says: "often and properly it is modified to suit particular circumstances, but as a basic type it is unsurpassed." Mr. Sanderson deplores the fact that the modern signwriter is not enamoured of antique Roman. "Perhaps," he says, "the chief reason why he has not accepted it with open arms is because of the extra study required to set out a style of lettering having so many different sizes of letters in its alphabet." We do not agree. The lack of popularity is due to bad taste, and a craving for "arty" effects. In his article Mr. Sanderson sets out to make the Roman into a simple and workable proposition, and in doing so says: "Although it may err somewhat on the mechanical side, there is no reason why the average signwriter should not infuse enough of his own personality into it to bring it to his liking." We would add that the less *personality* of this kind put into it the better. The signwriter should simply be given a good specimen and instructed to follow it faithfully. All the debased forms have been created by the personality of the craftsman.

There is, unfortunately, still a demand for shading and other elaboration. For this reason Roman is given the place of honour in the book, and what may be called "fancy" lettering is accorded relatively little representation. In our opinion the latter should be excluded altogether. The day of the elaborate letter is past. We do not imply the abolition of the Old English—of which there are some excellent examples in the book. Old English obviously is particularly suited for illuminated addresses, ecclesiastical work and the like, but generally the signwriter should be encouraged to get back to the Roman model.

Modern experts have put legibility first, and having searched far and near for the most legible types have come to the conclusion that the Roman capital is still the most readable, as it certainly is the most beautiful type of letter yet evolved. The production of the Roman letter coincided with the best period of Roman architecture and literature. The characteristics of the letters—a good specimen of which we reproduce from the book—are the strong, beautifully curved serifs, the variation in the thickness of the strokes, and the varying proportion in the width of the tters. Of Roman and Old English lettering the book contains some delightful examples, but it would have been etter had the debased forms, such as blocked or rojected, and incised letters been omitted. To include em is simply to invite the signwriter to copy them.

The book is full of practical and other useful information. should do much to educate the signwriter, and through m, the public as to what constitutes good lettering.

E. R.

"The Modern Signwriter." Price 12s. 6d. net. The Decorative Art Journals ., Ltd., 9 Albert Square, Manchester.

Architecture at a Glance

It has been apparent for some time past that general terest in architecture is steadily increasing. With this crease of interest there has grown a demand for text-books ving in simple terms the essential information about e styles and periods of architecture. Many books of is type have appeared, and some have enjoyed much pular success. That the demand is not yet satisfied—is, deed, growing in volume month by month—is attested the appearance of a fourth edition of "English Architecre at a Glance." This little handbook, originally pubhed on the initiative of Messrs. Dawnay & Co., the wellown firm of constructional engineers, differs from most her books of similar aim by virtue of the fact that it sets rth the story of English architecture in a series of pend-ink sketches, chronologically arranged, so that the owth and development of the different styles may be mprehended literally "at a glance." From the point of ew of the general reader who wishes to get a grasp of entials this is the ideal method of presentation. In the w edition the descriptive notes have been re-written (by . Frederick Chatterton, F.R.I.B.A.), and the number of istrations has been materially increased. The notes are essarily brief, but what they lack in length they gain in h, and they are an admirable reinforcement of the illustions. These, with the exception of one (by Mr. H. shbury), are the work of Mr. J. D. M. Harvey, who shows only general views of buildings, but their details, such caps, windows, doorways, chimney-pieces, and so forth. is little book forms an excellent introduction to the dy of architecture. The only improvement that we can gest is that it should contain a short glossary of technical ms.

English Architecture at a Glance." A Simple Review in Pictures of the Chief ods of English Architecture, with historical notes by Frederick Chatterton, .I.B.A. London: The Architectural Press. Price 1s. 6d. net.

Forthcoming Publications

mong the books to be published shortly by Messrs. Ernest n, Ltd., are the first volume of "Theory and Elements of hitecture," by Mr. Robert Atkinson, F.R.I.B.A., in colration with Mr. Hope Bagenal, and "The Decoration of niture," by Mr. H. P. Shapland, A.R.I.B.A. In the latter k the aim of the author has been to examine in detail various treatments which cabinet-makers have adopted the embellishment of their work—moulding, piercing, ing, painting, etc., and then to detail the infinite variations ach method. The work will be illustrated with about 200 tographs of fine specimens, quite two-thirds of which are continental museums, the majority never having before published in this country.

Law Reports

Repair of Roads—Important Point

rshot Corporation v. *Aldershot Gas, Water, and District Lighting Co.*

October 17. King's Bench Division. Before Mr. Justice Bailhache.

this case the plaintiffs claimed £305 odd for work done materials supplied at the defendants' request in iring trenches made by the defendants in the course eir operations in laying new gas mains, etc.

e defendants set up a counterclaim for damages on ground that plaintiffs alleged use of a steam roller of ssive weight had caused damage to some of their pipes mains.

Mr. Montgomery, K.C., argued the case for the plaintiffs, and Mr. Hugo Young, K.C., for the defendants.

Mr. Montgomery stated that under the Gas Works Clauses Act of 1847 and the Water Works Clauses Act of 1847 the defendants were required to repair openings which they made in the road with all convenient speed and to keep them in good repair for a certain period of time. Under the Public Health Act also there was a liability upon a local authority to maintain and repair roads whenever necessary. In this particular case, however, there was an agreement between the parties that the work necessary should be carried out by the local authority and afterwards paid for by the defendants. That agreement had existed for some time, but for the work of that description done since 31 December, 1920, the defendants now declined to pay.

Mr. Hugo Young argued that the work done was unnecessary and not done at the request of the defendants at all. In a number of instances the plaintiffs had reconstructed the road instead of repairing it. The only obligation upon the defendants was to put back into the trench the materials taken out and to ram it down. Plaintiffs had also used a steam roller of excessive weight, and that had had the effect of damaging some of the mains and pipes. These had stood the ordinary traffic for a number of years, and it could not be said that they were too shallow in view of that fact.

Mr. Montgomery maintained that most of the breakages were due to the fact that the pipes were only 13 in. below the surface. That was not nearly deep enough for modern road conditions.

His Lordship handed to counsel a written document setting out the form of the judgment which he proposed to give. A long argument followed, and ultimately his lordship gave judgment for the Gas and Lighting Company on the counterclaim for £15. In his view the pipes were laid deep enough to meet the requirements of the time at which they were put down. He also intimated that he was prepared to grant an injunction restraining the plaintiffs from doing further damage without paying for the breakages unless the Corporation were prepared to give an undertaking to make good such damage.

Mr. Montgomery said he would give that undertaking on behalf of the Corporation. With regard to the claim his lordship pointed out that the details were a fit matter for a reference, and the parties would no doubt act on the suggestions which he had given them in writing.

Judgment was entered accordingly.

Repair of the Highway—Liability—Important Action

Storey v. *Wilts County Council.*

October 24-26. King's Bench Division. Before Mr. Justice Darling and a Special Jury.

This was an action by Mr. Herbert Lushington Storey, of the Manor House, Malmesbury, against the Wilts County Council, claiming from them damages as the responsible highway authority for their failure to repair in a proper manner and to maintain a certain road, whereby the road became unsafe, causing a valuable hunter belonging to the plaintiff to slip and fall, receiving such injury that it had to be destroyed.

Defendants admitted that they were the responsible authority. They denied that they had been guilty of negligence or that they had failed to repair the road, or that by any failure on their part the horse was injured.

Mr. J. E. Singleton, K.C., and Mr. J. Rentoul appeared for the plaintiff, and Mr. Harold Morris, K.C., and Mr. Done for the defendants.

Mr. Singleton said the plaintiff was a former high sheriff of Lancashire, and he had always taken a keen interest in hunters and kept hunters of his own, and was interested in improving hunters throughout the country. A hunter which belonged to him was injured and had to be destroyed because of the defendants' conduct in the improper treatment of a road which passed the plaintiff's house and led from Malmesbury to Chippenham. On August 13 of last year the plaintiff was riding one of his hunters, Bloodstone, directly across the road in front of his house to a by-lane, when it slipped and fell, fracturing its pelvis, and had to be destroyed. The case for the plaintiff was that the road had been put in such a condition that it was unsafe for horse traffic—that it was in such a state that the horse could not stand upon it. There had been frequent accidents along the road, and people had considered it unsafe to take horses along it, using byways, lanes, and the fields instead. The hunter was valued by the plaintiff at £150. The complaint here was that the road had been tarred in such a way as to be dangerous to horse traffic.

Mr. Morris: I am going to say that this was a perfect road for everybody.

Expert evidence was given by Mr. Proctor and Mr. Cotterell as to the road, it being stated that as the road was on a gradient it was unnecessary to have tar-sprayed it, and that it was improper to have tar-sprayed this road at the particular point.

Plaintiff thought that the tarring of the roads was driving horses off the roads. If the roads were paved it would be much better.

Mr. Morris: You don't want the rates put up, do you?

Plaintiff: Oh, no!

His Lordship: But if you win this action they will be.

Plaintiff thought more tar was put on the combers of the road than on the crown.

Mr. Morris, for the defendants, said his clients had to hold the scale level among people who used the roads, those who lived in houses abutting on them, and people who paid for the making of the roads. Wear and tear of roads by motor traffic resulted in tar-spraying becoming universal. The road in question was dealt with in the ordinary way, and the defendants had received no complaints. Under these circumstances he contended that the defendants were not responsible for the injury to plaintiff's horse, and they were in no way negligent.

Mr. A. Dryland, county surveyor of Middlesex, and former county surveyor of Wilts, said he inspected this road in July last, and he considered the comber was normal and was safe to take tar. The surface of the road at the time he saw it was, for a hard tar-dressed road, unusually non-slippery.

Replying to his lordship, witness admitted that a tarred road was more dangerous to horses than an old-fashioned road of forty years ago. All roads were worse for horses now than they were years ago.

Mr. Jas. Geo. Powell, surveyor to Wilts County Council, gave evidence as to the safety of the road.

The jury found that the road was dangerous to horse traffic at the time of the accident, but that condition was not due to the repairs carried out by the defendants, and that the defendants had not been negligent in repairing the road.

Mr. Harold Morris, K.C., on those findings asked for judgment for the defendants.

His lordship entered judgment for the defendants, with costs.

Water Fittings

The regulations proposed by the British Waterworks Association setting up standard water fittings are being considered by a Ministry of Health committee. Property owners and manufacturers of fittings are opposing the proposed by-laws on the ground that they would give too much power to the water companies and necessitate the scrapping of practically all patterns of fittings now in use.

Mr. G. P. Warner Terry, secretary of the association, said that at least 1,000,000,000 gallons of water are wasted in this country every year through faulty fittings and other causes. The by-laws had been drafted with a view to minimizing this waste. There was no suggestion that the by-laws—which would not be compulsory, but only adoptive at the pleasure of the water authority—should be retrospective, although, of course, if existing fittings became faulty they would have to be replaced by the standard fittings. The new specifications, if adopted, would not become compulsory until manufacturers had been given an opportunity of clearing their stocks of satisfactory fittings, but as the specification would be standa the cost to the public should eventually be reduced throu mass production.

Mr. J. R. Venning, manager of Mellowes & Co., Ltd., Wes minster, said the original proposals practically meant t scrapping of every existing pattern of water fitting, and it w suggested that the new regulations should be retrospecti so that a water company's inspector could enter any house a demand the installation of new fittings of the standard patter "The association which we makers of fittings have formed Mr. Venning said, "has taken legal advice and we are advis that the water companies have been exceeding their powe in demanding that all fittings shall bear the approved seal the particular company of the area before being installed in house. We are advised that the Water Companies Act, 18 under which they claim to act, gives them no authority to this, and that all fees which have been paid to them for stam ing are recoverable."

Mr. E. A. S. Fawcett, chief engineer of the Ministry, sa that there was not the slightest possibility of any of the Wat works Association's proposals being made retrospective, a the Ministry was unlikely to embody any of them in by-la If the committee could find a method and specifications agr able to all concerned they might be adopted merely as a spe men of what was desirable.

Correspondence

Human Proportions in Architecture

To the Editor of THE ARCHITECTS' JOURNAL.

SIR,—This question is raised in your issue for October but no answer is given beyond noting the sanction history to build disproportionately to the human statu As a layman in matters architectural, I submit that th is no sound basis for any such theory of proportion.

Why should we not demand, with just as much, if better, reason, that all statues should be exactly life-siz Why not limit shipbuilding to rowing boats which can moved by human labour? Why make machinery t throws the puny strength of man into a distant ba ground? Why make anything bigger, stronger, or m accurate than ourselves? It is human necessity, hun ardour, and human vanity that demand these things.

Architecture is a volume in the history of man's end vour. Limitation in size is one of the obstacles to overcome. Necessity has led to skyscrapers; religi fervour, so we are told, to the lofty spires and high-fl pinnacles of the Gothic period; and the vanity of kings the eternal massiveness of the pyramids. It is natural t man should attempt these tasks. Man has mind and s —he is bigger than himself! His achievements repres the ability of his mind and the courage of his soul. W measure him by his physical stature? It were as well measure the radius of effect of a bomb by its case.

READEF

The Strength of a Concrete Floor

SIR,—On page 622 of your issue for October 24, Profes Henry Adams, in reply to "G's" letter, states: "By R path, Brown & Co.'s rule:—

$$W = 2{\cdot}8 + \frac{2{\cdot}8\,(1{\cdot}6719 \times 27 + 0{\cdot}4867 \times 17 \times 3)}{100}$$

$$2{\cdot}8 + 1{\cdot}96 = 4{\cdot}76 \text{ tons safe load.''}$$

The above is inaccurate; it should be:—

$$W = 2{\cdot}8 + \frac{2{\cdot}8\,(1{\cdot}6719 \times 27 + 0{\cdot}7912 \times 27 \times 3)}{100}$$

$$= 2{\cdot}8 + 3{\cdot}058 = 5{\cdot}86 \text{ tons safe load.}$$

He has taken the value of "*q*" for an 8×4 at 18 instead of for the 6×3 at 12 pds. under consideration. has also substituted "17" for "27."

A thickness of one inch of concrete over the top fla of the steel beams is common in floors of the descrip referred to.

For this thickness, by Redpath, Brown's rule, the load is 4·66 tons. This agrees, nearly, with the rul thumb Professor Henry Adams quotes. W. BASIL SC

The Control of Building

By A. N. C. SHELLEY, M.A., B.C.L., Barrister-at-Law

WE in Whitehall really wish to learn where the architect's shoe pinches as he goes about his business, and we are equally anxious to know what difficulties or imperfections local authori-ies find in practical administration of the law. I want to nphasize what we and the local authorities equally are do- g (or should be) to administer the law. For good or for evil, hat we all have to do at present in regard to building is administer and to obey a complex code of law—or ther, not a code, but a disjointed mass of legal enact- ents, differing in form from town to town, partly of niversal application, partly local, partly embodied in cts of Parliament, partly (but only partly) in by-laws.

What are the methods of control of building which our w has so far recognized? They are four: statutory enact- ent, by-laws, regulations, and discretion. Of these, gulations are of slight importance. They are, in effect, -laws with the safeguards of publicity omitted, and body that I know wants to preserve or to extend them. ow if you once admit that the essentials of building are be controlled by public authority, you have to make ur choice of these three methods—direct enactment by rliament, by-laws made by some local body, and discre- on exercised by some local body *ad hoc*, in relation to each ilding controlled. I say "each building controlled" cause I suggest that many buildings do not need control all, and I say "some local body" because it is not a gical necessity that the existing local authorities should used. Some have suggested, outside the county boroughs, ing the county councils in place of the existing town and strict councils. Others have suggested quite new systems, ore or less fantastic. But broadly it can, I think, be said at most serious observers would retain control of building a function of the ordinary local government authority thout prophesying what changes in the character of that thority the future has in store. Taking it then, that your ntrol of building is to be administered by town or district uncils, what shape is that control to take?

By-laws can, if necessary, be altered in a month or two, a any time of year; a local Act only in the spring session o Parliament and after elaborate technical preliminaries. A general Act of Parliament is even worse in this respect; ars may pass before the House of Commons can find time f alterations which all admit to be desirable. The ten- cy of Parliament itself has been more and more to foster th by-law method rather than the statutory method of trolling building.

The fundamental concept is that control by by-law shall certain; an effort is made to foresee the requirements o the next few years, and to lay down rules to meet them; es binding both the builder and the local authority. Do forget that apart from emergency provisions arising n the war, a council's by-laws bind the council; so long they remain in force they cannot be relaxed, but on the er hand, in the interest of the private person, they mark limit of what the council can exact from him. This is, haps, the greatest boon which law (in any form) can give. marks certain courses as prohibited, and in the very act doing so increases freedom.

espite the war, real progress has been made in moder- ing local building by-laws. Starting from the end of 2 up to the end of September, 1923, 392 amending es of by-laws have been made—roughly one for every and a half local authorities. Almost all of them repre- greater freedom for the architect and builder. That is, decidedly, one of the tendencies in local government rging in the past twenty years. It is not an emergency housing" movement; even before the war you will find l authorities, broadly, coming round to agree with the y which the Local Government Board expressed in their circulars from 1906, and at least from 1901 in their revisions of their model by-laws, that in the nineteenth century architects and builders were tied up too tightly, and that there is room to relax the bonds. It has been because in this country we had in the main the by-law system that we were able firstly to appreciate the working of the law, secondly to experiment in various directions, and thirdly, to bring the result into operation.

Obviously that system has its own drawbacks. One object, indeed, the main object, of Parliament in leaving the law of building to local enactment was to enable local circumstances to be met; these, and still more the local council's idea of local circumstances, lead to some divergencies. Moreover, the model by-laws themselves are never quite the same for more than a few months; we print only small supplies, and whenever the stock clerk reports that a certain level has been reached we reprint, taking the opportunity to bring in the latest fruits of experience. This is a deliberate process which has gone on for years, but it means that local by-laws also differ not merely according to district but according to date. One thing the architect dislikes especially is the undue divergency of building law, and he is right. But you have to weigh this against the counter-disadvantage of a universal code—that it would be extremely difficult to alter it as experience accumulated, and on the whole the advantage lies with the system which can be accommodated to experience.

Some disadvantages of the by-law system, disadvantages of which complaint is justly made, are in a fair way to be, at any rate, reduced. It has happened in the past that a local authority which had old fashioned by-laws has made its amendment of them conditional upon the confirming of some new requirement which the Minister or his predecessors, the Local Government Board, believed to be open to objection. When this was done he was in a dilemma; should he agree to the new proposal as the price of getting rid of the old by-laws, or should he stand to his guns, knowing that the local authority could not be compelled to alter their old by-laws? The problem really became one of the relative badness of the existing by-laws and the new proposal, and the dilemma was apt to be resolved by the Minister's deciding to get rid of the old by-laws at almost any cost—short, of course, of agreeing to clauses which were not authorized in law. Thus you may find, even in some quite modern series of by-laws clauses which cause difficulty, and would never have been approved by the confirming authority (the Minister of the Local Government Board) except under the duress that I have indicated —a threat by the local authority to abandon the task of reforming its old by-laws. The Departmental Committee say that "this is bound from time to time to happen until power is given to the Board to overhaul existing by-laws." Well, that has now been done, and the threat in question lost its force in July last, when Parliament passed section 13 of the Housing Act, 1923. The Royal Commission on Fire Brigades and Fire Prevention has just issued its report. The Minister of Health was not represented on that body (though I was privileged to give evidence on his behalf, not merely on the law of building, but on various legal points of interest to the Ministry), and it is the more noteworthy that the Royal Commission have heartily endorsed the policy I have described of abolishing unnecessary restrictions, and expressed approval of the model by-laws. Nay, they go even further and consider (if I rightly understand them) that even from the fire prevention point of view it would be well to give more freedom in building than many old-fashioned codes of by-laws would allow. Decidedly, the tide of reform is flowing on.

The means and the reason that reform can be effected inexpensively, lie in the very fact that we have the by-law method, that is local law made by the same authorities who administer the law, and requiring for its validity confirmation by some Minister of the Crown. What is the reason of requiring confirmation, and how is the power exercised? Foremost of all to protect the liberty of the subject; just as it is the first duty of the King's judges, so it is the first duty of the King's Ministers and those working under them to see that no requirement is placed on any man except as authorized by the general law of England. I have known what it is to be pressed by those who said, "This is a desirable power; why not let it be included in our by-laws, even if not strictly legal?" Well, the answer may not be put in the same words, but the answer comes, all the same, from Magna Charta: "We will not go against any man, save by the law of the land." And that binds the Minister in confirming local by-laws, as it binds the local authority in making them.

Next, his duty is to see that the requirements are reasonable, and as far as possible so drawn as to be understood by readers who are not trained to interpret legal documents. On the other hand, they must not be drawn up like an architect's specification, with figures and with formulæ, comprehensible by none but the elect.

Finally, the requirement of confirmation means (so far as the law of building is contained in by-laws) that at on spot in London there is a completely indexed record of th law in every place, bound volumes where it can be see the annotated drafts showing how it was settled, files correspondence, and (it may be) of complaints showing ho it works. All this, as a necessary consequence of the requir ment of confirmation, is available gratuitously to ever local authority making or revising by-laws. Take this step further. A progressive surveyor would like to fram rules for building with paper and pig-iron. He applies t us; no, no precedent exists, but he obtains the assistan of my staff in drafting his new rules. Another distri copies them; after a time by-laws for pig-iron and pap buildings are adopted elsewhere and found successful, an we put them in the model series—which is reprinted ever few months with alterations. To frame rules for the who country, as would be done if we had a general Building Ac would be extremely dangerous. To let each area exper ment and then to collate the conclusions reached and p them in a model series is a safer way, a simpler way, and more English way, because in harmony with our institut of local government.

[The foregoing extracts are from a paper read before t Liverpool Architectural Society.]

Concrete in Domestic Architecture

THE September–October number of "Kahncrete Engineering" contains some delightful examples and reproduces some photographs, not previously published in Britain, illustrating concrete houses in San Juan, Porto Rico. These houses are of reinforced concrete construction with Hy-Rib partitions, and they serve to show the adaptability of concrete to the special requirements of any particular country.

In those countries where concrete is used for domestic building the shortage of houses caused by the war has been much better coped with than it has here. Mr. H. Maule-Ffinch, the Cologne correspondent of the "Liverpool Courier," writes: "It is depressing in the extreme to re that in England hard-and-fast rules of so many bricks p day, etc., are combining to frustrate all efforts at a soluti of the housing problem. Here in Germany, since 1919, a in some cases before that year, houses have been springi up with something akin to the rapidity of mushrooms the night, constructed partly in brick, but chiefly in co crete. Houses have literally been turned out of a mou The designs are by no means monotonous, and t architecture is varied. Every house has its o garden, with every convenience, including electric lig provided."

A CONCRETE HOUSE IN SAN JUAN, PORTO RICO.

Underground London

At the Cannon Street Hotel Mr. W. J. Liberty, of the ublic Health Department of the City of London Corporation, ave an illustrated lecture before the United Ward's Club "Underground London." The lecturer traced many of the idden rivers, spas, and springs to their source, and described e various "bournes" and watercourses, dealing with the Fleet," the "Effra," and the "Wallbrook." By means of me excellent slidesMr. Liberty showed underground views the sewers, subways, dispatch railways, pneumatic tubes, rly steam trains, and modern electric tubes under construc- on with the Greathead shield.

The Glories of the Egyptian Temples

Sir Banister Fletcher, in describing the temples of the gyptians in a lecture at the Central School of Arts and Crafts, id that the normal temples were of particular interest. Each these was designed to be approached through avenues of ouching sphinxes, past obelisks and royal statues, by diminish- g stages of gigantic pylons, open courts, and forests of lumns in the "hypostyle halls," to the mysterious hidden nctuary to which only kings and priests might penetrate. the mysterious processions and hidden rites the people had part. Thus the plans and arrangement of those temples ffered vastly from the Greek temple, the Mahommedan osque or the Christian church. Chief among them were those the east bank of the Nile, in the parts of Thebes known as arnak and Luxor, and the great Temple of Ammon, which rpassed all others in grandeur and gradually grew by the ldition of successive kings to resemble an English cathedral. ere we saw the first trace of the "clerestory window." Chief nong the many Pharaohs who added to these monumental ructures was Rameses the Great. On the level ground on the estern bank of the Nile at Thebes were the mortuary temples, cluding the "Ramesseum"; next came the rock-cut temples, remost among which was the great Temple at Abu-Simbel, d, finally, there were the "Mammisi" temples. Thus did we e the gradual growth of architecture and its familiar forms roughout the ages.

Roman Colonies

In his second lecture at Birmingham University, Mr. William aywood, F.R.I.B.A., said that the contribution of Rome to ogress in town planning was best approached by way of her lonial output, which gave an easily understood background the more important but confused conditions of the capital ty itself. First, they must note the proximity to Rome of rtain fortified settlements of lake dwellers, of which more than e hundred existed in Northern Italy, between the river Po d the Apennines. These settlements were known as Terra- are. They dated back to 1400–800 B.C., and in their street gnment and regular disposition of sites for building they re as precise as a Roman military camp. It was possible at a knowledge of these formally planned Terramare may ve been handed on to Rome by way of the intervening ruscan cities, of which we knew so little, or that the Romans emselves discovered these cities of lake dwellers during their litary excursions. But of this we had no certain knowledge.

Roman towns of complete design first appeared in the period the late republic, approximately 200 B.C. At that time, and er, bodies of emigrants and time-expired soldiers were rown off from the parent city and established in small tified towns, the sites for these towns being determined the military needs of the time. The character of their plan naturally enough—followed military precedent. Seventy eighty such towns were founded or refounded prior to B.C. Sulla, after 81 B.C. added a dozen or so, and gustus about thirty more. Many of the most important ies of Italy to-day originated in this manner, and still ained much of their first plan.

Glasgow Cathedral

The structural design of Glasgow Cathedral was the subject a lecture by Professor Charles Gourlay at a meeting of the chitectural Craftsmen's Society held at Glasgow, under the irmanship of the President, Mr. James Macaulay, F.S.I. e lecturer said that architecture was a creative art, which pended on the art and science of building for its expression. nce, to fully appreciate architecture it was necessary to amine the actual building. Applying this principle to the subject of the lecture he pointed out that the eastern arm of Glasgow Cathedral, consisting of upper and lower churches, was a unity because the lower church was the complement of the upper, as it contained chapels necessary for the carrying out of the full ritual of the church. Although it was the rule that all important cathedrals should have the central areas of nave, choir, and transepts vaulted in stone, yet the omission of this high vault in Glasgow Cathedral was largely if not entirely owing to Romanesque influence, which lingered throughout the country for a long period. About 1836 it was proposed to vault the central areas in stone, but had the attempt been made to execute high vaulting as then designed the whole structure would probably have collapsed, because no arrangement had been made by flying buttresses or otherwise to withstand the thrust of such high vaulting. The professor then proceeded to study the superstructure of the cathedral, and showed how its various parts were soundly constructed, arch thrusts being counteracted longitudinally and transversely by buttresses. He concluded by urging young craftsmen to enthusiastically study the cathedral, and said that if they did so they would not fail to reap an abundant reward.

Great Western Railway: Housing Schemes for the Staff

Like most other large industrial undertakings, the Great Western Railway have been faced with the urgent problem of housing their staff, who number in all over 100,000 men. Various proposals were considered by the company's surveyor and estate agent, Mr. F. W. Showers, F.S.I., and finally the Board adopted the following two schemes :—

(*a*) To assist the staff to purchase their houses. In this case the company are prepared to lend 90 per cent. of the value on mortgage at 5 per cent., repayable within twenty years.

(*b*) To assist the staff to form public utility housing societies in various centres to let houses to members. As a large number of men, particularly of the uniform grades, are unable to shoulder the responsibility of purchasing houses, this alternative method for providing houses to let has met with a wide response. It also makes a special appeal to men who are liable to be moved from one area to another. The company are prepared to purchase sites, to arrange for their lay-out on the most modern lines, to construct roads and sewers, and to lease the site in sections as they are required for building for ninety-nine years on a 4 per cent. ground-rent basis to the societies. In addition the company in approved cases will provide the capital for the houses up to 90 per cent. of the cost at 4 per cent. interest, repayment being spread over fifty years. The members of each society, therefore, collectively, have only to find 10 per cent., ample time being allowed for this purpose.

The first society formed was the Great Western (London) Garden Village Society, Limited, and other societies have been formed, or are in process of establishment at Cardiff, Barry, Penarth, Newport, Severn Tunnel, Swansea, Port Talbot, Llanelly, and elsewhere on the system. For the Great Western (London) Society, the company have acquired two estates—one at Acton, and the other at Hayes, Middlesex. The former consists of 46 acres, making ultimate provision for some 500 houses; and the Hayes site of 60 acres, with provision for 600 houses. The lay-out of both estates provides ample open spaces and good gardens, and the houses will be in pairs and groups of four.

At Acton the company have collaborated with the Borough Council in constructing a new "through" road 50 ft. wide, connecting Noel Road with Twyford Avenue and with Hanger Hill, Ealing. This will be an important public improvement in the district, and is included in the council's town-planning scheme. Contracts for the erection of the first fifty houses at Acton and for the roads and sewers serving them have been let to Mr. Ernest Clarke, of Melton Mowbray, and for the first fifty houses at Hayes to Messrs. John Laing and Son, Ltd., of Carlisle and London. Forty of these first 100 houses have parlours and upstairs bathrooms, the others being of the large single living-room type, with bathrooms downstairs. Some groups will be built in 11 in. cavity walls and Luton facings, and others in 9 in. walls and roughcast, all being roofed with hand-made tiles. Gas and electric light is to be laid on in each case, with hot water supply and all modern conveniences.

The architectural work in connection with these schemes has been entrusted to Mr. T. Alwyn Lloyd, F.R.I.B.A., of Cardiff and London, architect to the Welsh Town Planning and Housing Trust, Ltd., the organizing secretary for the societies being Mr. E. Hall Williams, who is connected with the same organization.

R.I.B.A. Notes and News

Exemption from the R.I.B.A. Final Examination.

The Council of the R.I.B.A., on the recommendation of the Board of Architectural Education, have recognized the five years' (B.Arch.) course at the School of Architecture, McGill University, as exempting from the final examination of the Royal Institute under the usual conditions.

The R.I.B.A. Archibald Dawnay Scholarships, 1923.

. The R.I.B.A. have made the following awards in connection with the Archibald Dawnay scholarships for 1923 : a scholarship of £50 per annum to Mr. R. W. Donaldson (Liverpool University), and one of £25 per annum to Mr. R. H. Turner (Liverpool University), and to Mr. A. E. Cameron (Architectural Association). Mr. C. H. Hutton (Liverpool University), who was awarded a scholarship of £25 for 1922–1923, has been granted a renewal of his scholarship for 1923–1924. The scholarships are intended to foster the advanced study of construction and the improvement generally of constructional methods and materials and their influence on design.

R.I.B.A. Examination Exemptions.

At the last meeting of the Council of the R.I.B.A. the following certificates of "second examinations," approved by H.M. Board of Education, were accepted as the standard of general education required of applicants for the probationership R.I.B.A. : The higher school certificate examinations of the Oxford and Cambridge Schools Examination Board; of the Oxford Delegacy for Local Examinations; of the Cambridge Local Examinations and Lectures Syndicate; of the University of Bristol; of the University of Durham; of the University of London; of the Northern Universities Joint Matriculation Board; and the Central Welsh Board.

The five years' (B.Arch.) course at the School of Architecture, McGill University, was recognized as exempting from the R.I.B.A. final examination under the usual conditions.

The silver medal awarded for the best set of designs submitted at the annual exhibition by post-graduate students exempted from the final examination was awarded to Miss I. M. Chambers (A.A.). Mr. C. H. Hutton (Liverpool University) was highly commended.

Appended are further notes from the minutes of the meeting :

Membership.—The applications of twenty-one candidates for the Fellowship and thirty-one candidates for the Associateship were approved.

Reinstatement.—Mr. C. F. Whitcombe was reinstated as an Associate.

City Churches.—Mr. H. M. Fletcher, F.R.I.B.A., was appointed to represent the R.I.B.A. at a meeting to be held in the Mansion House on November 2 to consider a scheme for the extended use of the City churches by lay speakers, musicians, and singers.

Hough End Hall, Manchester.—It was decided to support the efforts of the Preservation Committee.

Whitgift Hospital.—A grant of ten guineas was made towards the expense of opposing the Croydon Corporation's Bill.

Competition News

Largs Pavilion Competition Result.

The design or Mr. J. H. Parker, of Margate, has been placed first in the competition promoted by the Borough of Largs, for a concert pavilion and public hall.

Chiswick Competition Awards.

The design of Mr. A. V. Elliott has been awarded first place in the competition promoted by the Chiswick Urban District Council for the lay-out of a river embankment promenade adjoining the River Thames below Barnes Bridge. The designs of Mr. G. T. Morris and Mr. J. W. Powell were placed second and third respectively.

"Steel Beams and Pillars"

In the article on "The Practical Design of Steel Beams and Pillars in Buildings," published in our issue for October 17, page 585, it was stated that "handbooks dealing with the New British Revised Sections in compound forms are not yet generally published." We are informed that such a handbook may be had on written application to Messrs. H. Young & Co., Ltd., constructional engineers, 4–6 Wandsworth Road, Vauxhall Cross, S.W.8, by those engaged in the architectural profession who have not yet received one.

List of Competitions Open

Date of Delivery.	COMPETITION.
Nov. 5	Art Gallery for Hull. Assessor, Mr. John W. Simpson, PP.R.I.B. Apply, with cheque for £2 2s., to Mr. H. A. Learoyd, Town Cler Guildhall, Hull.
Nov. 30	Taunton School War Memorial. The Council of the Taunton Sch invite designs for a War Memorial, consisting of an Art and Scien Block, the cost of the building to be approximately £10,000. T Assessor is Mr. Robert Atkinson, F.R.I.B.A., who will have t power to nominate a second Assessor if desirable. Premiun first, £100; second, £50. The first premium will merge in the arch tect's commission. Particulars, together with photograph of t present buildings, may be obtained from the Secretary of t School, H. J. Pollard, F.C.A., 3 Hammet Street, Taunton, return for a cheque for £2 2s.
Dec. 10	Designs for a dining-room and bedroom furnished in the style of 192 to form part of the applied art section of the Palace of Arts at t British Empire Exhibition at Wembley next year. Prizes to t value of £400 have been offered by "Country Life" for the be designs submitted. The Palace of Arts will include among its oth interesting features a series of six decorated rooms illustrating t progress of decorative art since 1750. Two of these rooms will designed and be furnished in the styles of the Georgian and Regen periods covering the years 1750 and 1815 : two more will illustra the standard of interior decorative art, attained respectively 1851 and 1880. The modern rooms will demonstrate the remarkab advances made in this sphere of applied art since those date Competitors must be of British birth or of British parentage, an all manufactured goods to be provided must have been man factured within the British Empire. The designs are to be co sidered by a special Jury of Award, consisting of : Sir Edw Lutyens, R.A., Miss Ellen G. Woolrich, Mr. P. Morley Horder, an Mr. Norman Wilkinson. The Exhibition is to arrange for t carrying out of the prize designs under the supervision of t successful competitors.
Dec. 10	The War Memorial Committee of the Burgh of Coatbridge invi designs for the erection of a War Memorial on a site in the We End Park. The estimated cost of the work amounts to £3,00 and premiums of £75, £50, and £25 are offered for designs plac first, second, and third respectively. Assessor is Mr. James Loc head, F.R.I.B.A., Hamilton. Apply Town Clerk. Deposit £1 1s
Jan. 1	The Imperial War Graves Commission invite architects who serv during the war as members of the Military, Naval, or Air Forc raised in any part of the British Empire to send in their names f admission to a competition for the designing of memorials to t missing to be erected by the Imperial War Graves Commissi at Bethune, Armentières, Cambrai, and Soissons. Applicatio for particulars of premiums and other regulations from tho desiring to compete are to be addressed to the Secretary (Wor Branch), Imperial War Graves Commission, 82 Baker Stre London, W.1, and must be received there not later than January 1924, and must be accompanied by a statement giving particula of the war service and professional career of the applicant a clearly stating which of the memorials it is desired to compe for. Deposit, two guineas for each set of plans. The Assessor Sir Aston Webb, K.C.V.O., P.R.A.
Jan. 5	Memorial Building and Tower, Dudley. The Council of the Coun Borough of Dudley invite Competitive Designs from duly qualifi Architects for the "Brooke Robinson Memorial" Building a War Memorial Tower comprising a Public Hall, Coroner's Cour small museum, and a new sessions court. Premiums £300, £20 and £100. Mr. W. Curtis Green, A.R.A., F.R.I.B.A., Assess Conditions of competition, together with a copy of the site pla can be obtained on application to E. W. Tame, Town Clerk, Tov Clerk's Office, Dudley, with deposit of £2 2s.
Feb. 1	Proposed Concert Hall and Public Baths for Newcastle-upon-Ty Premiums £750, £250, and £100 respectively are offered, the fi premium to merge into the commission or other payment to made to the author of the successful design. Assessor, Mr. Alf W. S. Cross, M.A. Apply, with deposit of £2 2s., to Mr. A. M. Oliv Town Clerk, Town Hall, Newcastle-upon-Tyne.
No date *	The Eastleigh and Bishopstoke Urban District Council invite desi for the extension of their existing Council buildings, and t erection of an assembly hall, on the site adjacent. Premiun 50, 30, and 20 guineas. Apply, with deposit of £1, to Mr. Lawrence, Clerk to the Council, Council Offices, Eastleigh.

* Indicates Competitions whose conditions are not in accordar with those laid down by the R.I.B.A. and the Society Architects.

Coming Events

Wednesday, October 31.

L.C.C. Central School of Arts and Crafts.—"West Asiat Architecture Influences."

Thursday, November 1.

British Museum.—"Excavations at Babylon." By Mi Claire Gaudet. 4.30 p.m.

Friday, November 2.

A. W. G.—"Line." 8 p.m.

Monday, November 5.

R.I.B.A. Inaugural Meeting : President's Address. 8.30 p.

Tuesday, November 6.

Institute of Civil Engineers.—Ordinary Meeting.

The Town Planning Institute

The tenth anniversary dinner will be held at the Sav Hotel, W.C.2 (Embankment entrance), on Friday, Decer ber 7, at 7 for 7.30 p.m. The Rt. Hon. Neville Chamberla M.P. (Chancellor of the Exchequer), Hon. Vice-President, w be the chief guest.

The Week's News

Public Shelter for Bridlington.

Bridlington Town Council are seeking power to borrow £6,400 for the provision of public shelters on the sea front.

French Grand Medal.

France's highest architectural honour, the Grand Medal, has been awarded to Mr. John W. Simpson, PP.R.I.B.A.

Carlisle Bridge Improvements.

Carlisle City Council have decided to approach the Government for grants for the widening and improvement of two important bridges in the city.

£50,000 Marine Drive Project.

Swansea Town Council have decided to proceed with negotiations with a view to constructing a marine drive from Mumbles to Langland, at an estimated cost of nearly £50,000.

More Houses for Watford.

As a result of a Town Council deputation to the Minister of Health, the building of fifty houses has been sanctioned. Under the original Government scheme 1,000 dwellings were erected in the town.

Change of Address.

Mr. D. N. Martin-Kaye, A.R.I.B.A., having removed from London to Southend-on-Sea, would be glad to receive manufacturers' and other trade catalogues at his new address, 99 Boston Avenue, Southend.

New Cinema for Leicester.

The City Cinema, which is being erected in Market Place, Leicester, will be the largest in the city. It will accommodate nearly 3,000. The architects are Messrs. Burdwood and Mitchell, of London.

New Hotel for Bamburgh.

A new three story hotel is to be built at Bamburgh. On the ground floor will be a large dining-room, lounge, ballroom, sitting-room, etc., and there will be forty-seven bedrooms, exclusive of staff sleeping quarters.

Proposed New Concert Hall for Ilfracombe.

A Ministry of Health inquiry has been held into the application of the Urban District Council for sanction to borrow £8,600 for the construction of a new concert hall at the Victoria Pavilion.

New Baths for Newcastle-upon-Tyne.

Public baths are in the course of erection at Heaton, Newcastle-on-Tyne, and at Walker, Newcastle-on-Tyne, for the City Corporation. Messrs. A. W. S. and K. M. B. Cross are the architects.

Hythe Improvements.

The Town Council have decided to call into consultation an expert to report on the sea defences. There is a great impetus n the building trade. Buildings on the Council estate are being erected at a cost of over £30,000.

Stepney New Town Hall.

The Finance and Parliamentary Committee of the Stepney Borough Council have decided to go into the question of mmediately proceeding with the erection of a new Town Hall and municipal offices for the borough.

Bournemouth Pavilion Scheme.

Bournemouth Pavilion scheme, in its amended form, has een approved by the Ministry of Health. The Corporation re to borrow £171,000 for building and equipping the pavilion n the Belle Vue site, near the pier.

Carlton Club Extensions.

No. 7 Carlton Gardens, a fine mansion at the rear of the arlton Club, has been acquired by the Club for the extension their premises. Plans for communication between the two uildings are being prepared by Sir Reginald Blomfield, R.A.

Corporation's Gift to Swansea College.

Terms have been agreed on whereby the Swansea Corporaon gives to Swansea University College the present college uildings at Singleton Abbey and the 24 acres of land surunding them, and cancels a loan of £10,000 given to the ollege. Mr. Charles Cleves has given £5,000 to the College for engineering laboratories, Mr. Frederick Cleves £1,000 for a similar object, and Mr. Henry Holland £3,000 for scholarships. The College also benefits considerably under the will of the late Mr. Roger Beck.

More Houses for Abergele.

It was reported to the Abergele Urban District Council that Messrs. W. H. Jones and Son are contemplating building about 95 houses in the district. The Council decided that they would in every way possible support the scheme.

£1,000,000 Road Scheme.

Devon Main Roads Committee have approved the principle of a scheme for improving the main roads of the county at an estimated cost of a million pounds. It was stated that it was expected the Government would make a grant of half the amount.

Garden City for Trevor.

The Penmaenmawr and Welsh Granite Company have engaged Professor Abercrombie to carry out a housing scheme for workmen's dwellings at Trevor. The village has a population of 1,500, and one of the biggest granite quarries in North Wales.

Raynes Park.

The property which comprises Raynes Park golf course and surrounding land has been acquired for £50,000 by a private purchaser, who, it is stated, will renew the lease of the golf club, and intends to utilize the rest of the estate for a new garden city on modern lines.

Whitby : Free Plans for Houses.

The Housing Committee of the Whitby Urban District Council are going to offer free plans and a grant of £8 per house to any one who will build a house which will comply with the requirements of the Government, and to capitalize the Government subsidy and make a lump sum grant of £75.

Proposed Bathing Pool for Tynemouth.

Tynemouth Town Council are considering plans of a rectangular bathing pool, 180 ft. by 60 ft., proposed to be constructed at the south end of the Long Sands. The cost is estimated at £7,000, not including retaining walls.

Housing Held Up.

The Edinburgh Corporation scheme for building 1,774 houses is being retarded by lack of bricklayers. Only twenty-five bricklayers are available, the remaining 500 in the city being engaged on private building. Housing schemes in Glasgow and other Scottish towns are similarly retarded.

Proposed Sugar Beet Factory at Kidderminster.

Over £42,000 has been subscribed in Kidderminster towards the £50,000 to be raised locally for the proposed sugar beet factory at Kidderminster. The farmers have consented to provide the necessary acreage of sugar beet, and Kidderminster Corporation have offered suitable land on the Worcester Road.

Shepherd's Bush Station Improvement.

Improvements to cost £46,000 are to be carried out at Shepherd's Bush Station, Central London line. The lifts will be superseded by two escalators, while passimeter booking booths will be installed, equipped with automatic ticket-issuing machines, each able to book 1,000 passengers an hour.

£40,000 for Nottingham Hospital.

It was announced that a legacy of £40,000 had been left to the Nottingham General Hospital by Miss Florence Carver, daughter of the late Mr. Richard Carver, a Nottingham lace manufacturer. A new out-patients' department is to be built with the money, and the Corporation have promised to give a site for the building.

New Bridge over the Severn.

It is proposed to construct a road and railway bridge over the River Severn, from Beachley to Aust (3½ miles S.E. of Chepstow), to improve communication between South Wales and the West of England. Mr. L. Forestier-Walker, M.P., representing the local interests, and Mr. W. W. Grierson, the company's chief engineer, have been appointed as a deputation to wait upon the Ministry of Transport and to arrange for the details of the scheme to be worked out.

(*Continued on page 666.*)

The Week's News—*continued.*

Blackburn Infirmary Extension.

The war memorial extension to the Blackburn and East Lancashire Royal Infirmary is estimated to cost £75,000, exclusive of equipment. The architects are Messrs. Sames and Green, of Blackburn and Darwen, in collaboration with Colonel D. J. Mackintosh, C.B., M.V.O., M.B., LL.D., of Glasgow.

Coast Road Extension.

Seaham Harbour Urban District Council have agreed to be represented at a conference of local authorities, convened by Durham County Council, to be held at Durham at an early date, on the subject of the new coast road, so as to form a through road from West Hartlepool to Sunderland. It is understood that the Government are prepared to make a grant of 65 per cent. of the total cost.

Winchester House Sold.

Winchester House, St. James's Square, has been sold by the Office of Works, for approximately £100,000, and it is to be converted into a club. The property was acquired nearly fifty years ago by the Crown at a cost of £45,000, having been before that the London house of the See of Winchester. The house has been used for Royal Commissions and a variety of official purposes.

Hull Town Planning Scheme.

Hull is to embark upon a new town planning scheme, which will replace a dilapidated slum area by a fine 120 ft. wide shopping road from Paragon Station to Beverley Road. The cost of the new thoroughfare, which will not be of great length, will be £150,000, and it will include an omnibus stand and a motor park. Other schemes are in progress, and an overhead railroad will be commenced shortly.

Armstrong College Extensions.

The Armstrong College extensions have been approved by the Town Improvement Committee of the Newcastle Corporation, and it is stated that the proposed buildings will involve an expenditure by the college authorities of about £60,000. The work, which will be put in hand during the winter, has been approved by the Government as suitable work for relieving unemployment.

1,000-*Bedroom Hotel.*

Another large hotel is to be erected in London by Messrs. Lyons & Co. It will be built on the island site opposite the London and North-Eastern Railway station at King's Cross, and will have 1,000 bedrooms. The large hotel to be built by Messrs. Lyons on the site of the Golden Ballot offices at Marble Arch will not be finished until 1930. It will have a frontage almost double that of Selfridge's, and will contain 2,500 bedrooms.

New L.C.C. Alderman.

Major Harry Barnes, V.P.R.I.B.A., has been elected an alderman of the London County Council. It will be remembered that he is a member of the Progressive Party. During the war he was commanding officer of the 2nd Battalion Volunteer Northumberland Fusiliers. He represented Newcastle East in Parliament as a Liberal, and sat on the Land Values and Rent Restrictions Committees. He is also a Fellow of the Surveyors' Institute.

Wandsworth's Housing Scheme.

Wandsworth Borough Council, having acquired certain undeveloped land on the Furze Down and Southfields Housing Estate, propose to proceed with a housing programme. At the last meeting of the Council, a resolution was passed urging the Minister of Health to give his approval to the scheme at the earliest possible moment, in view of the urgency of the problem in Wandsworth, and in view of the impetus the erection of houses would give to other trades. Under the existing scheme the Council have built 708 houses and converted 340 flats.

Housing Scheme for Somers Town.

St. Pancras Estates Committee recommend the Council to approve an amended housing scheme for Somers Town—to be termed the Walcot Street area—and that the Minister of Health be asked to sanction the scheme and to contribute one half of the estimated average annual loss. The committee propose to erect four blocks of sixteen flats and one block of eight, a total of seventy-two flats. The work is estimated to cost £49,110, and the value of the land is approximately £13,500, making a total expenditure of £62,610.

Rebuilding the Mint.

Bit by bit the Royal Mint is being remoulded in order to bring it up to date. The present Mint, standing under the shadow of the Tower of London, has been in existence for more than 100 years. At first it was suggested that the Mint should be transferred elsewhere and the valuable site sold, but the Government valuers advised that the money realized for the site would fall far short of the cost of a new factory; in addition, houses might have to be built for the workmen if the Mint were taken into the country; and further the Bank of England did not like the Mint to be too far away.

Wallasey's new Building Scheme.

The erection of 245 non-parlour houses in Poulton and Somerville is part of a big housing offensive which the Wallasey Corporation are launching. The Housing Committee have considered the question of assisting builders under the new Act, and have decided to apply for the subsidy in respect to 200 houses; and to obtain sanction to borrow £12,375—the capitalized value of the Exchequer subsidy of £6 per house per annum in respect to 165 houses. The work of extending Belvidere Road to Rolleston Drive, will cost £5,500 irrespective of £2,780 for the purchase of land.

Worthing Improvements.

A public inquiry was held by the Ministry of Health at Worthing relative to the application of the Town Council to borrow £16,000 for laying out Beach House Park (ten acres) and Denton Gardens (two and a quarter acres) as public walks and pleasure grounds. The Town Clerk stated that experience had shown the public bowling greens and tennis courts to be paying propositions, the existing hard courts having paid for themselves in the first season. There was no opposition.

The Institution of Heating and Ventilating Engineers.

The Publicity Committee have issued a suggestive list of subjects for the use of members who desire to read papers before the Institution of Heating and Ventilating Engineers. Hints are also given on the manner in which the papers should be prepared. All papers accepted are eligible for the silver and bronze medals of the Institution, which are given for papers considered to be specially meritorious. For the coming session the following prizes are also offered by Messrs. Davidson & Co., Ltd., Messrs. Lumby's, Ltd., and Mr. J. Roger Preston: Sirocco premium, £10 10s.; Lumby premium, £10 10s.; Preston premium, £5 5s.

Manchester's Building Schemes.

Unemployment schemes at Manchester include the continuance of house building, new roads, park-laying, and many private building projects, including the erection of three huge warehouses in Trafford Park, at a cost of £500,000, by the Ship Canal Company. The sanction of the Ministry of Health has been received to the demolition of a large slum area in Hulme. The first task will be to house the large working-class population on a new estate in the suburbs. The Corporation are making an offer of an advance up to £410 for a £600 house, carrying the Government subsidy of £100 to encourage people to buy their own houses. This means that the prospective owner-occupier has to find only £90, the balance being paid in reasonable weekly sums.

Housing Loans.

The Ministry of Health have sent a circular letter to public utility societies with regard to section 6 of the Housing Act 1921. This section provides that section 40 of the Housing Town Planning, etc., Act, 1919 (which defines a public utility society) shall have effect as though the words "the issue of any share or loan capital with interest or dividend exceeding the rate for the time being prescribed by the Treasury" were substituted for the words "the payment of any interest or dividend at a rate exceeding 6 per cent. per annum." The letter states that "the prescribed rate has hitherto been 6½ per cent. per annum, but by Treasury minute dated August 16 last, which was published in 'The London Gazette' of August 21, the rate was reduced to 6 per cent. per annum, so however as not to affect the rate of interest or dividend on share or loan capital already issued by a public utility society. A society therefore may continue to pay a rate of interest or dividend not exceeding 6½ per cent. per annum on share and loan capital issued prior to August 16, 1923, but in respect of capital issued on or after that date the rate must not exceed 6 per cent. per annum. Attention is also drawn to the fact that the rate prescribed in the minute in question applies for purposes of section 3 of the Housing, etc., Act, 1923."

(*Continued on page* XXI.)

The Week's News—*continuea.*

Building Operatives and the Ex-Service Man.

Mr. Fred Bramley, secretary of the Trade Unions Congress, alt in an interview with the charge made by the Minister Labour that the trade unions had opposed the employment ex-service men in the building trades. "Sir Montague rlow," he said, "knows that the policy of the building trade ons in regard to the introduction of ex-servicemen into the ustry simply gave effect to the joint findings of the Industrial uncil for the building industry, often called the "Building ades Parliament," and representing the views not only of the ons, but of the employers in the industry. At the very time en Sir Montague Barlow was urging the ex-servicemen's ms there were more disabled ex-servicemen preparing under training schemes to enter the building industry than any er trade. The services rendered by the unions in developing se training schemes was publicly acknowledged by the then ister of Labour (Sir Robert Horne). The last official urns of unemployment made in the 'Labour Gazette' for tember give the number of unemployed building trade kers as 82,000. At the time when the unions were being ailed for their attitude to the ex-servicemen there were rly 10,000 ex-servicemen receiving unemployment pay as ding trade workers. What possible justification was there increasing their number?"

Housing Progress.

ir Charles Ruthen, Director-General of Housing at the istry of Health, in a statement on housing, said that present national position was as satisfactory as one could xect. Private enterprise was recovering, and he thought the output of houses this year would prove that the ding industry was appreciating the grave urgency of housing problem and was rapidly getting back into its war stride. He stated that houses which three years would have cost £1,000 to build were to-day being produced roughly, £400. They might fairly claim that in effect were building 2½ houses to-day for the price of one e years ago, and not only that, but building them in same time as it took to build one three years ago. The dity with which houses could be produced was governed he cost of their production. The root of the problem of sing, he said, lay within the housing industry. At present e was a serious lack of skilled labourers—bricklayers in icular. Consequently there was an unfortunate surplus, r as new houses were concerned, in other classes of labour, h could not be employed until the foundations were in the walls up. No solution was likely to be found until building trade unions and employers together formulated heme for replacing the direct loss in the essential skilled aches of the industry caused by the war.

Littleton Pumping Station.

cupying a site area of over 20,000 sq. ft., the new pumping on at Littleton is designed to house the largest single ping plant yet installed by the Metropolitan Water Board. designs for the new buildings were prepared by the archi- ral staff of the Metropolitan Water Board, under the ction of Mr. Henry E. Stilgoe, M.I.C.E., the chief engineer. clusive contract for the whole of the structural work, to £70,312, has been placed with the firm of Messrs. John and Son, Ltd., of Lincoln House, High Holborn, W.C.1. buildings are in three bays, forming a compact block ximately square. The front bay will be the largest, com- g the engine room, with side wings affording accommoda- or offices, garage, oil and general stores, mess rooms, etc., ngth over all being 127 ft., and the width 60 ft. The ion for this main block will be of red facing bricks, with and stone dressings. In the centre is the main entrance ric style, surmounted by Portland stone ornaments. morland slates are adopted for the roof. Behind the engine- block are the coal bunkers, in reinforced concrete. These signed to carry 120 tons each. Ranged side by side, they y a length of 88 ft., and a width of 20 ft., the height to dge of the block being 60 ft. Each of the five bunkers s, empty, about 160 tons. The third block consists of the house. This is a brick structure 88 ft. long, and 41 ft. and it will accommodate five Stirling boilers. Beneath ting-floor a subway will be excavated for the ash wagons, will be brought to the surface by an electric hoist. side the boiler-house a chimney is to be erected. will be octagonal in plan, built of red brick, with gs of Portland stone. It will be carried to a height of

Trade and Craft

New Telegraphic and Cable Address.

Messrs. W. H. Willcox & Co., Ltd., manufacturers, merchants, and shippers, have secured registration of a new telegraphic and cable address, as follows: Telegrams: Enginsplys, Boroh, London. Cables: Enginsplys, London.

Removal of Medway's Works.

The business carried on by Messrs. Medway's Safety Lift Company, Limited, at Rolt Street, Deptford, S.E.8, has been transferred to more commodious premises at Victoria Works, Maidstone. These spacious works have been planned on the most modern lines, and are fitted throughout with the latest types of machinery. The company's selling organization remains at 35 Surrey Street, Strand, W.C.2.

Sanitary Appliances.

Messrs. Shanks & Co., Ltd., Barrhead, Scotland, send us a copy of their Letter H General Catalogue, just published by them. All their well-known designs are herein illustrated, and many of them have been improved, and a number of new ones introduced. Appliances of all grades are shown, suitable either for the luxurious mansion or the Government house. Numerous specialities for hospitals, schools, etc., are also shown.

Artistic Interiors.

Some idea of the range of possibilities opened up by the use of "SX" board is conveyed in the illustrations contained in "Artistic Interiors." They are by no means exhaustive, for the use of "SX" board gives threefold scope to the designer of artistic interiors. The design can be varied architecturally, by the arrangement and size of the panels; decoratively, by the choice and blending of the colours; and ornamentally, by varying the type of the mouldings or panel strips or by adding borders or stencils to the board. Like every other material, "SX" board has its own particular sphere of usefulness, and calls for appropriate treatment and fixing. It is essentially a panelling material, and the panel feature is an integral part of its fixing as well as one of its greatest charms. Priming or sizing is not necessary for ordinary purposes—the board being suitable for paint or distemper. "SX" board is a British-made article, the advantages of which are becoming more and more widely known. Copies of the booklet can be obtained from the Thames Paper Company, Limited, Purfleet, Essex.

Concrete Machinery.

At the Public Works, Roads, and Transport Congress and Exhibition, 1923, which is to be held at the Royal Agricultural Hall, London, from November 22 to 29, the exhibit of the Ransome Machinery Co. (1920), Ltd., will include tar macadam, concrete, and piling plant of various kinds. A prominent exhibit will be the Ransome tar and bituminous macadam plant, similar to those of various sizes in use by the Ministry of Transport and by large numbers of county, municipal, urban, and rural councils, road contractors, etc. It is claimed to be the only plant having a double drying drum. The drying and mixing processes can be regulated to suit the specific needs of any batch of aggregate, so that every batch is properly dried and coated. These plants are made in three portable or stationary sizes, with outputs of four, six, and twelve tons per hour, and also in stationary sizes only, with outputs of twenty and thirty tons per hour. Another important feature of the stand will be the hand-power moulding press that makes "almost anything." This machine has three moulding boxes mounted on a low revolving frame. While the first is loaded, the second is pressed (forty tons pressure by merely turning a handle), and the finished product in the third box is taken away. The machine will make solid or hollow, plain or ornamental blocks, bricks, slabs, copings, angles, etc., in innumerable shapes, any dimension within 18 in. by 9 in. by 9 in.; also pin and pan tiles and clay bricks. Specimens of its work will be exhibited, and the machine will be demonstrated.

Waterproof Sandpaper.

The National Federation of Building Trades Employers have issued the following statement:—

"It is expected that the Government will shortly introduce a Bill to deal with the 1921 Geneva International Labour Conference as to the use of white lead in painting. It is not known whether this Bill will adopt the whole of the proposals included, and in particular whether it will seek in any measure to prohibit the use of white lead for the painting of interiors; but it is to be considered as certain that it will include regula-

(*Continued on page* xxii.)

Trade and Craft—*continued*.

tions for the use of white lead in painting, and that, especially in view of the findings of the recent Home Office Committee (the 'Norman' Committee) as to the importance of avoiding the dust caused by dry rubbing down, one of the regulations will be to prohibit the rubbing down by a dry process of surfaces painted with lead paint. As this will to some extent cause a change of practice, it is thought proper to call the attention of the members of the federation to the introduction of waterproof sandpaper, which was the subject of a demonstration at the half-yearly meeting in October, 1922, and of which there is now more than one satisfactory make on the market. In regard to regulations, the outstanding feature of this material is that it enables water to be used so as to prevent injurious lead dust arising from rubbing down. The waterproof sandpaper can be wiped or rinsed in water to clean it when clogged by the particles of detached paint, and the scratching of the surface by detached particles of abrasive is also avoided. Smoothness of the rubbed surface and quickness of working is also caused by the lubricating action of the water. The waterproof sandpaper is already well known, but in view of pending legislation it is thought desirable to call the matter to the attention of members who may not have made themselves acquainted with it, in order that, before the regulations come into operation, they may have considered it as a means of adapting their practice to the requirements of the regulations."

"B.R.C." Reinforcements.

We have received from the British Reinforced Concrete Engineering Co., Ltd., a copy of a very well-produced photographic record of examples of the use of reinforced concrete in modern building construction. The book is issued with the hope that it will prove interesting as an exemplification of the widespread employment of the "B.R.C." system of reinforcement in modern building construction. Such reinforced concrete construction consists in all cases of columns (or struts), beams, and slabs, either separately or in combination. Slabs themselves are actually beams, but as a rule they are so shallow and so wide and carry so much less unit load that they are differently reinforced from the parts commonly considered as beams. Among the uses to which the "B.R.C." system has already been put, and which are illustrated in the volume, the following are some of the most important: foundations, piles, columns, floor beams, floor slabs, roofs, lintels, staircases, bins, silos, bridges, reservoirs, culverts, piers, roads, and barges. The main feature of "B.R.C." reinforcements is that they are machine-made at their works and supplied in the most convenient form ready for fixing in position with the least amount of labour, so that the possibility of misplacement or subsequent displacement is to the greatest extent eliminated. By this means the greatest degree of safety is ensured.

The publishers of this volume would seem to have app ciated the fact that if a thing is worth printing at all, it is wo printing well. We would that every volume in our own libra were as well produced.

New Inventions

Latest Patent Applications.

25056.—Balfour, J. F.—Buildings. October 8.

25401.—Bell, I.—Wooden houses. October 12.

25119.—Bridge, L. G.—Metal sheeting for buildings, e October 9.

25547.—Duncan, W.—Pre-cast concrete blocks, etc. Oc ber 13.

25231.—Lovell, J.—Roofing tiles. October 10.

24989.—Scantlebury, F. H.—Method of carving sto October 8.

Specifications Published.

204392.—Moler Fireproof Brick and Partition Co., Ltd., a Deane, B. P. F.—Manufacture of articles from cl diatomaceous earth, and similar mineral substanc

204487.—Akerman, W. S.—Roofing-tiles.

204490.—Price, F. G.—Corrugated roofing-sheets.

204497.—British Reinforced Concrete Engineering Co., Lt and Hall, E. B.—Wire-fabric reinforcements for t concrete foundations of roadways, tramways, a the like.

204516.—Miller, J. E.—Angle concrete bricks and blocks.

204535.—Skelton, Sen., J.; Skelton, L. J.; and Skelton, Jur J.—Built-up metal towers, particularly those crane stagings employed in the construction buildings.

204580.—Pearlman, J.—Composition for coating, covering, painting for stone steps, stone staircases, and otl stonework, and a process connected therewith.

Abstract Published.

202921.—Roofing shingles.—Abraham, H., 95 MadisonAven New York, U.S.A.—Roofing shingles, consisting o foundation of felt impregnated or saturated w bituminous compounds with or without a facing mineral particles, are secured to spaced laths, partially overlapping horizontal rows in such man that due to their flexibility the unsupported porti sag to give an ornamental appearance. Specifi tion 184361 is referred to.

The above particulars are specially prepared by Messrs. Rayner & Co., regist patent agents, of 5 Chancery Lane, London, W.C.2, from whom readers of JOURNAL may obtain all information free on matters relating to patents, trade ma and designs. Messrs. Rayner & Co. will obtain printed copies of the publis specifications and abstract only, and forward on post free for the price of 1/6 each.

Fiberlic
"THE WALLBOARD WITH A REPUTATION."
MACANDREWS & FORBES LIMITED, 65 SOUTH MOLTON STREET, LONDON, W.1.

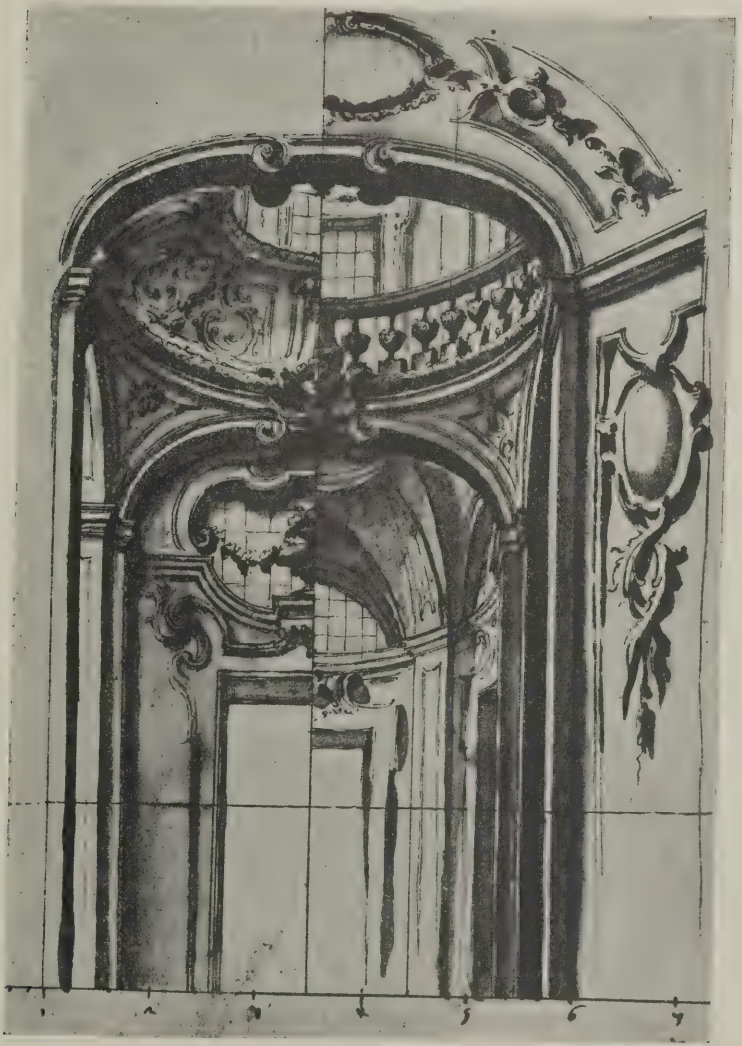
EASTWOODS
LIMITED
STOCK FLETTON AND RED BRICK
MANUFACTURERS
CEMENT, LIME & BUILDERS' MERCHANTS
HEAD OFFICE. 47 BELVEDERE RD. LONDON, S.E.1.
PHONE. HOP 344

Vednesday, November 7, 1923.

Vol. LVIII. No. 1505.

THE ARCHITECTS' JOURNAL & Architectural Engineer

With which is incorporated "The Builders' Journal."

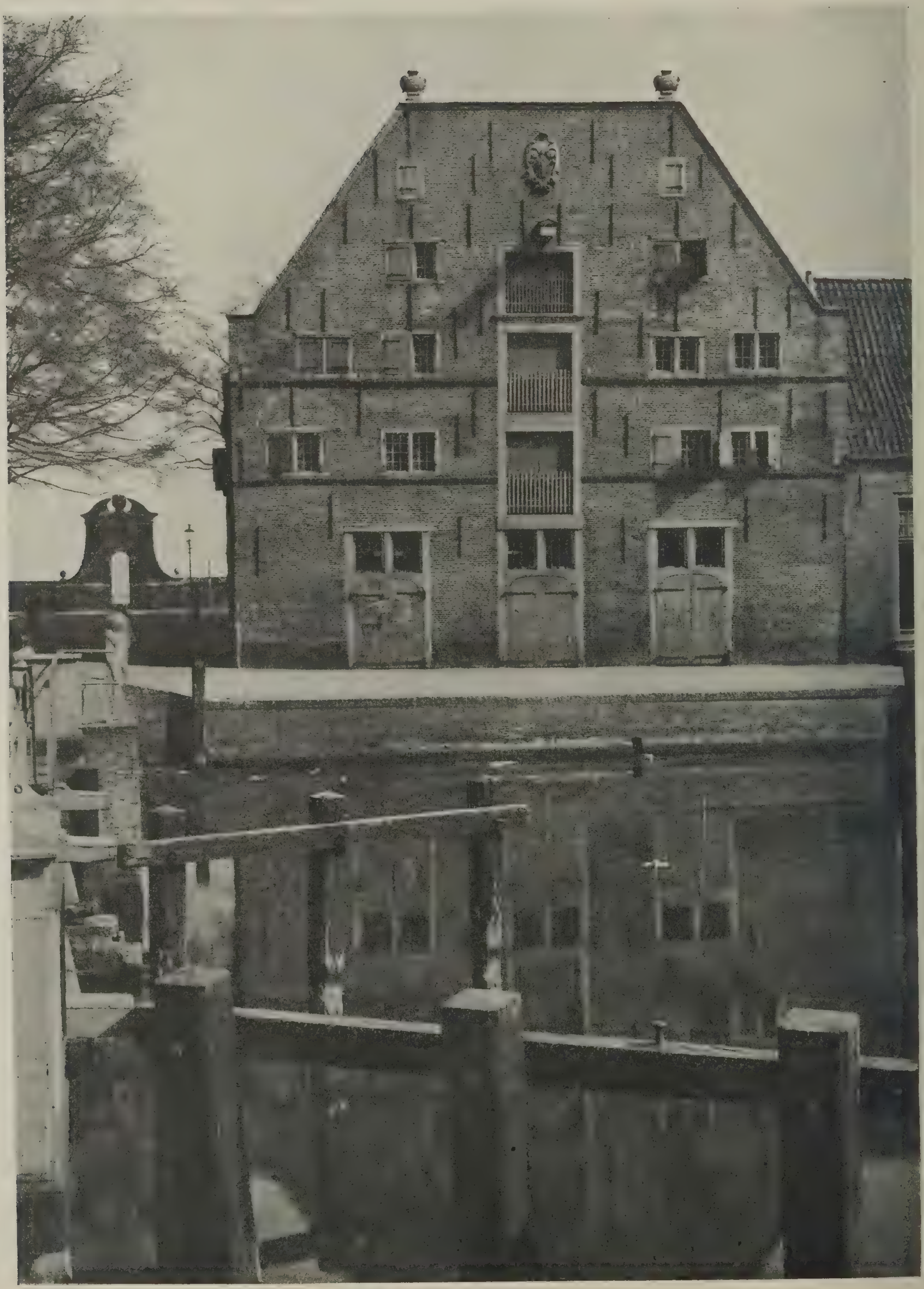


TWO DESIGNS FOR A WINDOW, VILLA STUPINIGI, PIEDMONT.

27-29 Tothill Street, Westminster, S.W.1.

c

Enkhuizen, Holland. A Warehouse of the Old East India Company



The old warehouses of Holland are full of character, and give an atmosphere to the canals which they line as do the wharves on the Surrey side of the Thames. In the background, on the left, can be seen a gateway of the sea wall.

THE
ARCHITECTS' JOURNAL
27-29 Tothill Street, Westminster, S.W.1.

Wednesday, November 7, 1923

Volume LVIII. No. 1505

Modern Industrial Art

IT may perhaps be said with some justification that collecting, as we understand it to-day, owes its inception to the etchings of Piranesi. Others had studied Roman remains, but he it was who drew men's atten- ti to all the exquisite paraphernalia : to the urns and the rods, to the vases and the candelabra, and to the frag- nts, and it was but a short step from admiration to cuisition. Sir John Soane is typical of the early collectors, n even he did not despise the craftsmanship of his day. admired and bought the work of Flaxman, and most of furniture is the work of contemporary men. To-day habit of collecting has so increased that it is no un- mon thing to enter a room in which scarcely a single rle is a contemporary product. Perhaps even worse n this is to enter a room in which every article is a con- porary product, every one being an imitation of some ler piece. How, under such conditions, can good modern rk continue to be produced ?

ke many other evils of the day the situation is the ome of industrialism. The conditions brought about ndustrialism completely changed methods of produc- on, and traditions of craftsmanship were well-nigh severed. nuous thread was maintained by such men as Philip t and Eden Nesfield, by the pre-Raphaelites, William ois, and, later, by Ernest Gimson. Meanwhile, however, dustrialism had done its worst, and men had, for the most r lost all standards of beauty and fitness. But the se of beauty is not so easily extinguished. Indeed, the nd for it is to some extent a measure of civilization, ic reviving from a kind of stupor, there was a natural ion in favour of products of the past since the present ul produce only machine-made monstrosities. It is n the result of this reaction that we are still suffering. e interval the methods of industrial production have aged, and it is now possible to produce beautiful things. t so ingrained has the belief become that beauty and trialism are entirely incompatible that the purchase dmitation of antiques continues, despite the fact that w industrial conditions have shown themselves capable th production of objects which, if examined impartially, nare favourably with those of almost any other age. vit to the recent exhibition of Industrial Art at the u Kensington Museum would have confirmed this tment.

Textiles, ceramics, furniture, and the like must be judged some extent in relation to the habits and tendencies of ge which they are designed to serve. There can be absolute standards for assessment. There are, however, n general standards to which all products of this kind st conform. Workmanship must be good, materials be properly used ; if the object is designed to perform pecific function it must do so efficiently ; there must be y and appropriateness in form and colour. Many of hibits at South Kensington conformed to all these ndards, particularly the furniture, the textiles, and the ting. Printing plays a prominent part in our lives. er how often our eyes are engaged with it both consciously, when we deliberately read, and unconsciously, when we merely observe. An improvement in it is, therefore, to be welcomed, particularly in commercial printing. If town planning includes an attempt to achieve the town beautiful, then it must take note of printing, which can, and, indeed, often does, utterly deface our streets and public places.

We are at the moment more concerned with those exhibits which make up the equipment of the house. The workmanship of much of the best contemporary furniture is certainly extremely good, and although in design it may tend towards austerity, much of it is certainly sedately beautiful. And this square severity harmonizes with other simplifying tendencies of the age. At a time when so much attention is being given to labour-saving it is but natural that these same ideals should inform contemporary furniture. Any failure to do so, even for the sake of increased richness of effect, would cause the products to cease to be expressive of their age. As for the textiles, it is doubtful whether any other age could have produced such richness and beauty in colour, and such sumptuousness of texture, as were to be seen in many of the materials at the exhibition. The speciality of the moment seems to lie in the most magnificent effects of shot colours. Many of the ceramic exhibits were good, but for the most part they are inferior to the achievements of the past.

The whole exhibition afforded a thoroughly convincing proof that it is possible to-day to equip a building with contemporary products which are of absolutely sound workmanship, and which combine beauty with efficiency. And these objects are not the result of maintaining archaic and obsolete organizations. They are produced under the prevailing industrial conditions. They indicate, indeed, a victory of beauty over commerce and industry. In its first flush industrialism thought to ignore beauty, but it has since discovered its error. Yet despite the fact that all these excellent products are available how seldom do we see them in use. Herein lies the tragedy. The habit of ignoring the work of the present has been formed, and it is not so easily broken. Certainly most of the articles are extremely costly, and this applies especially to the furniture and the textiles. We should have thought that it would be possible to sell at more moderate figures. The furniture is particularly expensive, for although the joinery is of the first quality, the designs are, for the most part, so simple and unadorned that there is none of that fine and delicate workmanship, the execution of which is a necessarily long process. Nevertheless, there are even to-day many people who spend as much on buying old pieces, or even well-made reproductions, as the cost of these modern pieces. But with old furniture there is always the chance of a bargain, of *picking something up*, in addition to the delight of collecting, which appeals to the modern sophisticated mind, and which is completely lacking when dealing with contemporary furniture.

The only means of stimulating an interest in present-day work is through publicity, of which there are many channels, the recent exhibition being one, and, to judge by the attendance, an extremely good one. Others which occur to us are the modern stage, which might be set with good modern furnishings; better shop displays; greater prominence in the illustrated press; and, lastly, much could be done by the architect who, nowadays, is fortunately more often consulted as to house furnishing and equipment than he was a few years ago.

It is evident that there can be no real coherent progress in any branch of art so long as there is a persistence to ignore the present and to imitate the past, and as architecture is so intimately bound up with furnishing it too must suffer. We should like, therefore, to see a real change of outlook and a more general acquaintance with, and appreciation of, the extremely good work which is the product of to-day.

Sir Edwin Lutyens Speaks Out

Sir Edwin Lutyens, in an article in "The World's Work," from which we quote extracts in this issue, has some vigorous things to say of modern architecture. Few observers will be disposed to disagree with his general criticisms. No one who is honest with himself can pretend to find much cause for satisfaction in the general level of English architectural achievement to-day. This does not necessarily imply conscious personal obliquity upon the part of any practising architect. To few men is given the power to shake off the shackles of early training and environment. Norman Shaw did it to a certain extent, but he reached his classicism too late in life to produce anything of really first-rate order. He was, however, the essential link between the Gothic Revival and the newer renaissance, which not yet has run its course of tentative and experimental effort. We are still suffering from the effects of the Gothic Revival, and, like the invalid who has reached convalescence, are still worried, pernicketty, and inclined to be fretful. This stage in our recovery will pass—is, indeed, passing rapidly. Sir Edwin, we are glad to note, did full justice to the fine work of the schools, which are every year turning out hundreds of competent young architects to aid in the regeneration of our national architecture. They have gone through a rigorous and an inspiring training, in which the importance of the orders is not overstressed. Those who are responsible for the conduct of our architectural schools have been wise in realizing the futility of revivals. From time to time there has been a veering of the architectural compass: according to the professorial breeze we have been at different moments gracefully Georgian, gloomily early nineteenth-century, or heavily neo-Grec. But the schools have passed safely through their early trials; and, although they may occasionally show evidence of a leaning towards America or the Continent, they are in their ultimate product indubitably English. The welfare of our architectural future is assured. Already numbers of men who but two or three years ago were students are now in a large way of practice; some, indeed, have won wealth and fame. It needs little imagination to picture the architectural splendour of the future. In ten or fifteen years' time our American confrères will be coming over here not to gaze respectfully at St. Paul's and the Banqueting House, but to pick up a few tips on modern design.

Versatile Architects

In the article to which we refer in the preceding note, Sir Edwin Lutyens stimulates thought on a number of matters relating to architecture. He observes:

"I should like the architect to be more of a universalist, more comprehensive as a creator, nearer in spirit to Leonardo da Vinci, who, when submitting his qualifications to Lorenzo the Magnificent, recorded that he was an architect, a sculptor, a mathematician, and an obedient servant. In conclusion, the genius who painted undying beauty in the Sistine Chapel declared: 'I also paint.'"

The architects of the Renaissance were giants indeec
an amazingly versatile race of men. Can we show th
like to-day? Perhaps not. We know one architect w
spends his leisure hours in the making of violins—a
very fine instruments they are, too—while another puts
all his spare time organ-playing. Others severally ex
in wood-carving, water-colour painting, plastic modelli
and so forth. One well-known architect is a profound soci
ogist, with an original theory on occupational influenc
while another designs not only his furniture but his clotl
—his trousers have but to be looked upon to be cove
by anyone with half an eye for elegance of form.
could compile a lengthy list of architects who have acc
plishments over and above the practice of architectu
but in the end it amounts to no more than a recital
hobbies. Where is the modern architect who can not o
design his building, but chisel its statuary, paint its ceilin
shape its metalwork? Either he is non-existent
incurably modest, for we know him not. There can be
doubt that most architects find it more than enough
master the problem of architectural design, though so
have been known to investigate the mysteries of structu
steel, heating and ventilating, and sanitary engineeri
More than a general knowledge of the principles and pr
tice of these subsidiary branches of architectural w
architects need not trouble to obtain. The archite
primary occupation should be with design pure
simple. The moment he begins to try to do the w
of the sculptor, the decorative artist, or the craftsm
his own art must suffer. Despite the example of
Renaissance, "every man to his trade" is still a so
maxim.

Colour and the Architect

We publish in this issue two further reproductions
colour-drawings done in the Architectural Associat
School ofArchitecture. (The first two appeared in our is
for October 3.) The A.A. is to be commended for
pioneer work in this field of architectural design. In
sense in which it is understood to-day colour design i
new art. But it has abundant historical precede
Egypt, Babylonia, Assyria, Greece, Rome—all have c
tributed their quota in the past, while in Pompeii we
a source of inspiration that very nearly approximates
the requirements of our own day. Yet the use of col
heretofore has been completely misunderstood, and
opportunities almost entirely neglected, except by a
of the more enterprising decorative firms, many of wh
efforts fall far short of success. Colour design is obvio
the province of the architect, and he ought to take adv
tage of the opportunities which are now provided for
close study of it. No longer is it to be regarded as
abstruse subject in which one takes a pot shot, so to spe
and considers oneself lucky to land somewhere on
target. To-day it is possible (to preserve the metapho
the rifle range) to score a bull every time. To quote
words of Mr. Howard Robertson: "From the study of
spectrum, with its natural order of colours, spring cert
elementary exercises in which the student discovers t
effects can be produced, as it were, by law and not
accident." An art that is thus capable of mathemat
determination may not appeal very strongly to the arti
temperament; but since everything in this world of
has a mathematical basis, especially architecture,
disadvantage is more apparent than real. By the use
chart of scientifically harmonized colours it is possible
produce, in infinite variety, schemes of decoration t
completely satisfy the æsthetic requirements. The c
parative inexpensiveness of colour is a strong recommen
tion, and business men, once they know of its possibilit
will be quick to take it up. Great scope for new acti
in the field of decorative design is thus provided. A
specialized study, colour holds out unique opportunitie
the architect who cares to take it up seriously. Those
do so should not fail of their reward.

The R.I.B.A. Presidential Address

By J. ALFRED GOTCH, P.R.I.B.A., F.S.A.

JUST as the plainest idea can be rendered handsome by clothing it in the gorgeous raiment of poetry, so the crudest necessities of building can be ennobled by architecture. That, indeed, is one of its func- ns: to turn the disjointed and even illiterate prose of e client's sketch-plan into an organic whole, infused th the spirit of poetry: to transmute his halting rmurs into the liquid song of the nightingale.

But you may say that poetry is not apt for everyday , or even confess that you have no ear for it. Well, re is noble prose as well as fascinating poetry. But se, to be noble, cannot be haphazard; its words must carefully selected and skilfully blended, chosen as well the aptness of their meaning as the music of their nd.

As with noble prose, so with fine architecture: its nponent parts must be carefully marshalled and skil- ly adjusted, apt for their purpose and agreeable to the ; and although in small buildings the scope is nar- ver than in large, yet the same principles hold good both.

What is the moral to be drawn from this analogy? is, that as we are agreeably affected by fine literature hout knowing exactly why, so, with like vagueness, we impressed with good architecture. But as literary le can only be acquired by study and practice, so can the faculty of design in architecture only be uired by training.

his fact is sometimes overlooked by those who are ut to build, especially if their intentions are not bitious. They have been known to employ a builder a decorator or a land agent or a house furnisher, so ple do they consider the problem to be, so prudent they in saving the expense of an architect. But, depend n it, with these practitioners the cost of design is ays added to the bill, although it may not appear a separate item. And, more important still, the work lesign is done in such cases by men who are not trained t—men admirable in their own occupations, but who, he nature of things, cannot have devoted much time tudying the niceties of design; and by design I mean merely external appearance, but the arrangement of building, whether great or small, its aptness, its tion to the sun, the disposition of its windows, doors fireplaces, not to mention a due supply of cup- rds.

only in the past the designing of houses had not been to excellent (if speculating) builders, untrained for this of their enterprise, how far less depressing, or irritating, ld be the suburbs of our cities and country towns! past is irrevocable, but the present and the future are ur own hands, and my appeal to the public is that just vhen they are ill they employ a doctor, if their teeth ble them they go to a dentist, or if they are suitors at they seek the skill of a barrister, so if they undertake requiring architectural design they should go to an itect; not for the sake of the architect, but for the sake e public themselves. More especially is this necessary n it is borne in mind that the barrister and his inarticu- client, the doctor and his patient, the dentist and his m, all die and are forgotten; whereas in architecture results are abiding, and the sins of the fathers are ed upon the children unto the third and fourth genera-

rchitecture is abiding: so it is if climate is propitious, f unpropitious, is duly taken into account; if motorists somewhat curbed in their desire to rush through ent towns and villages; if the work of our forefathers emed to hold lessons for ourselves. Each generation ts own views as to this last point. Even so ponderous a matter as architecture is subject to the vagaries of fashion. It has been so throughout its history. Greek architecture became fashionable in Rome and decided the forms of the Roman builders. Ancient Roman architecture became fashionable in Italy of the fifteenth century and decided the trend of design during the period we call the Renaissance; Italian architecture became fashionable over the rest of Europe and gradually ousted the native Gothic style of Northern countries. Gothic architecture itself had sprung and developed from ancient classic forms largely in consequence of slowly changing fashion. In the days of Elizabeth classic features were built into or added on to Gothic houses in order to bring them more into the fashion; and Kirby Hall, one of the most fascinating productions of the early designers in the revived classic of Elizabeth's time, was itself modernized, the better to conform with fashion, in the time of the first Charles, by the insertion of features designed on more scholarly lines.

In the distant past the pursuit of fashion was intimately associated with structural development, and was, in fact, a process of slow evolution. But in the nearer past the changes have been more rapid, prompted as they have been not by structural development, but by admiration of the appearance of older buildings. Thus we have had the artificial Gothic of Horace Walpole, the fleeting Greek revival, the more genuine Gothic revival initiated by Pugin, which in its turn has given way to modern design founded on classic ideals. Indeed, so much has the classic spirit permeated our schools that the study of Gothic has fallen almost into abeyance, a fact much to be deplored; for the student of architecture will find his account in studying every phase of it which has dominated his own forefathers, and it is a short-sighted policy which would confine his attention to those phases only which may be supposed to minister to his immediate needs.

All these changes of fashion have their lesson for us. Some few teach us what to avoid, but by far the greater number show us how skilful men of old solved their problems; how they adapted their designs, not only to the wants of their clients, but to the materials at hand; how they contrived to make their buildings at once express their purpose and give pleasure to the eye, and this through the whole gamut of fancy, from that bestowed upon the simplest cottage to that which produced the most gorgeous and complicated cathedral. May I therefore make an appeal to the public to hesitate before consenting to the destruction of these ancient works of art, remembering, among other things, that the beauty of a building does not consist in the ivy with which it is covered, but in the design and the materials which the ivy hides? There may sometimes be circumstances which render the retention of ancient buildings impossible, but it should be borne strongly in mind that their number is limited, that they cannot be replaced, and that their disappearance may result in such pangs as followed the obduracy of the proud Tarquin in rejecting the Sibylline books.

I take a cheerful view of the future of architecture, especially when remembering the growing interest shown in the subject by the public at large. The civic spirit, which has done so much to make us what we are, is stirred more deeply than in bygone years by the beauty of art; and of all the arts, architecture reflects the spirit of its age with most insistence. What is to be the record of our own age? It lies with us; let it not be mean and contemptible, but rather let it be, by happy harmony between the public and the architect, a record fit to vie with that of the great days of Rome or the spacious times of Queen Elizabeth.

Sir Edwin Lutyens on Modern Architectu

SIR EDWIN LUTYENS, R.A., contributes an article on architecture to the current issue of "The World's Work," from which the following extracts are taken :—

There are signs that for British architecture the next half-century may be one of great achievement, despite the heroic vulgarity of buildings that are rising all over the trading districts in our cities. Pupils of rare promise are leaving the schools; and, if that promise fulfils itself, the forthcoming fifty years can give the future a landmark as distinctive as was the period in which Wren created masterpieces of classic harmony.

The endeavour of the generation to which I belong has been to pave the way for such an era. We have attempted, within the limits of our ability and our materials, to end the vogue of picturesque flamboyance that dominated Victorian England, and to return to the tradition of what was best in English architecture, as represented by the work of Wren, Inigo Jones, and, later, of Norman Shaw and Philip Webb.

How far we have succeeded is here irrelevant. Among professional men physicians are the most fortunate, in that they bury their failures; and, when criticizing other people's attainments, one is conscious of one's own mistakes. Each completed task leaves me with the determination to do better next time. Since I have been asked, however, to explain the influences that have reacted upon my conception of design, I cannot avoid referring to a detrimental factor which none of us could escape in the days of my youth.

When I first woke up to architecture, the Ruskin influence was very much alive, with Waterhouse as its most prominent exponent. The Ruskin followers gave vocal powers to all that they did. They saw with their ears instead of their eyes, and focussed the imagination by the same distorted practice. They planned a building so that it might *express* something. The result was like a nineteenth-century Academy picture of the "literary" school—a book of words was needed.

As a young man, then, I was for a while sensible to the Ruskin influence; which influence may be noted, I daresay, in a few of my early buildings. Every young man begins with tremendous enthusiasm, which is ready to overflow into elaboration. As he grows older his outlook clarifies, and he becomes more reserved, more tolerant, more restrained.

I started to realize that we were being led into error for the sake of ideas productive of what can only be described as ugliness and misformation. I accepted the truth that in architecture the final appeal must be made to the eye alone, and that only the eye can be the judge. I understood that—as in the case of fruits which are pleasant to the eye but evil to taste—although one sense can inform another, it cannot replace another.

I was guided into this development of understanding by the teaching in silent stone of great architects. Like a puppy-dog in a motor-car, I looked around at the work of old masters and new ones.

Norman Shaw, a Scotsman permeated with the English classic tradition, was freeing design from its literary aspect, and was focussing directly on the optic vision. During the sixty years of his career he advanced from early experiments in the Gothic manner to the fine classicism of Chesters, in Northumberland; and meanwhile he, more than anybody else, released a new force in architecture. To know that here was an improving influence, I had only to go round the corner and study his three houses built on the east side of Queen's Gate, London.

Contemporary and parallel with Norman Shaw's work was that of Philip Webb, a master of building, who showed the way to the beautiful use of modern materials, and who rather revolted against the "architect-tonic" practice, then prevalent, of borrowing foreign features, such as t of Italian or German palaces, for the sake of novelty originality.

All modern architecture owed and owes much to t two men, and to Norman Shaw in particular. Inevita Shaw made us look back and consider the work of I Jones and other great designers.

After Gilbert Scott, Shaw, and Webb, we had r recent architects seizing the imagination with ori conceptions. Sir Reginald Blomfield is of this band, so is Sir Aston Webb, who, although not an entire classi has an outlook that is excellently free, and who helpe toward more sober attainments—attainments which given both London and the countryside buildings of s factory proportions in the traditions of modern classic The War Office and the Office of Works' new buildin Storey's Gate belong to this category, as did the spaced Westminster Cathedral before they decorated it such magnificence.

So, in its own fashion, does the Bush Building in K way, by Mr. Harvey Corbett (an American), which des decided praise, although the scale may be inconsider large for its neighbourhood. Like the skyscrapers whi approaches, it has the benefit of fine patternage. scrapers can hold the imagination because of their mendous opportunities in the use of windows. Fenestr is our predominant method of expression, the windows the ribs in the cloth of design.

It may be that, in my enthusiasm for the restored t tions of simplicity and classicism, I have given the im sion that the Gothic ornateness of the nineteen hun has produced no aftermath other than the buildings i in our midst. To correct a possible misapprehensi must recur to my earlier reference to the introducti picturesque foreign forms for the sake of novelty. Thi not end when the Gothic revival was broken up; as wi the Port of London building. Is this not too "magnific for the degree of craftsmanship at which we have arriv

Consider the metamorphosis of Regent Street. skyline in Nash's Regent Street, from Langham Pla Waterloo Place, was without jars or jags. The curve absolute, the main cornices were continuous: a achievement, this, if you consider the gradients.

But that, which belonged to the pre-Ruskin trad has gone, and we are the worse off for its disappear Instead, we have in Regent Street and other parts of Lo commercial buildings covered with domes, towers, excrescences, and flamboyantly uneven skylines.

The architect's relations with his public shoul improved. I greatly regret that he is not better place social service, satisfactory though the changes in respect have been during the last two decades. I sh have liked, for example, to see the Royal Institu British Architects, with its affiliated societies, placed position to manage and engineer the national ho schemes in a public-spirited manner for the public go

And I should like the architect to be more of a univers more comprehensive as a creator, nearer in spirit to Leo da Vinci, who, when submitting his qualifications to Lo the Magnificent, recorded that he was an archite sculptor, a mathematician, and an obedient servant conclusion, the genius who painted undying beauty i Sistine Chapel declared : "I also paint."

The last Englishman of this splendid type was A Stevens—classicist, excellent sculptor, good painter, inspired architectural designer—who nearly starved Ruskin preached. It is not unlikely that there will be o of his universality among the brilliant young men who just left, or are about to leave, the schools, and that will be more fortunate than was Stevens. Theirs i future, theirs the fulfilment which we have earnestly to prepare.

New Baths and Changing Room at St. John's College, Cambridge

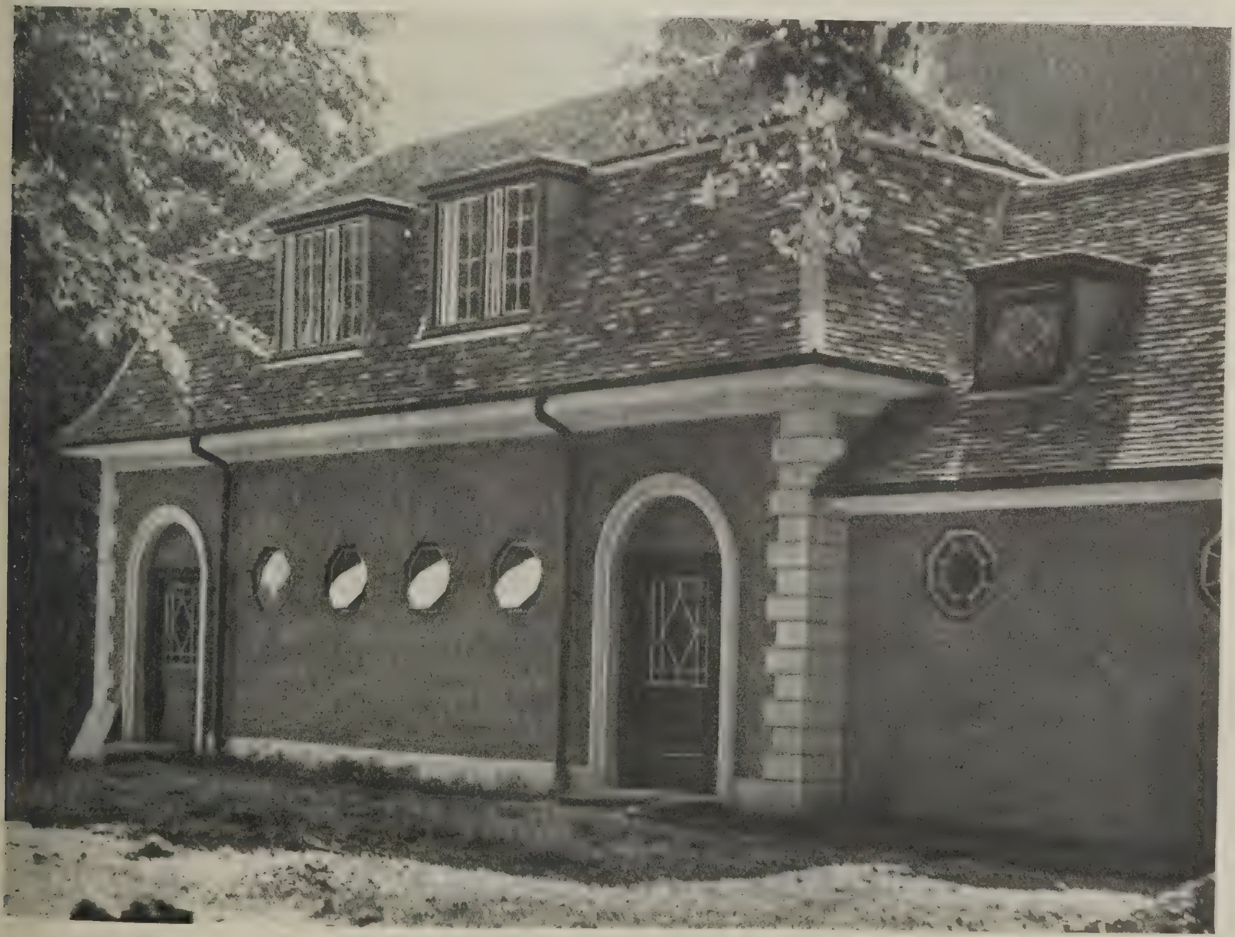
LFRED W. S. CROSS, M.A., F.R.I.B.A., and KENNETH M. B. CROSS, M.A., Architects

THE new baths, which have been completed recently on the west bank of the river Cam, occupy the site of some of the earliest chemical laboratories in Cambridge. It was originally
ended to adapt the smaller of these buildings to meet the
quirements of a slipper bath hall, but on further examina-
n this was found to be structurally unwise, and it
s decided that the old foundations only should be
used. The system of bathing introduced, by which a
ge number of bathers can be accommodated in a very
ort time, is entirely new to the University. Lassar baths,
ich may be described roughly as spray baths arranged
compartments in a heated bath hall, enable the bathers
enjoy all the cleansing and refreshing results obtained by
: slipper baths without using more than a fractional part
the quantity of water required for an ordinary slipper
h, and without spending the same amount of time over
ir ablutions that is usually occupied by even the least
ditative of bathers. Special mixing valves enable the
nperature of the water to be varied at will. The
ssing boxes, one to each bathing compartment, are
nned outside the superheated hall, which is reached by
-shutting swing doors.

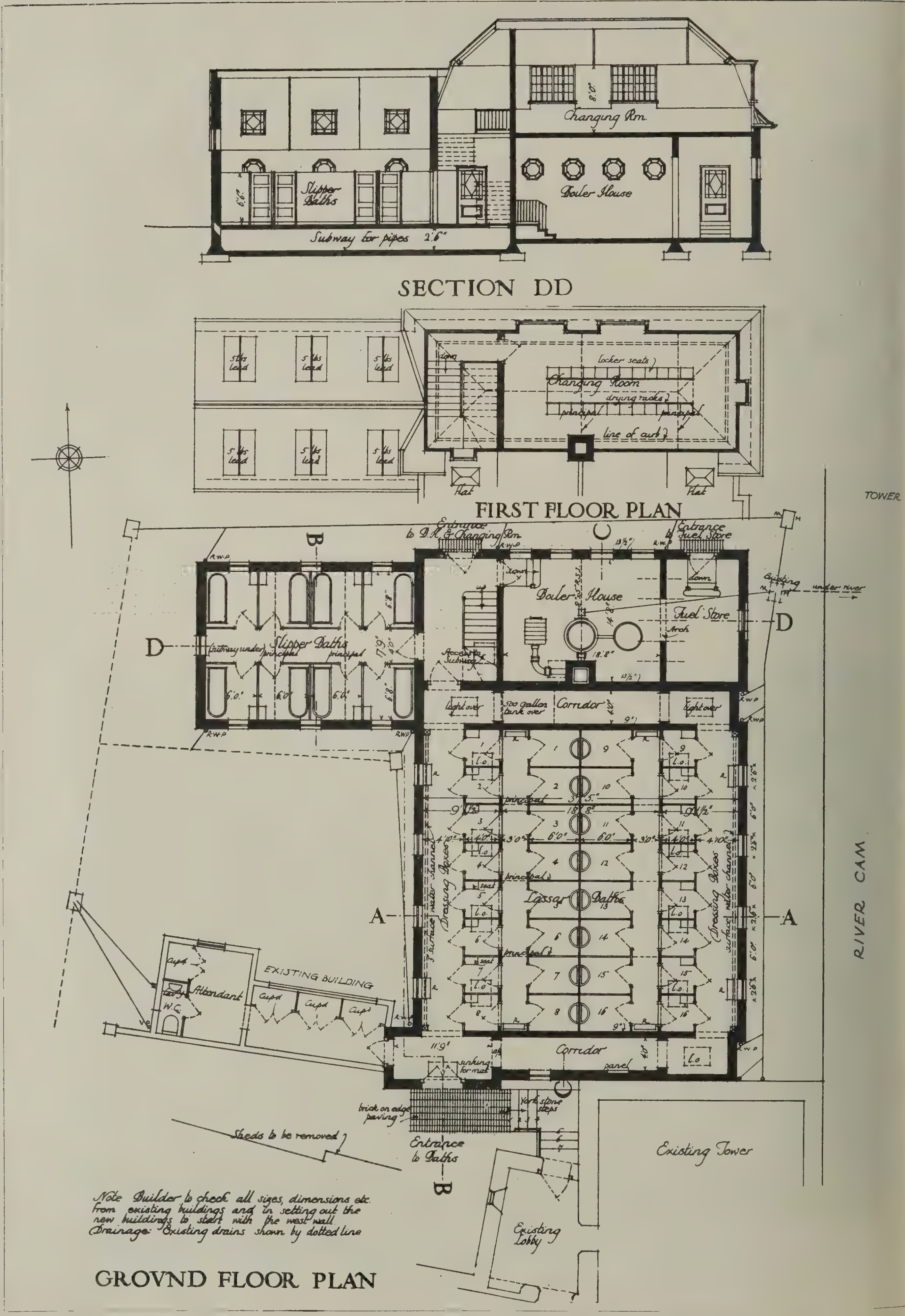
he principal entrance to the baths is placed so that convenient access may be readily obtained from New Court; and an existing building has been adapted to the needs of a superintendent's room, with towel store, etc. The ranges of dressing-boxes are placed on each side of the Lassar baths hall, which is heated to a temperature of about 100 degs., and contains sixteen bathing compartments.

The slipper baths hall contains eight bathing compartments, the boiler-house is centrally placed, and the changing room has drying racks for football and running clothes. The internal walls to the Lassar baths hall are lined with patent impervious material up to the level of the roof springing, and the concrete floors throughout are finished with terrazzo. The doors to the compartments in the Lassar and slipper baths halls are of teak, and the window casements are of metal in teak frames. Externally the walls are faced with Luton grey bricks, with Portland stone dressings. The roof is of old hand-made Cambridge plain tiles, the mansard roof being finished with lead hips and ridges.

The contractors were Messrs. Coulson and Son, of Cambridge, and the sub-contractors as follows: Messrs. Z. D. Berry and Sons (heating engineers); Messrs. Brookes, Ltd. (marble terrazzo floors and partitions); Aston Construction Co. (steelwork).



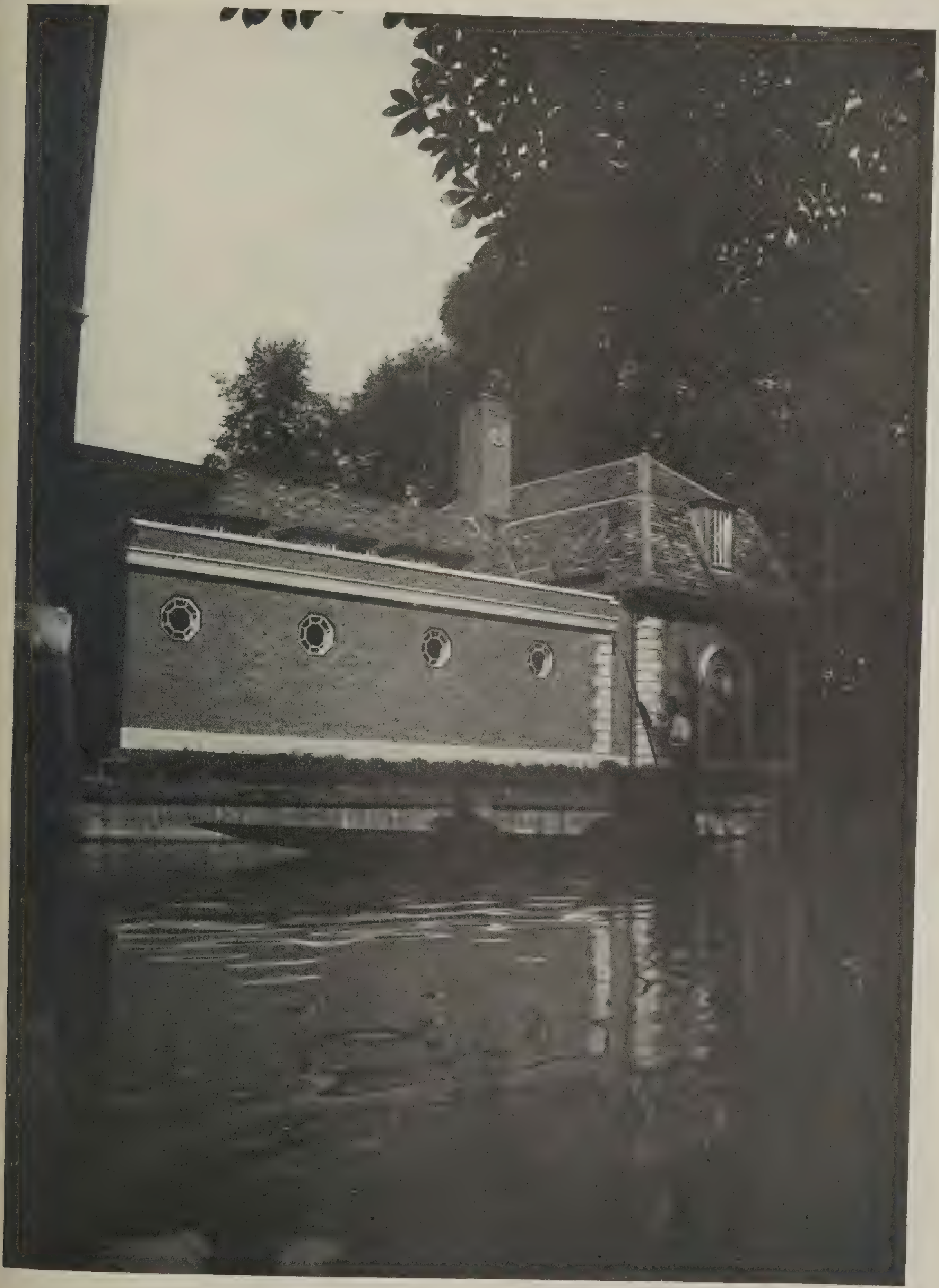
PART OF THE NORTH FRONT.



NEW BATHS AT ST. JOHNS COLLEGE, CAMBRIDGE.

Current Architecture. 208.—New Baths at St. John's College, Cambridge

Alfred W. S. Cross, M.A., F.R.I.B.A., and Kenneth M. B. Cross, M.A., Architects

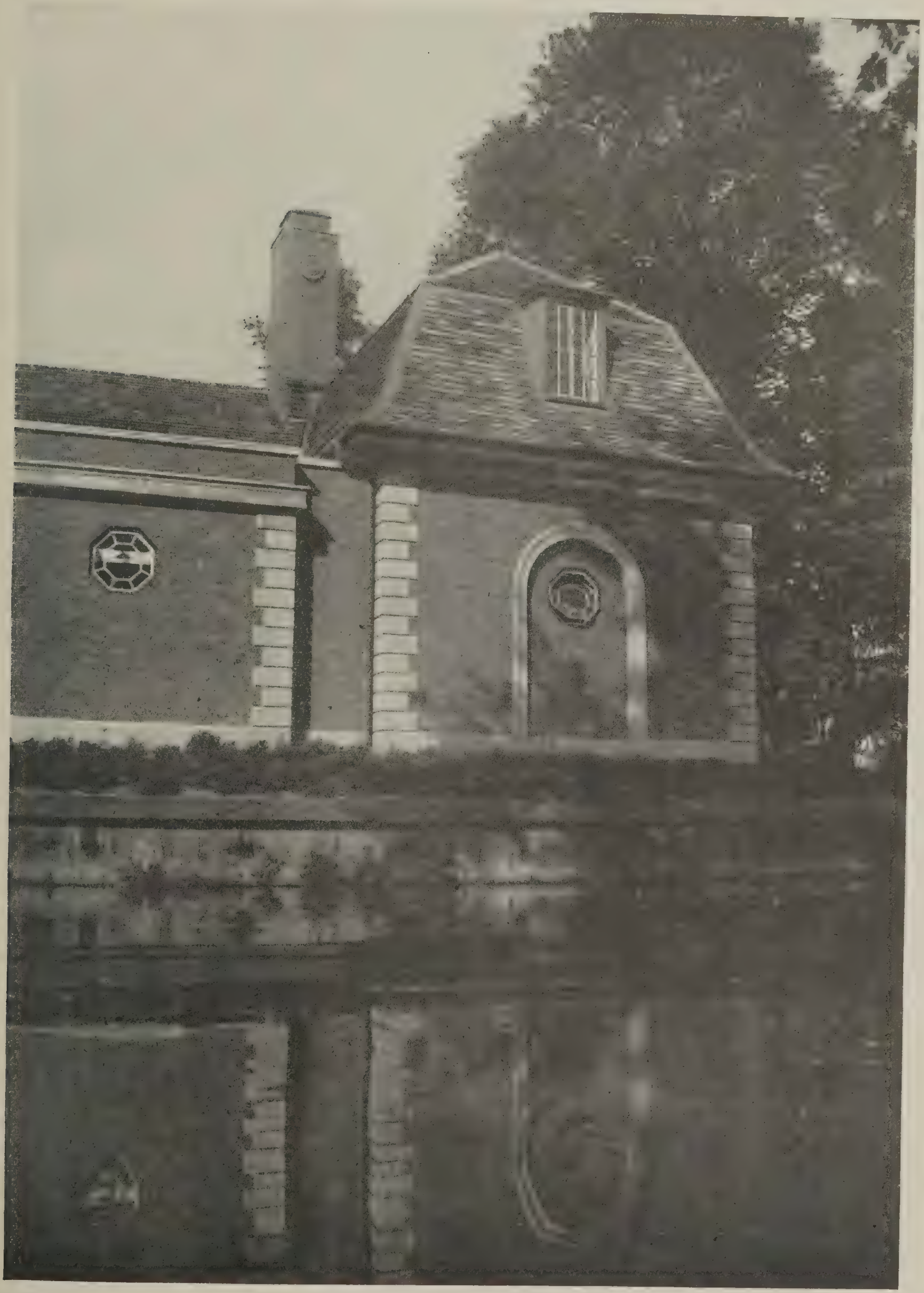


These baths occupy a site on the bank of the River Cam. The walls are faced with Luton grey bricks with Portland stone dressings, and the roof is of old hand-made Cambridge plain tiles. The mansard roof is finished with lead hips and ridges.

THE LIBRARY
OF THE
UNIVERSITY OF ILLINOIS

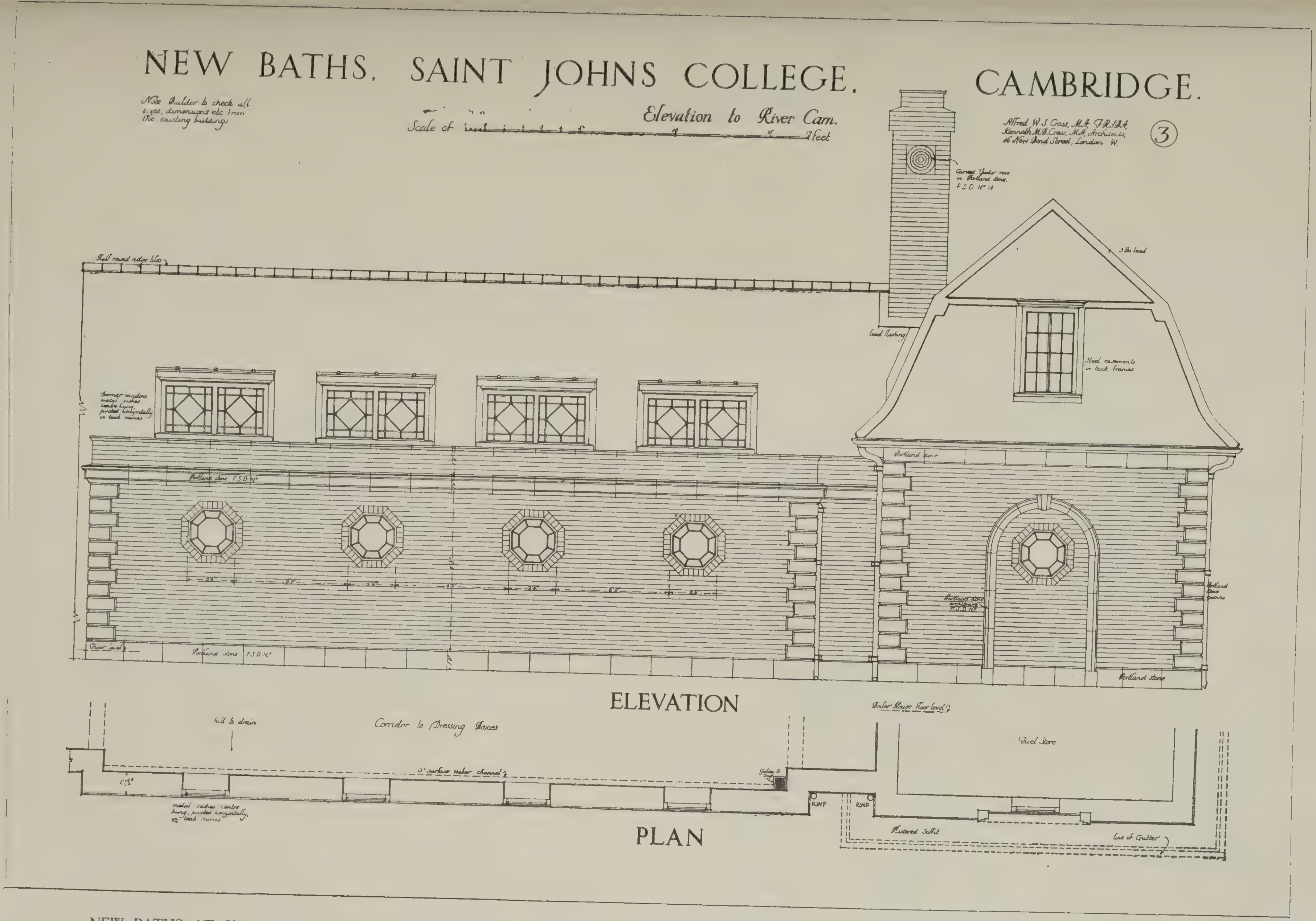
Current Architecture. 209.—New Baths at St. John's College, Cambridge

Alfred W. S. Cross, M.A., F.R.I.B.A., and Kenneth M. B. Cross, M.A., Architects

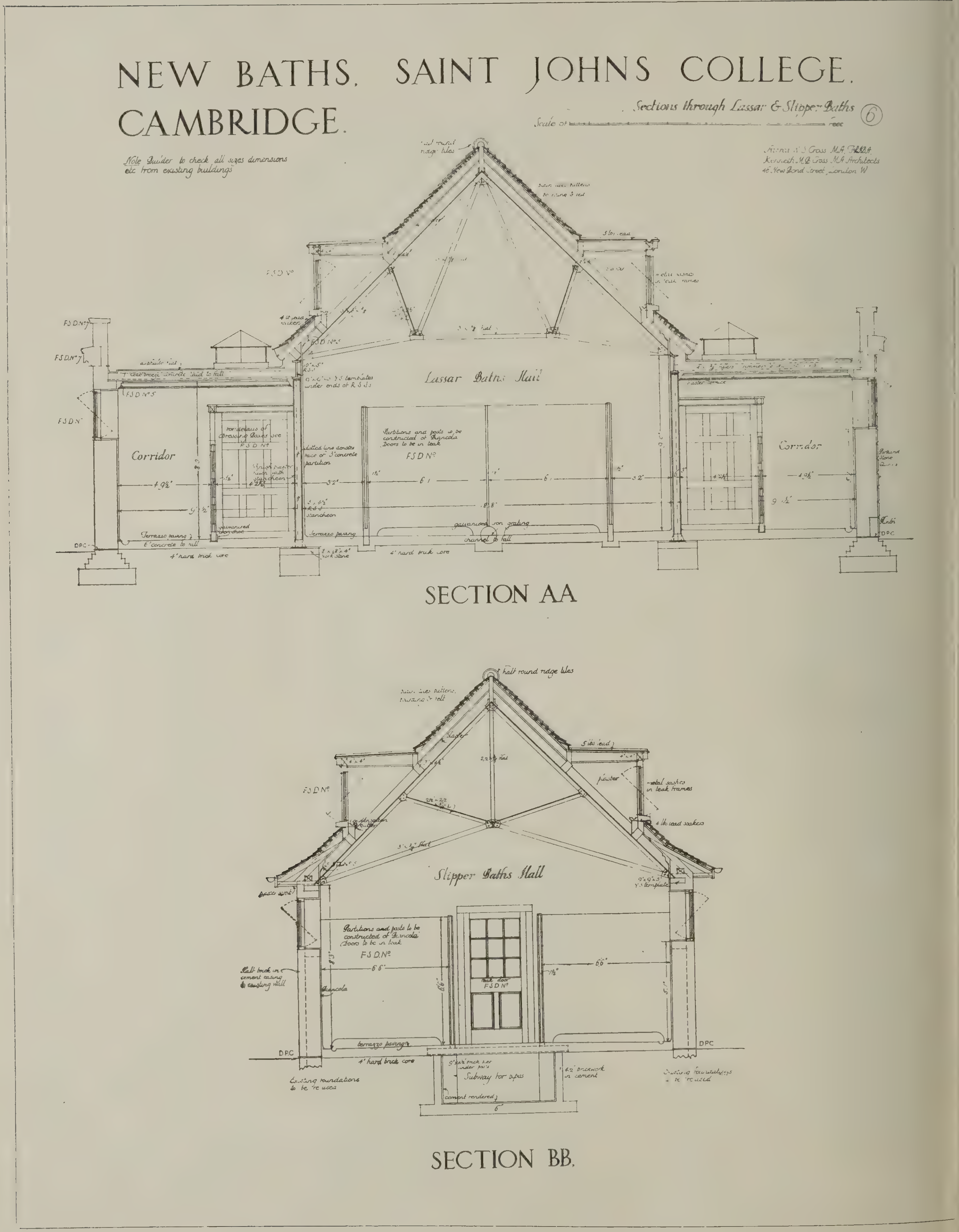


This illustration shows part of the river front. In the mansard roof is the changing room, and underneath is the fuel store.

THE LIBRARY
OF THE
[illegible]

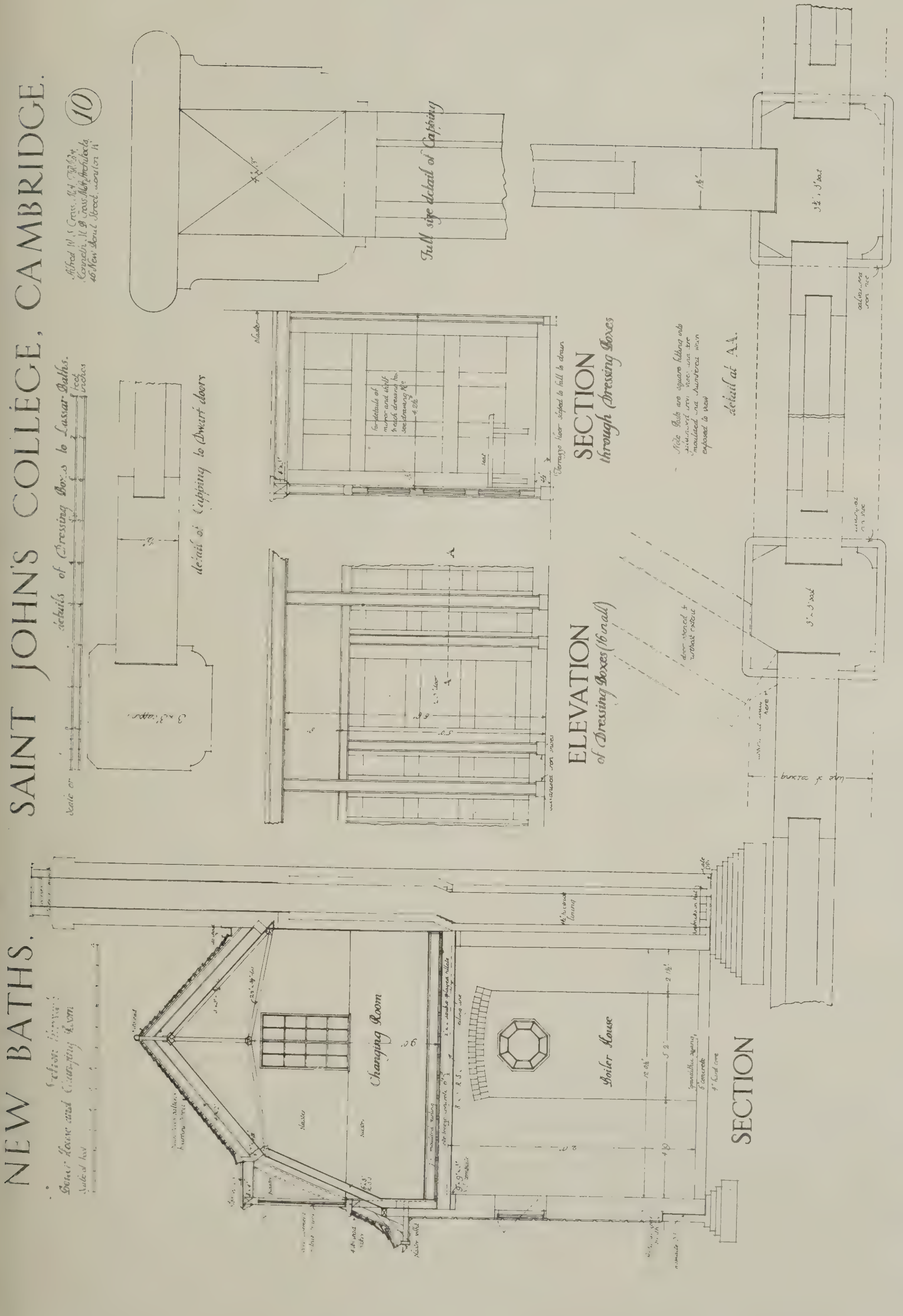

NEW BATHS, SAINT JOHNS COLLEGE, CAMBRIDGE.
Note Builder to check all sizes, dimensions etc from the existing buildings
Elevation to River Cam.
Scale of Feet
Alfred W S Cross, M.A. F.R.I.B.A.
Kenneth M.B. Cross, M.A. Architects,
46 New Bond Street, London W.
③
Carved Tudor rose in Portland stone. F S D No 14
5lbs lead
Half round ridge tiles
Lead flashing
Steel casements in teak frames
Dormer windows metal sashes centre hung, pivoted horizontally in teak frames
Portland stone F S D No
Portland stone
Portland stone architrave F.S.D No
Portland stone quoins
Floor level
2'6"
6'0"
ELEVATION
Boiler House Floor level
Fuel Store
Fall to drain
Corridor to Dressing Boxes
3" surface water channel
Gulley & trap
RWP
Plastered Soffit
Line of Gutter
metal sashes centre hung, pivoted horizontally, in teak frames
PLAN

NEW BATHS AT ST. JOHN'S COLLEGE, CAMBRIDGE. ALFRED W. S. CROSS, M.A., F.R.I.B.A., AND KENNETH M. B. CROSS, M.A., ARCHITECTS.


NEW BATHS, SAINT JOHNS COLLEGE.
CAMBRIDGE.
Sections through Lassar & Slipper Baths
⑥
Scale of Feet
Note Builder to check all sizes dimensions etc from existing buildings
Alfred W. S. Cross M.A. F.R.I.B.A.
Kenneth M.B. Cross M.A. Architects
46 New Bond Street, London W
half round ridge tiles
Lassar Baths Hall
Corridor
Corridor
Partitions and posts to be constructed of Rancola Doors to be in teak
F.S.D. No
Terrazzo paving
6" concrete to fall
4" hard brick core
galvanised iron grating
channel to fall
DPC
SECTION AA
half round ridge tiles
Slipper Baths Hall
5 lbs lead
metal sashes in teak frames
4 lbs lead soakers
plaster
Partitions and posts to be constructed of Rancola Doors to be in teak
F.S.D. No
6'6"
6'6"
teak door F.S.D. No
Half brick in cement casing to existing wall
Rancola
terrazzo paving
4" hard brick core
Subway for pipes
cement rendered
4½" brickwork in cement
Existing foundations to be re-used
Existing foundations to be re-used
DPC
DPC
SECTION BB.

NEW BATHS AT ST. JOHN'S COLLEGE, CAMBRIDGE.

ALFRED W. S. CROSS, M.A., F.R.I.B.A., AND KENNETH M. B. CROSS, M.A., ARCHITECTS.


NEW BATHS.
SAINT JOHN'S COLLEGE, CAMBRIDGE.
10
Alfred W. S. Cross, M.A. F.R.I.B.A.
Kenneth M. B. Cross, M.A. Architects.
46 New Bond Street, London W.
details of Dressing Boxes to Lassar Baths.
detail of Capping to Dwarf doors
Full size detail of Capping
SECTION
through Dressing Boxes
ELEVATION
of Dressing Boxes (16 in all)
detail at A.A.
Changing Room
Boiler House
SECTION

NEW BATHS AT ST. JOHN'S COLLEGE, CAMBRIDGE. ALFRED W. S. CROSS, M.A., F.R.I.B.A., AND KENNETH M. B. CROSS, M.A., ARCHITECTS.

The Business of an Architect

10—Specification Writing

By C. MURRAY HENNELL, F.S.I.

THE writing of specifications is the bogey of many architects, and is a duty they are disposed to dodge, pass on to someone else, or rush through with insufficient care and attention. I trust this statement will offend no one, for I think most architects will admit that the subject of this chapter touches on a weakness of theirs, and that they do not really like writing specifications.

The American specifications are worthy of considerable study, for most of the larger offices over there have "specification writers," whose training and constant duties make them specialists in this work. There is good reason for the existence of these specialists, as the "quantity system" has not yet become adopted generally in the United States, and the contractors tender for most work on the drawings and specification. Consequently it is essential that both should be complete and perfectly definite in all particulars, if only for the sake of avoiding claims for extras.

In England we have our quantity surveyors, who play a very important part in building works, and I think I may safely say that they are usually better specification writers than are architects. At any rate I have observed that the best and most complete specifications it has been my good fortune to see were written by quantity surveyors from architects' notes, or rough drafts, and the quantities. The surveyor is, from the nature of his work and the method by which it is done, far less likely to miss anything, and most of his life is spent in putting a building and all its details concisely into words. "Concise" and "specific" are adjectives to be kept constantly in mind in preparing a specification, which has been well described by Mr. Alexander C. Guth, of Messrs. Buemming and Guth, architects, of Milwaukee, as "the very voice of the architect reflecting with unerring precision his thoughts and wishes concerning the what, how, and where of all the component parts of the building he has designed." "The very voice of the architect" by all means, but unless the architect has special knowledge of the language, particularly its idioms, and is certain of leaving nothing unsaid in its proper place, he had better have an interpreter, and that is where the expert specification writer or the quantity surveyor comes in.

Surely no architect will care to give up his "very voice" to someone who has taken no part in the design of the building, and if he looks at the matter in this way, he will set about making himself the originator of his specifications. This is one of the matters in which a partnership, such as I have previously advocated, has decided advantages, and where the "business partner" is able to concentrate his energies. He is in constant touch with the designers in the firm, and knows full well the methods of construction adopted, and all the idiosyncrasies that are given way to. He inspects most of the work during progress, accustoms himself to look out for those things which were specified and have not yet appeared in the building, and will have brought home to him certain matters which he should have mentioned and did not, but which he will most certainly include in the next specification.

It is always as well for the architect to hand his specification in draft form to the quantity surveyor, not only for use in taking off the quantities, but also to be edited, and the surveyor should be given a free hand in correcting and re-arranging the specification on the understanding, of course, that he will not in any way alter its intent or meaning. He will then return the corrected draft to the architect for examination, and they can discuss any point of difference that there may be between them.

New specifications can usually be drafted rapidly from old ones, the scissors and paste-pot taking prominent part in the process, but this needs the greatest care to avoi the inclusion of clauses or descriptions which applied t another job and which have no relation to the present one and, on the other hand, to be sure that every new departur is specified.

It would be ideal if several days could always be spen on writing the specification after the drawings have bee completed, but before they are printed. Unfortunatel this is seldom possible, as there are but few jobs which ar not wanted in a hurry once the client has made up hi mind to build. Consequently the specification writer mor often than not has to seize such opportunities as he can t absorb the drawings while they are in the making, and carr on concurrently with the draughtsmen.

A complete mental picture of the proposed building i the first essential, and a few hours spent poring over th drawings, making notes, and incidentally calling attentio to the draughtsmen's mistakes, is time well spent. Excep in very small works, whose specifications can probably b written straight away, a "skeleton," divided up int different trades, should first be prepared. I find it a goo plan to make the "skeleton" of as many sheets of roug paper as there are trades, and in the process of the pre liminary poring over the drawings to jot down under thei respective trades the various points that I want to note Thus, under "Bricklayer" I shall note "hollow walls— purple facings with red dressings—fair face in coals, bac lobby, outside w.c., tools, garage—slate dampcourse— plinth and band courses in reds—rubber brick arches— tile pavings in hall, scullery, coats, lavatory, ground floo w.c."—and so on through the "Bricklayer" and othe trades until I feel I have got down everything that is o importance or different from a previous specification whic I am using as the basis to work upon. Having done thi the mental picture of the building is now well defined and most of the specification can be written withou further reference to the drawings. With practice it wi be found possible to dictate many of the trades to a short hand-typist, and once this can be achieved much time wi be saved.

I have laid emphasis on the matter of dividing the work into trades, and it is important not only to do this, but t see that every item of work gets into its proper trade Some builders have a way of sub-letting certain trades even without the written permission of the architect, and despite the conditions of the contract, and you may find that the Bareface Construction Company, Ltd., has torn your specification asunder and handed the different trade to various sub-contractors. This is very wicked of tha Construction Company, to whom you may apply boiling oil, but that will not help in getting the job built, and item which are not specified under their correct trades are likely to be omitted. Even if the contractor does not sub-let any part of the work he will probably have a foreman bricklayer carpenter, plumber, painter, and others who will look afte their respective trades in the building, and, although the general foreman should keep an eye on all the work these sub-foremen do not examine more of the specification than the pages that refer to their own trades. For example the bricklayer will not ask for a soot door, which has to be fixed in a certain position, not shown on the drawings and only mentioned under "Founder" in the specification, and ıe will build up the brick flue so that an opening has to be :ut for the soot door later on when the omission is disovered. In this case a paragraph somewhat as follows hould appear in the "Bricklayer" :—

et soot door. Carefully set in brick flue from boiler on boiler house side, 6 in. below point of connection with iron flue, 9 in. by 9 in. iron soot door and frame (provided by "Founder").

The foreman bricklayer then has no excuse for not building in that soot door or leaving the opening for it.

One should consider not only who is going to do every em of work, but also where it is going to be done. For ıstance, we may write under "Painter": "knot, prime, :op, and paint so many coats of oil colour on all exposed oodwork," but the knotting and priming will be done long efore the gang of painters arrives on the scene, and if we ant to ensure that the joinery is thus protected before it aves the shop, we should mention it in the "Joiner" part the specification, thus :—

ainting joinery
revious to
ing.

All joinery specified to be painted is to be knotted and primed before leaving the joiners' shop. Bottom edges of all doors are to be primed and painted one coat just previous to hanging. The backs of all wood frames to be primed.

The trades are arranged in the specification more or less the order in which they take their parts in the building, and although one cannot adhere to any chronological order of the items in each trade, these should so far as possible have some sequence. Thus, in the "Bricklayer" let us take the bricks and the mortar first, then the general brickwork, the dampcourse, the facings and other external work, followed by internal work, such as sleeper walls, fender walls, chimney openings, flues, etc., and wind up with all the odds and ends.

The "Carpenter" and "Joiner" are frequently specified together, and for most buildings I see no objection to this. If it is done thus all carpenter's work, which is carcassing and more or less of a rough nature, should come first and be followed by the joinery, which consists of finishings and involves finer workmanship. They should not be jumbled up together with, perhaps, floor joists followed by floor boarding and skirtings, architraves, roof timbers, staircases, picture rails, doors, draining boards, gutter boards, cupboards, windows, centres, and turning pieces. I mention this order, or disorder, having actually seen a specification arranged in that way, to the confusion of the foreman in charge of the work, and its producer was the architect of a number of large, if not notable, buildings. Needless to say, there were a multitude of items necessary to the building that had been entirely lost sight of in the specification.

(*To be continued.*)

[The previous articles in this series appeared in our issues for April 4, 11, 25; May 9 and 30; June 27; July 18; and August 1.]

Cambridge Collegiate Buildings Competition

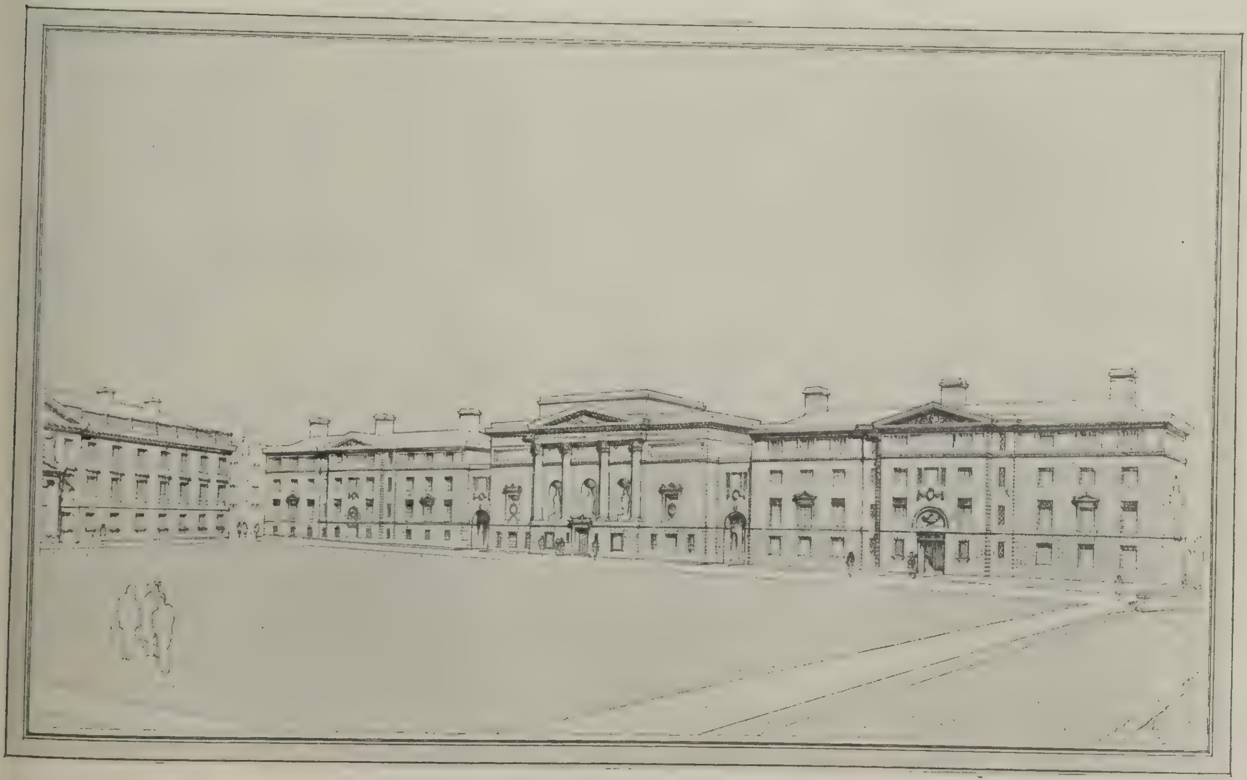
THE following awards have been made by the assessor, Mr. C. Lovett Gill, F.R.I.B.A., in the limited competition, promoted by the Fellows of King's College, Cambridge, for designs for two w blocks of chambers for undergraduates and a new llege library :—

First—Messrs. Herbert J. Rowse, A.R.I.B.A., and onel B. Budden, M.A., A.R.I.B.A.

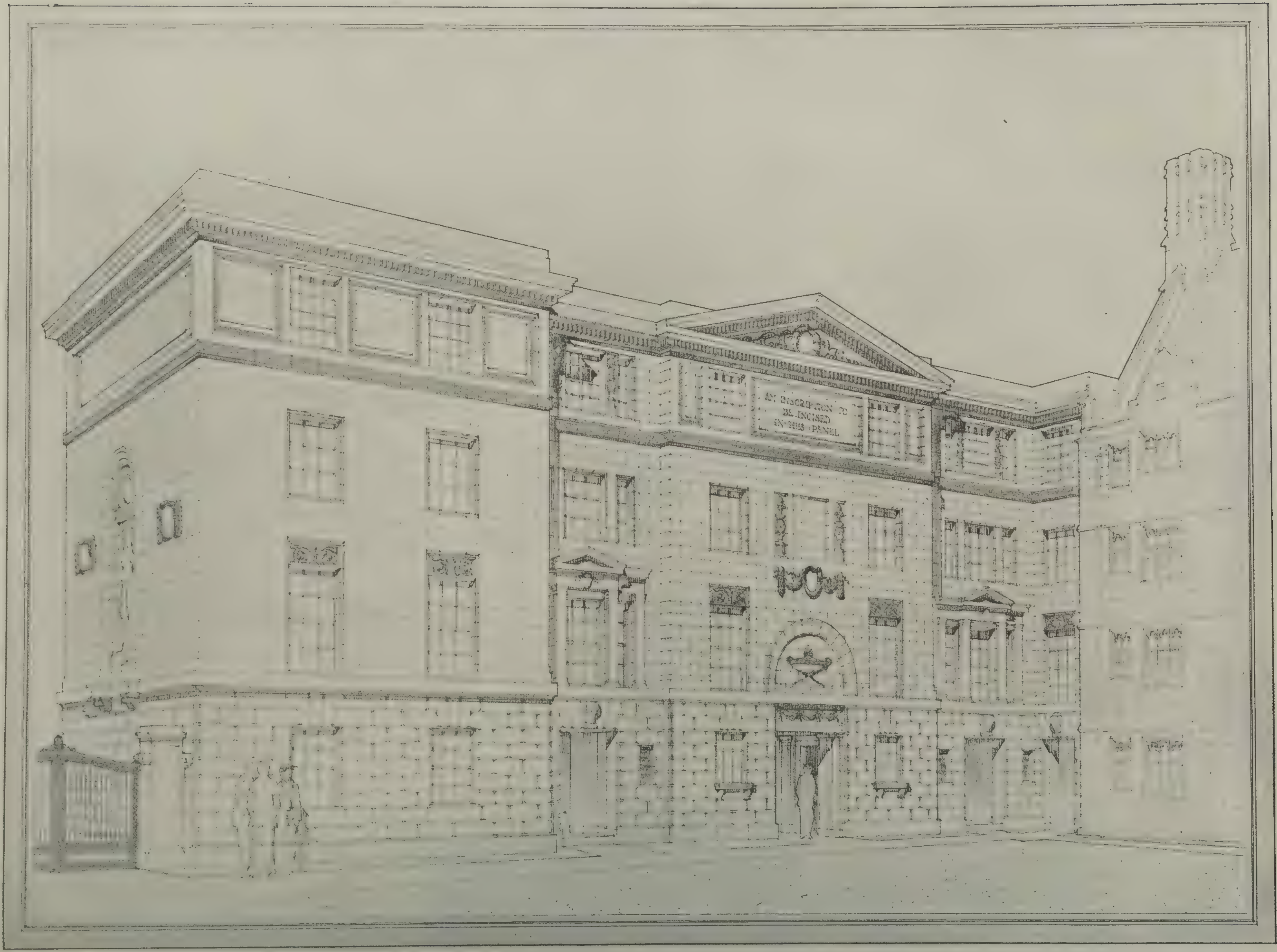
Second—Mr. H. A. Dod, M.A., A.R.I.B.A.

The competition was restricted not only as to the number competitors, but as to the competitor's age as well, the Fellows of the College deciding that no competitor should be over forty-five years of age. The other architects who had the honour of an invitation were Mr. W. G. Newton, M.C., M.A., A.R.I.B.A., Mr. James Burford, A.R.I.B.A., Messrs. Holt and Rees, Mr. T. S. Tait, A.R.I.B.A., and Mr. W. Naseby Adams, A.R.I.B.A. Messrs. Rowse, Budden, and Dod were students during the same year at the School of Architecture, Liverpool University, under Professor C. H. Reilly, F.R.I.B.A.

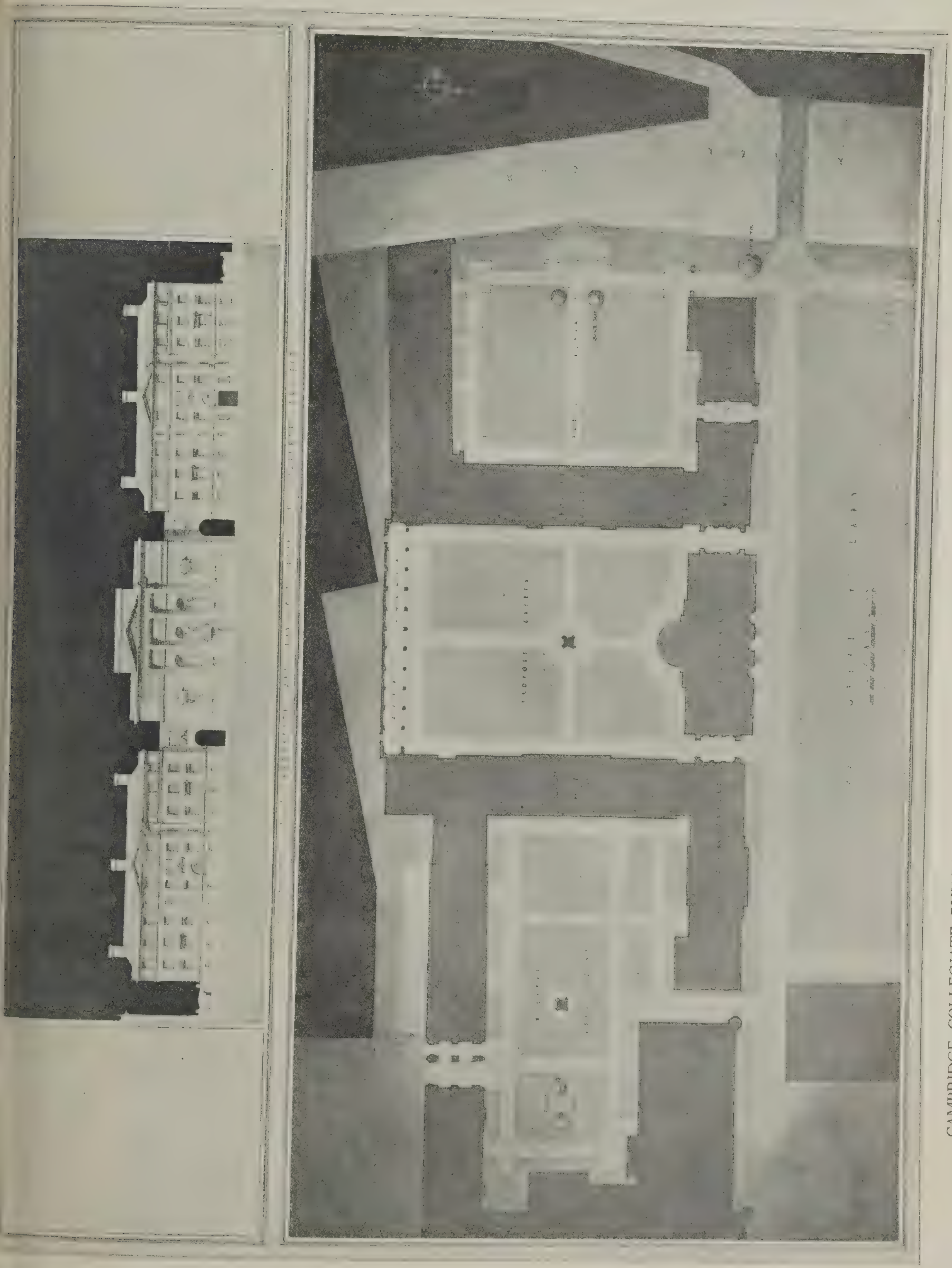
The new buildings are proposed to be erected under the bursarship of Mr. Maynard Keynes. The proposed new



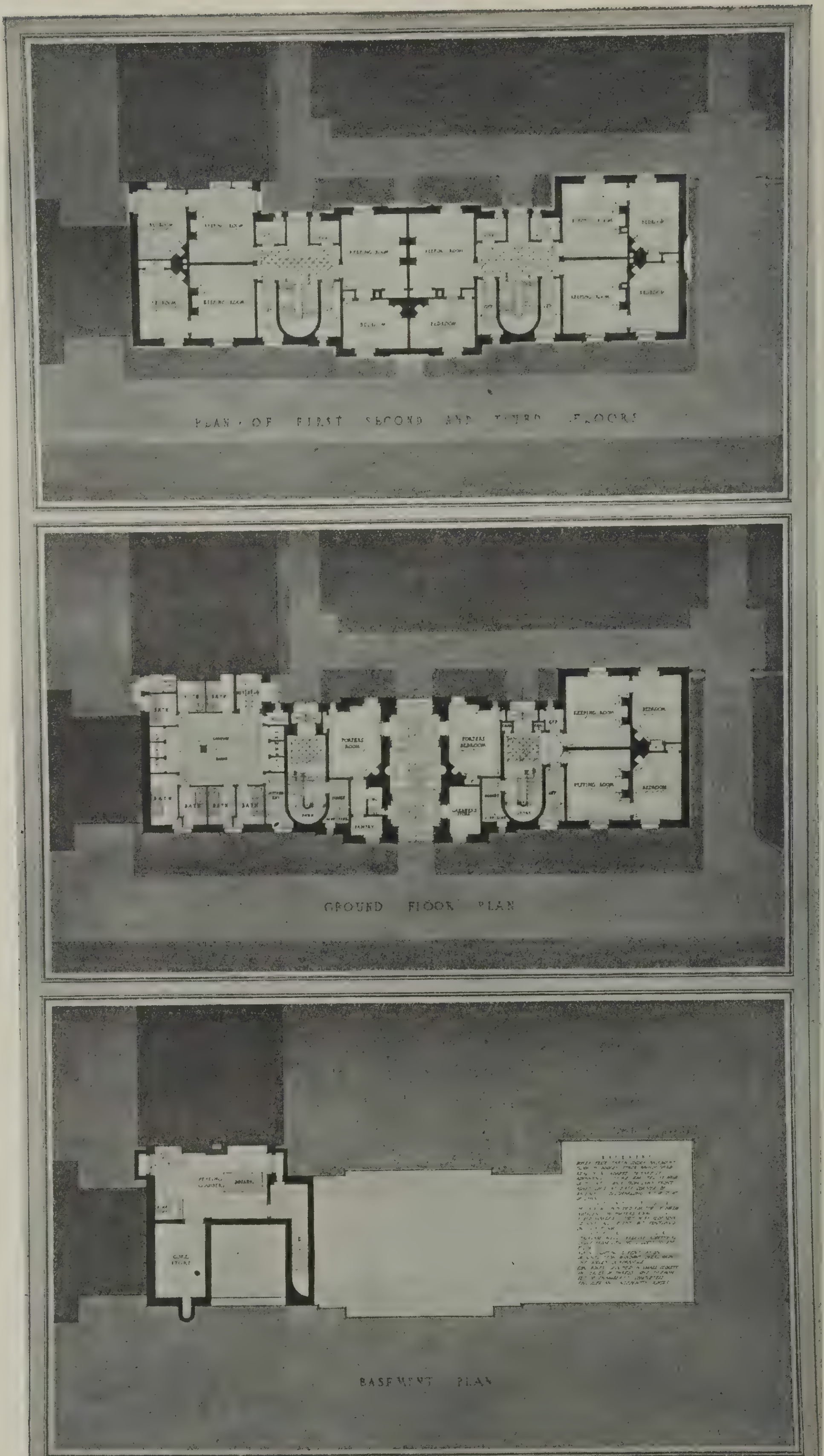
A PERSPECTIVE VIEW OF THE WINNING DESIGN.
HERBERT J. ROWSE, A.R.I.B.A., AND LIONEL B. BUDDEN, M.A., A.R.I.B.A., ARCHITECTS.



CAMBRIDGE COLLEGIATE BUILDINGS COMPETITION. THE WINNING DESIGN: THE WEST CHAMBERS FROM BODLEY QUADRANGLE.
HERBERT J. ROWSE, A.R.I.B.A., AND LIONEL B. BUDDEN, M.A., A.R.I.B.A., ARCHITECTS.

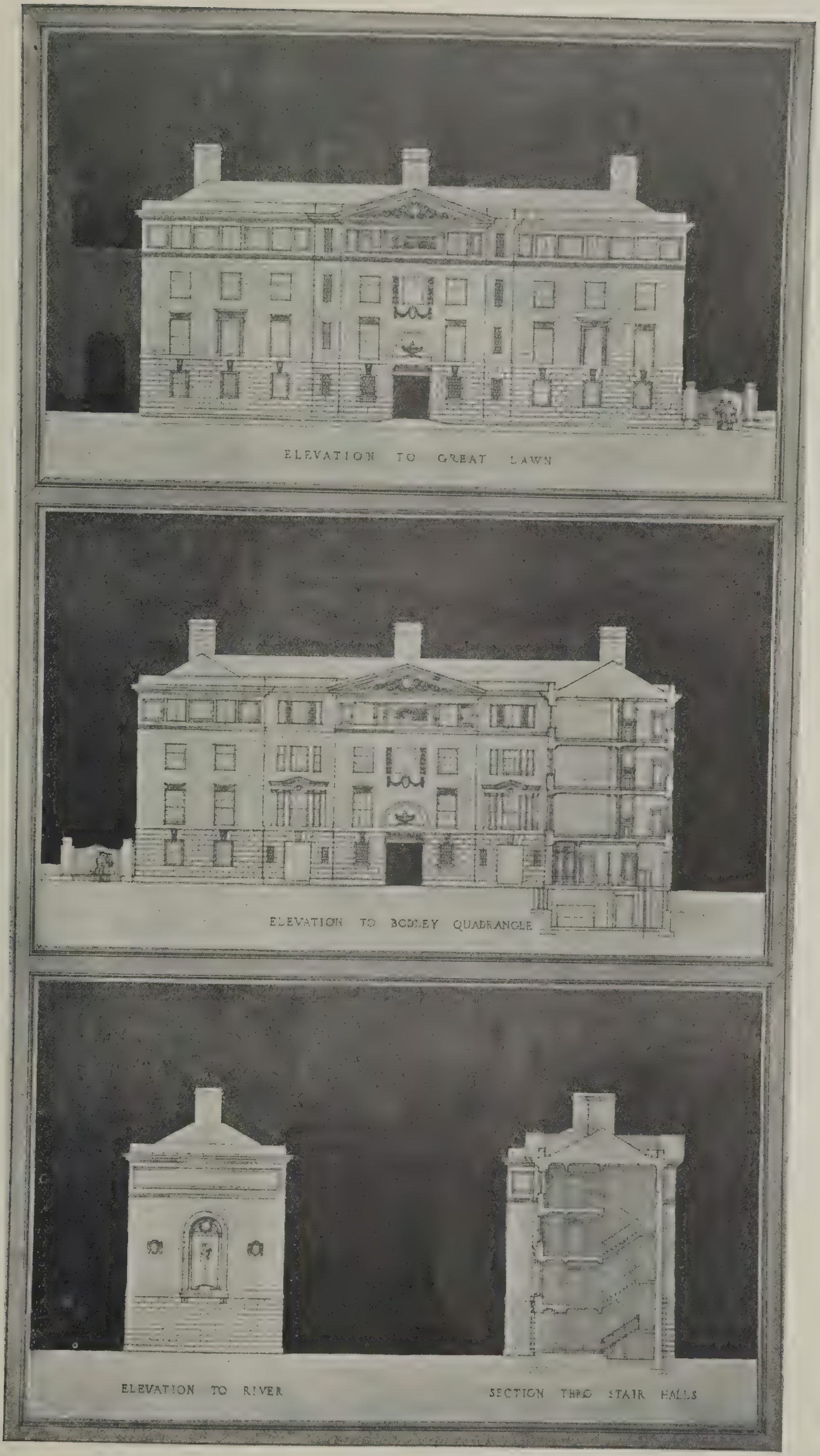


CAMBRIDGE COLLEGIATE BUILDINGS COMPETITION: ELEVATION AND LAY-OUT PLAN OF THE WINNING DESIGN.
HERBERT J. ROWSE, A.R.I.B.A., AND LIONEL B. BUDDEN, M.A., A.R.I.B.A., ARCHITECTS.



PLANS OF THE WEST BLOCK OF CHAMBERS.

CAMBRIDGE COLLEGIATE BUILDINGS COMPETITION: THE WINNING DESIGN.
HERBERT J. ROWSE, A.R.I.B.A., AND LIONEL B. BUDDEN, M.A., A.R.I.B.A., ARCHITECTS.



ELEVATIONS AND SECTION OF THE WEST BLOCK OF CHAMBERS.

CAMBRIDGE COLLEGIATE BUILDINGS COMPETITION: THE WINNING DESIGN.
HERBERT J. ROWSE, A.R.I.B.A., AND LIONEL B. BUDDEN, M.A., A.R.I.B.A., ARCHITECTS.

block will be on one side of the famous King's lawn, which slopes gently to the river from the Gibbs building. It will, therefore, face across the lawn Clare College. The new building will bear the winner's name, for it is the charming custom of King's College to name its buildings after their architects.

The winners in their report state: The planning of the proposed new block of chambers has had three objects in view. It has aimed at obtaining a convenient and economic arrangement of the accommodation; at securing interiors that would be pleasant in effect; and at producing shapes capable of satisfactory external treatment. For the scheme adopted the following advantages are claimed:—

(*a*) The entrance to the Bodley Quadrangle is placed in the centre of the block, in which position alone a satisfactory balance of parts in elevation and planning is possible.

(*b*) Twenty sets of chambers are in consequence conveniently served by two ample and well-lighted staircases.

(*c*) Thirteen out of twenty keeping rooms face south.

(*d*) The gyp rooms attached to the chambers have in every case adequate windows.

(*e*) The keeping and bedrooms both in size and shape are of the modern type.

(*f*) The grouping of the staircases and gyp rooms on either side of the entrance to the Bodley Quadrangle has permitted concentrated planning giving sufficient light to the rooms adjacent to the Bodley building without resort to indirect means.

(*g*) On the north as on the south side of the plan the projections are not fortuitous but are the logical outcome of the arrangement of the interior elements; and the elevational proportions thus obtained in the case of the central feature on the north side are in harmony with those of the central mass of the Gibbs building.

As the chambers and the library are to be in an academic environment and are to occupy an important position in that setting, it has seemed desirable that they should be traditionally conceived; that the simplicity and dignity which ought to distinguish buildings of this order should be expressed in established forms. No attempt has been made to produce archæological architecture, but it has been thought that a development of an accepted style would, under the circumstances, be more appropriate than any revolutionary experiment.

The proportion of the group of buildings as a whole is necessarily horizontal on account of the type and amount of accommodation required, the extent of ground covered, and the relative lowness of the fixed floor levels. Classic rather than mediæval principles of composition have therefore been followed, since no effective vertical treatment is really possible under such conditions. In any case the situation of the buildings—facing the great lawn and in immediate proximity to the Gibbs building—calls for a formal rather than a picturesque handling of the subject, and would seem virtually to dictate an expression in the classic manner.

An English version of that manner is submitted which carries on the tradition of the Gibbs building. Much of the character of the latter has been deliberately preserved in the design of the new group, because it has been felt that the Gibbs building, in virtue of its position, its size, and its inherent qualities, should largely determine the style and scale of whatever is to be built on the south side of the lawn. No building at present facing on to the lawn can count so effectively in its relation to the proposed new group as the Gibbs. Its great length intervenes between the chapel and the new site, and puts the chapel at too great a distance to exert an appreciable influence. The Clare building is still further removed, and is, in any event, altogether so small in its parts that a composition similar in scale to it, erected immediately adjacent to the Gibbs, would be dwarfed into insignificance by the mass and height of the latter. The case for attempting to secure a balance between the Clare building and the new blocks is, it is contended, illusory one.

There can be no balance between two works which as radically different in their elements and silhouette as single block of the Clare building and the triple blocks the new group. And the fact that the north and south si of the lawn are not equidistant from the centre of the Gi building or the chapel finally excludes the possibility o symmetrical grouping about the axis of either building.

That the new building should be designed primarily relation to the Gibbs has then been accepted as an axi in view of the existing conditions. The chief problem been to obtain a scale in the new buildings that will sust comparison with the scale of the Gibbs.

At the point at which the Gibbs and the east block chambers approach most nearly to each other the height the crowning member of the former's cornice above ground level is approximately 48 ft.

The main cornice of the proposed east block of chamb must maintain the cornice level established in the r west block as a general effect of balance is required.

If, as is suggested in the conditions, the top set of cha bers in both blocks were to be placed in the roof, the m cornice would then run at the floor level of these chamb and its uppermost edge would be no more than 27 above the ground level at the corner of the east bl opposite and nearest to the Gibbs building.

Thus, at the point where a comparison would inevita be made, the wall-surface of the Gibbs would rise 21 above the cornice of the east block and would appear overwhelm that block and the whole composition of wh it is a part. Whatever treatment might be given to roof could not compensate for the deficiency in height a area of wall-surface below the main cornice, for it is actual height of the main cornice in all buildings that f determines their scale.

To avoid both the practical and æsthetic disadvanta that must result from placing the upper floors of chamb above the main cornice, in the roof, and lighted by dorr windows, the external walls have been carried up to ceiling level of these chambers, and the main cornice t minates the external walling at this height. In conseque the upper floors of chambers are planned with the sa degree of convenience as those on the floors below.

In the elevational modelling of the new blocks of cha bers the breadth of treatment that characterizes the Gi has to be sought by other means. The large cubic volu of the Gibbs rooms results in a wide spacing of the windo and ample expanses of wall-surface remain between the even though they are heavily framed and surmounted deep entablatures.

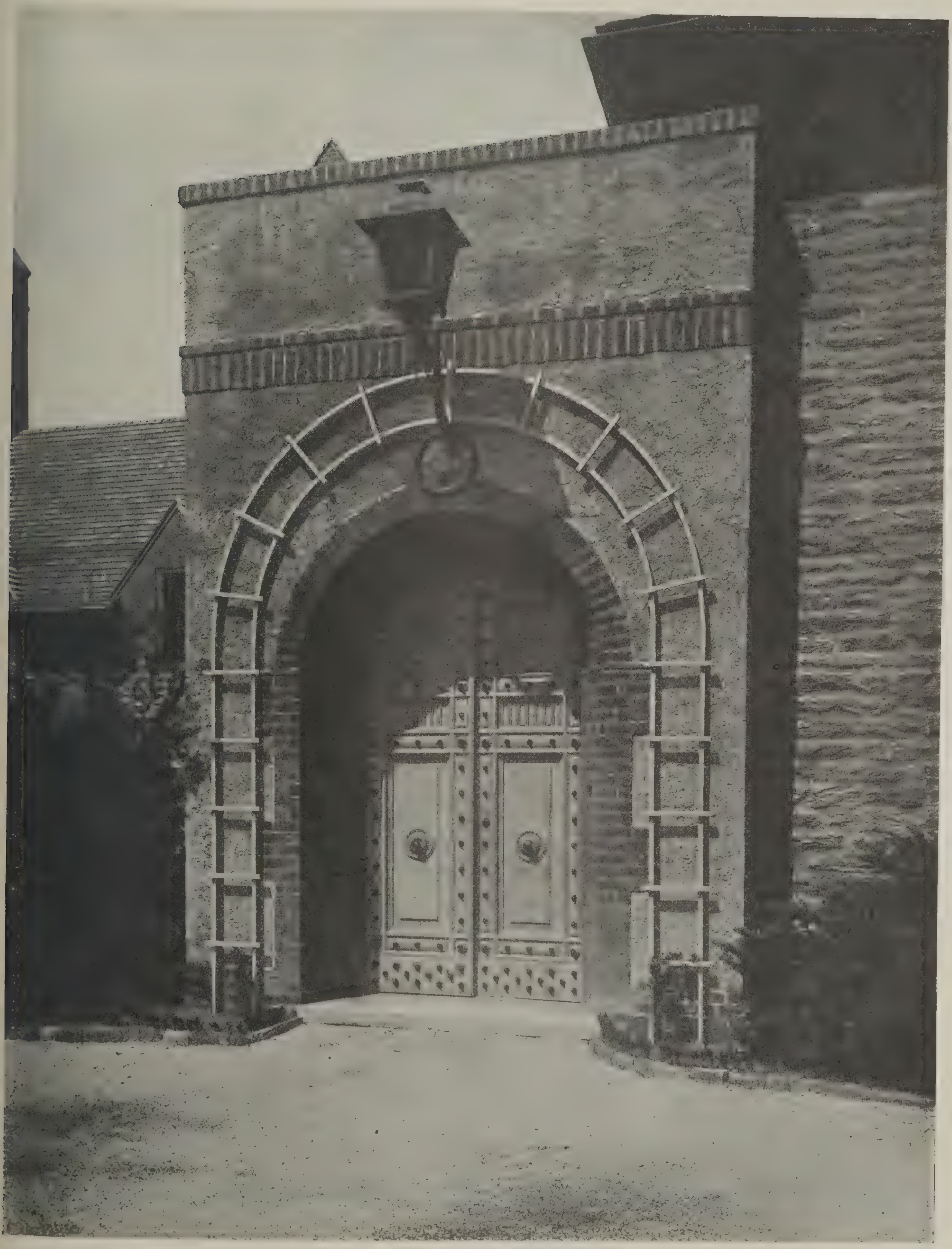
The slope of the ground from the Gibbs building to river has affected the design of both blocks of chamb and of the library. To secure continuity and an effect balance, the first-floor level has been treated as the up base-line of the whole composition, a simple scheme fenestration and rusticated wall-surface being adop below. With the same intention the entrance to Bodley Quadrangle in the centre of the west block echoed in the east block by a feature which could app priately be developed as a wall monument, and the mot is repeated again in the links connecting the library w the blocks of chambers.

The chief interest of the design as a whole is establisl above the even horizontal level of the first-floor base-li Both blocks of chambers have been treated as eleme definitely subordinate, but complementary, to the libra In the central portion of the latter, above the entrance h and Bursar's offices on the ground floor, a rotunda with dome is assumed and its presence is emphasized externa by the engaged portico and attic.

All three buildings will be in Portland stone. It probable that one block of chambers will be comple first—at an approximate cost of £20,000. The to scheme might involve an outlay of £100,000.

Modern Domestic Architecture. 64.—Gateway to House at Chestnut Hill, Pennsylvania, U.S.A.

Mellor, Meigs and Horne, Architects



This entrance gateway to a house in Pennsylvania has been executed in red brick and stucco—the latter worked with a rough texture. In the illustration the proportions are a little interfered with by the surrounding trellis, but of the dignity of such a portal there can be no doubt.

THE LIBRARY
OF THE
UNIVERSITY OF ILLINOIS

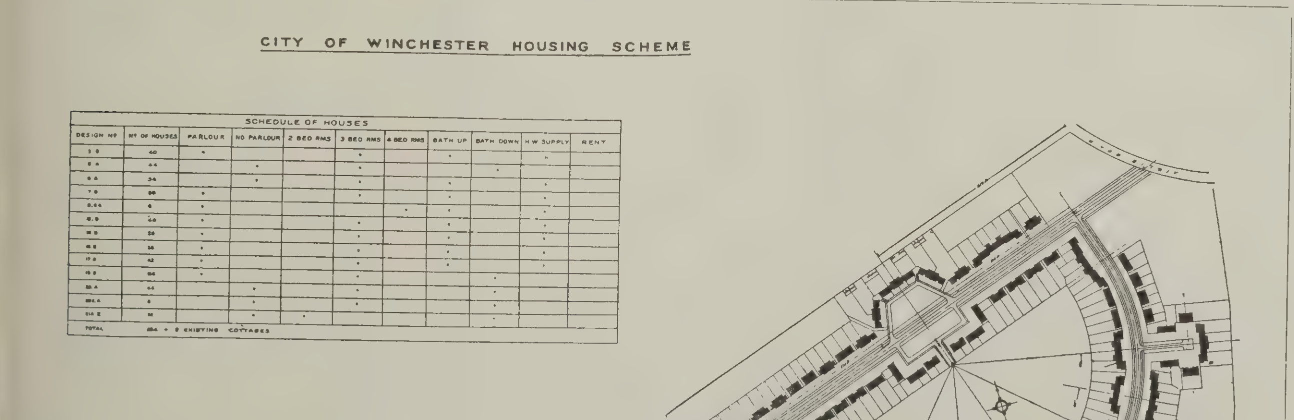
STANMORE, FROM OLIVER'S BATTERY.

The City of Winchester Housing Scheme

W. CURTIS GREEN, A.R.A., F.R.I.B.A., Architect

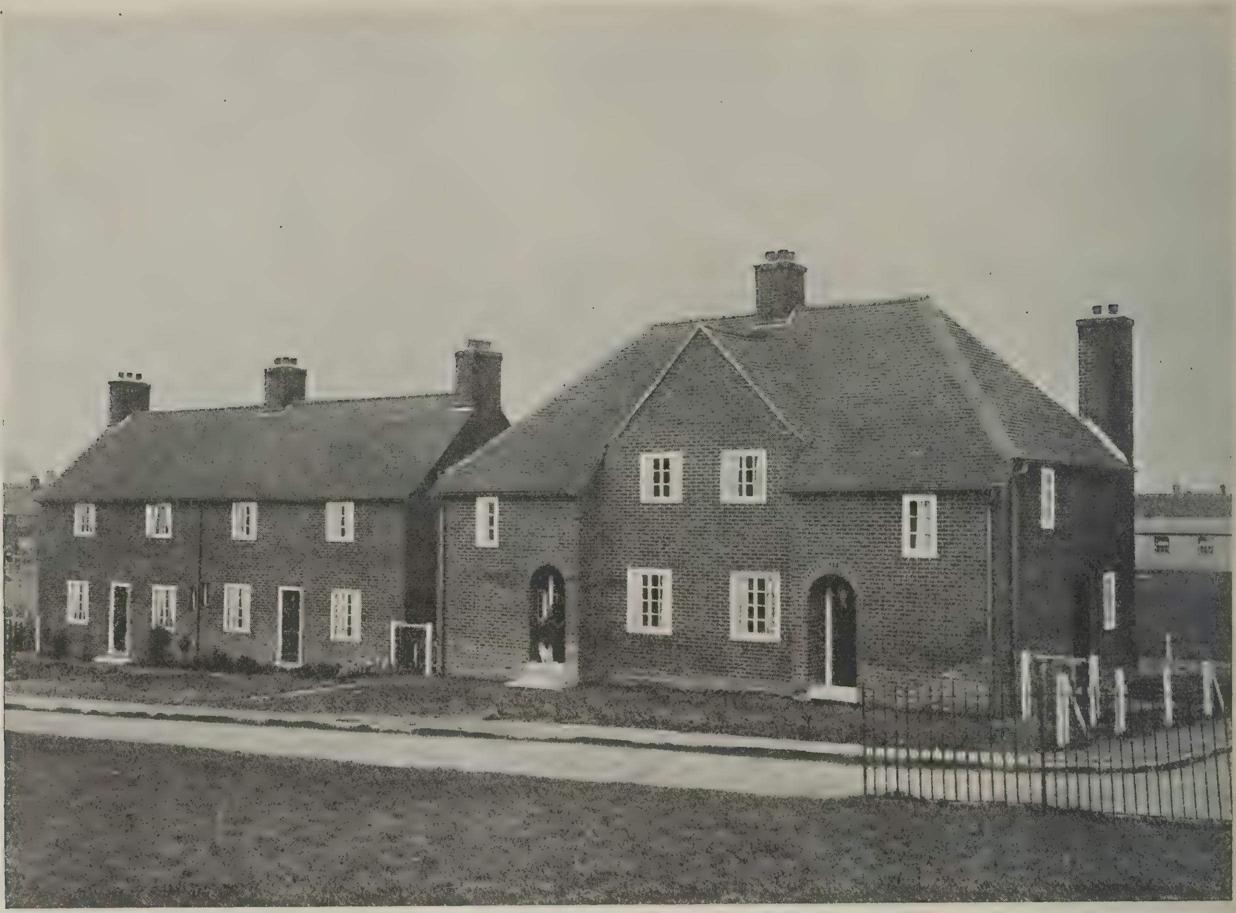
THE Prince of Wales is again showing his interest and concern for housing by the visit he is paying to-day to the Winchester Stanmore estate. The Stanmore housing scheme is a timony to the keenness and judgment of the Winchester poration. To have conceived the scheme and carried the first part of the programme amounting to about houses and eight shops in its entirety, in face of all the iculties such an enterprise involves, is creditable to the horities. Not only are the houses built, but they are built of brick and roofed with tiles in keeping with the city. Moreover, all the houses are occupied, and would-be tenants fill a long waiting-list. The scheme is not, unfortunately, all that the Building Committee had wished, and would have had but for the economies and restrictions enforced by the Ministry of Health, all housing schemes being subject to the ruthless pruning of this department. It can only be said that this pruning is not so noticeable here as in some other estates.

The site acquired by the Corporation is approached from

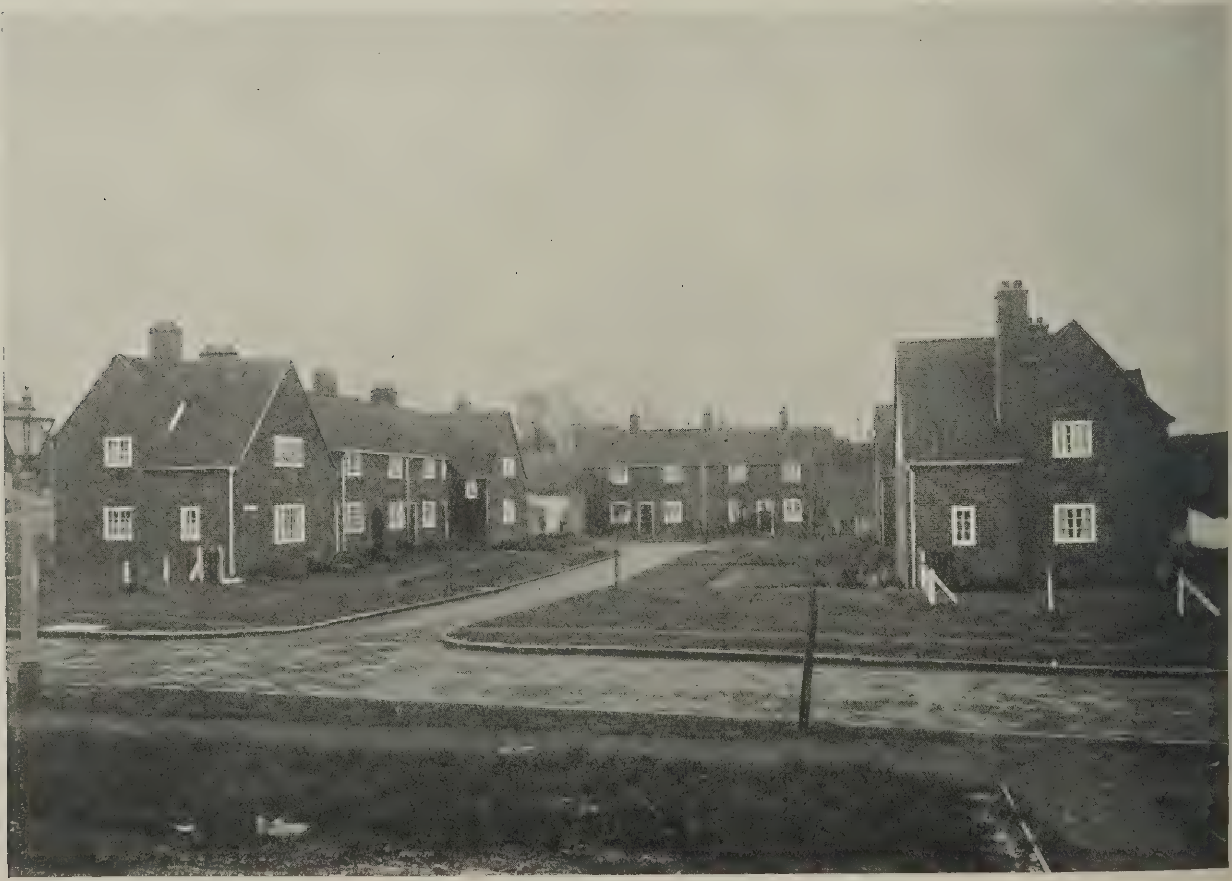


SCHEDULE OF HOUSES										
DESIGN Nº	Nº OF HOUSES	PARLOUR	NO PARLOUR	2 BED RMS	3 BED RMS	4 BED RMS	BATH UP	BATH DOWN	H W SUPPLY	RENT
[illegible]	40	●			●		●		●	
5 A	44		●		●			●		
[illegible]	34		●		●		●		●	
7 B	[illegible]	●			●		●		●	
[illegible]	6	●				●	●		●	
[illegible]	44	●			●		●		●	
[illegible]	[illegible]	●			●		●		●	
[illegible]	[illegible]	●			●		●		●	
17 B	42	●			●		●		●	
[illegible]	[illegible]	●			●			●		
[illegible]	44		●		●			●		
[illegible]	[illegible]		●		●			●		
[illegible]	[illegible]		●	●				●		
TOTAL	[illegible] + [illegible] EXISTING COTTAGES									

PLAN OF LAY-OUT.

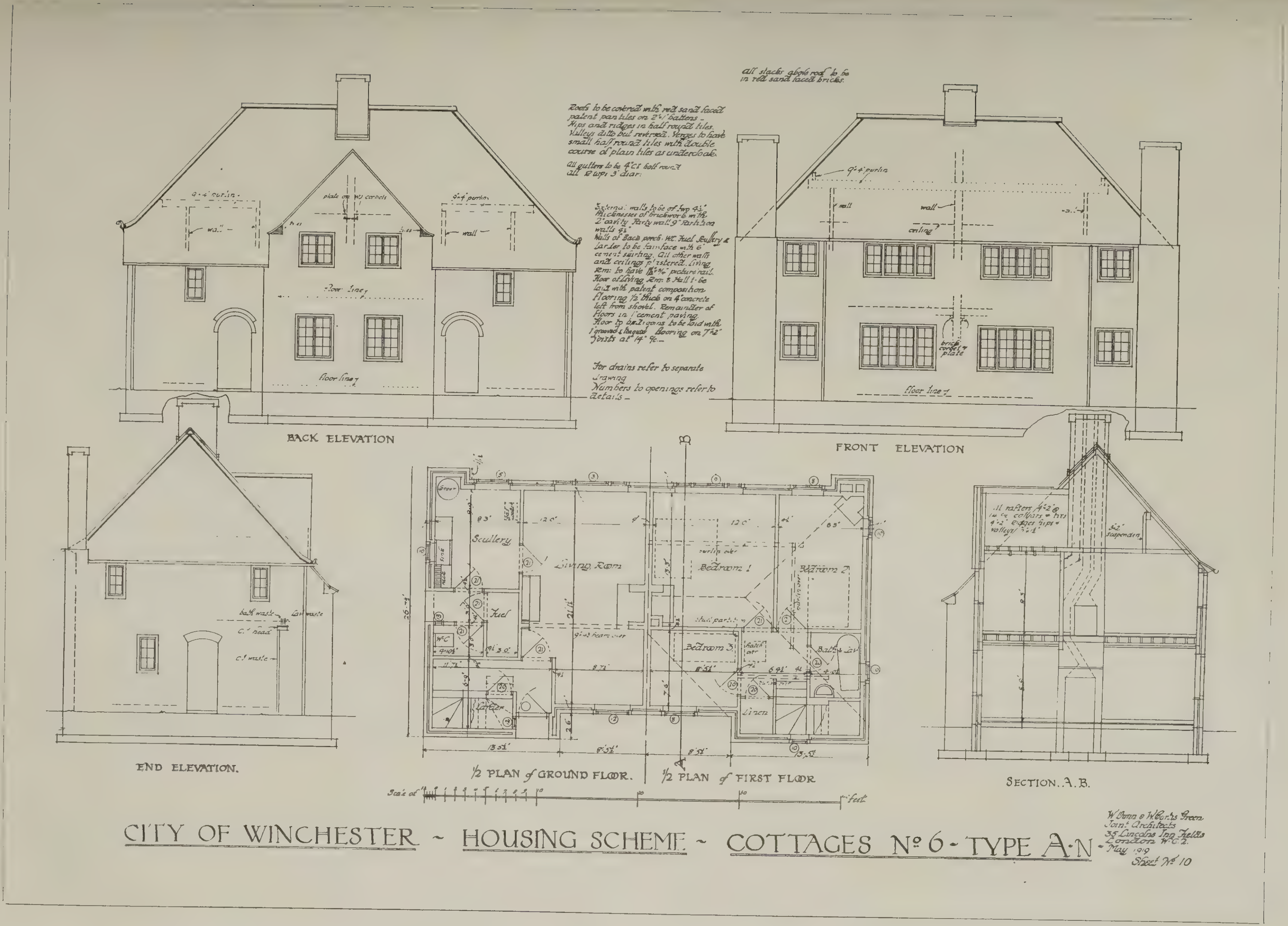


HOUSES IN CROMWELL ROAD.

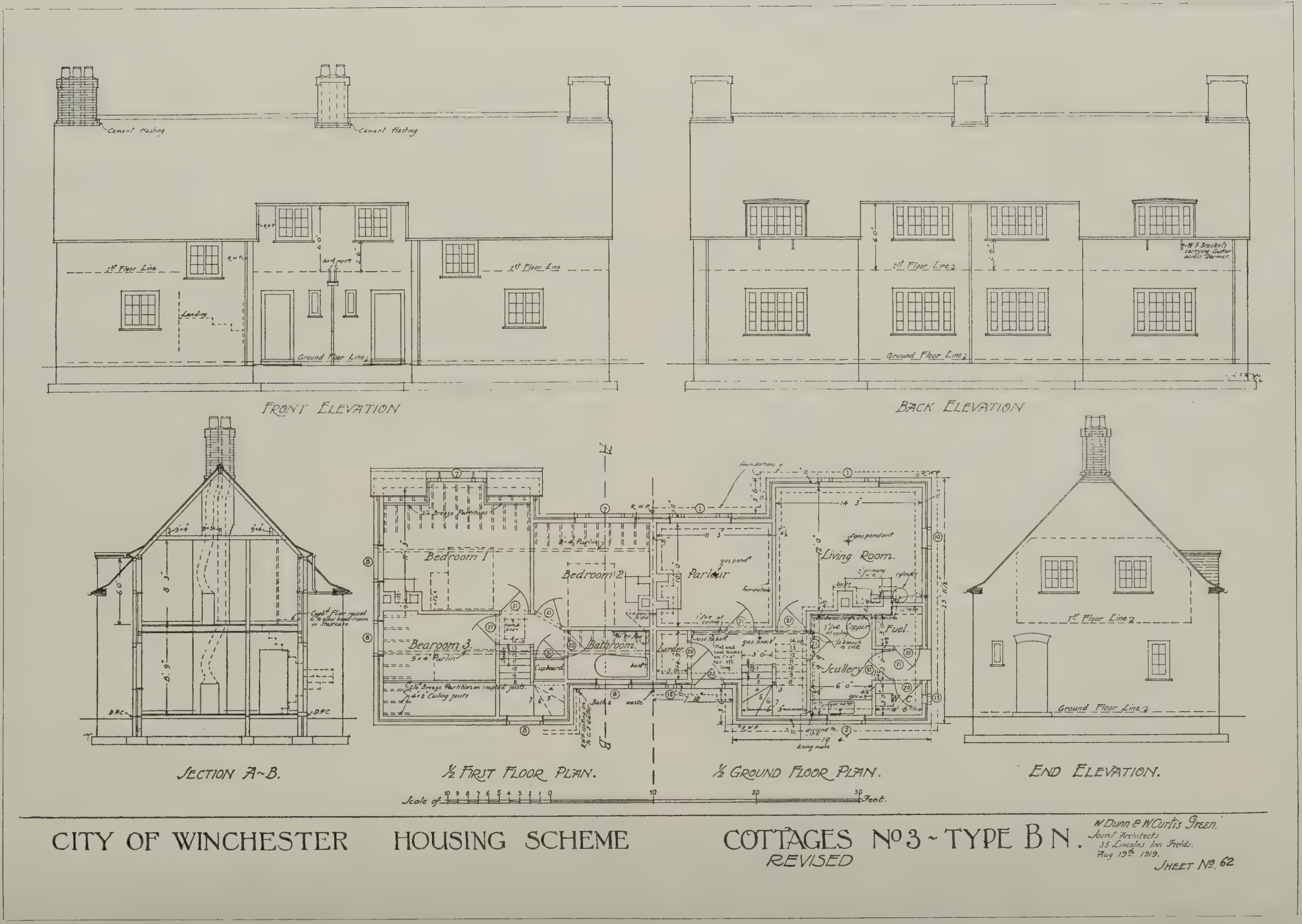


PRINCE'S PLACE, KING'S AVENUE, STANMORE.

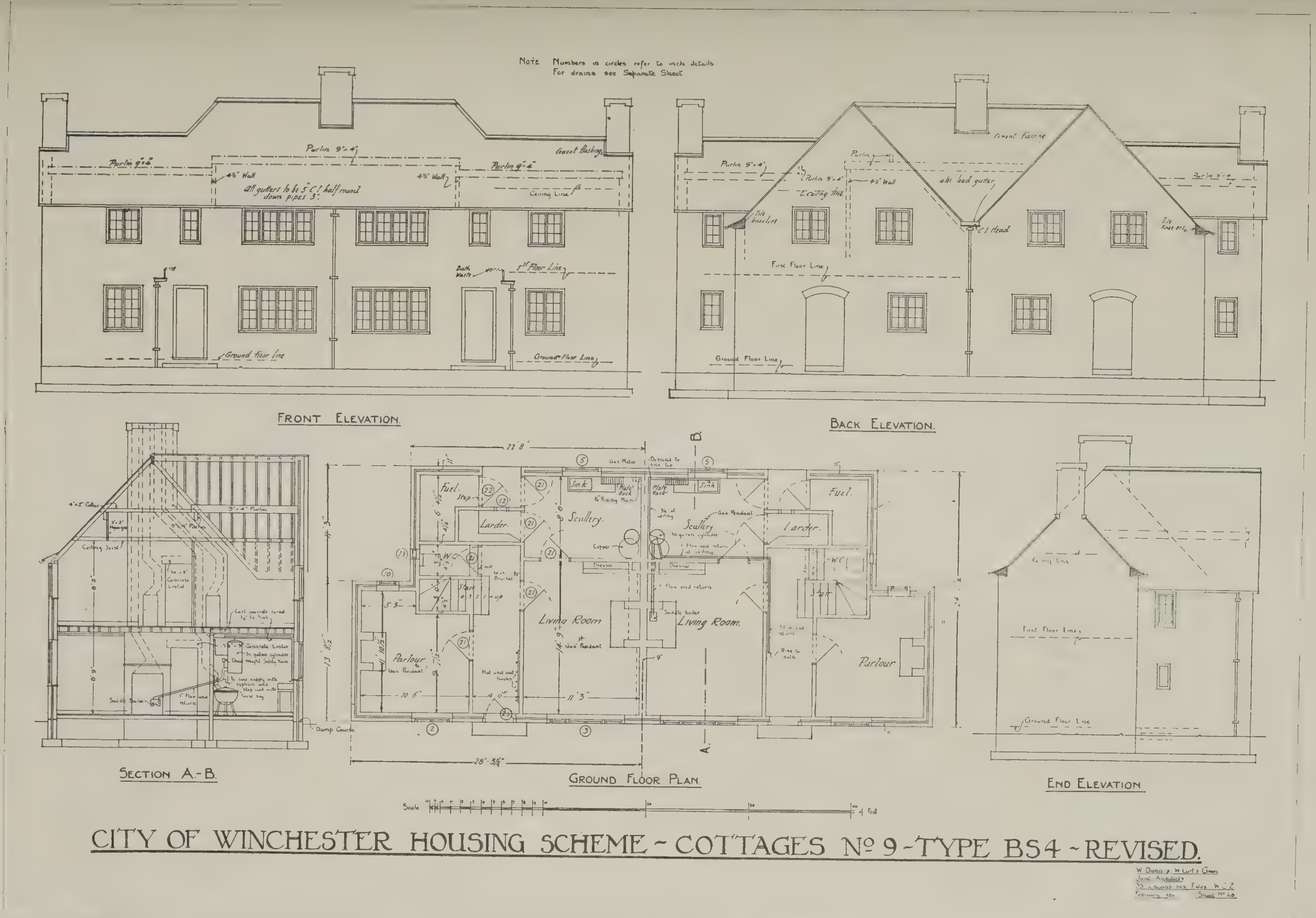
THE CITY OF WINCHESTER HOUSING SCHEME W. CURTIS GREEN, A.R.A., F.R.I.B.A., ARCHITECT


CITY OF WINCHESTER ~ HOUSING SCHEME ~ COTTAGES No 6 - TYPE A·N -
BACK ELEVATION
FRONT ELEVATION
END ELEVATION.
SECTION. A. B.
1/2 PLAN of GROUND FLOOR.
1/2 PLAN of FIRST FLOOR
Scale of feet
Scullery
Living Room
Fuel
W.C.
Larder
Bedroom 1
Bedroom 2
Bedroom 3
Bath
Linen
9"-4" purlin
wall
ceiling
floor line
brick corbel & plate
bath waste
lav: waste
C.I. head
C.I. waste
All stacks above roof to be in red sand faced bricks.
Roofs to be covered with red sand faced patent pantiles on 2"×1" battens - Hips and ridges in half round tiles. Valleys ditto but reversed. Verges to have small half round tiles with double course of plain tiles as undercloak.
All gutters to be 4" C.I. half round all D.pipes 3" diar:
External walls to be of two 4½" thicknesses of brickwork with 2" cavity. Party wall 9" Partition walls 4½"
Walls of Back porch, W.C. Fuel Scullery & Larder to be fairface with 6" cement skirting. All other walls and ceilings plastered. Living Rm: to have 1½"×¾" picture rail.
Floor of Living Rm: & Hall to be laid with patent composition flooring ½" thick on 4" concrete left from shovel. Remainder of floors in 1" cement paving.
Floor to bedrooms to be laid with 1" grooved & tongued flooring on 7"×2" joists at 14" %.
For drains refer to separate drawing
Numbers to openings refer to details -
W. Dunn & W. Curtis Green
Joint Architects
35 Lincolns Inn Fields
London W.C.2.
May 1919
Sheet No 10

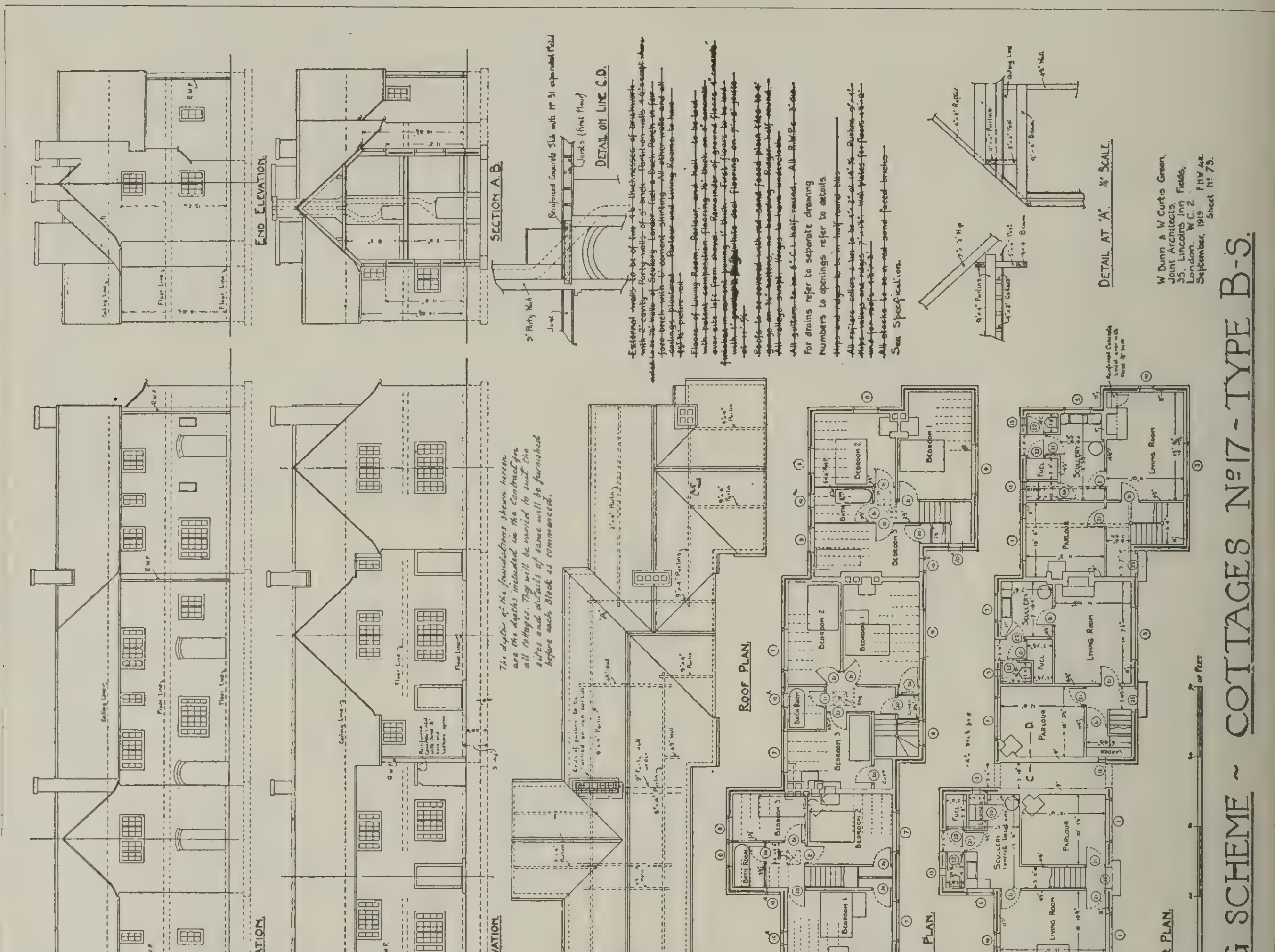
THE CITY OF WINCHESTER HOUSING SCHEME. W. CURTIS GREEN, A.R.A., F.R.I.B.A., ARCHITECT.



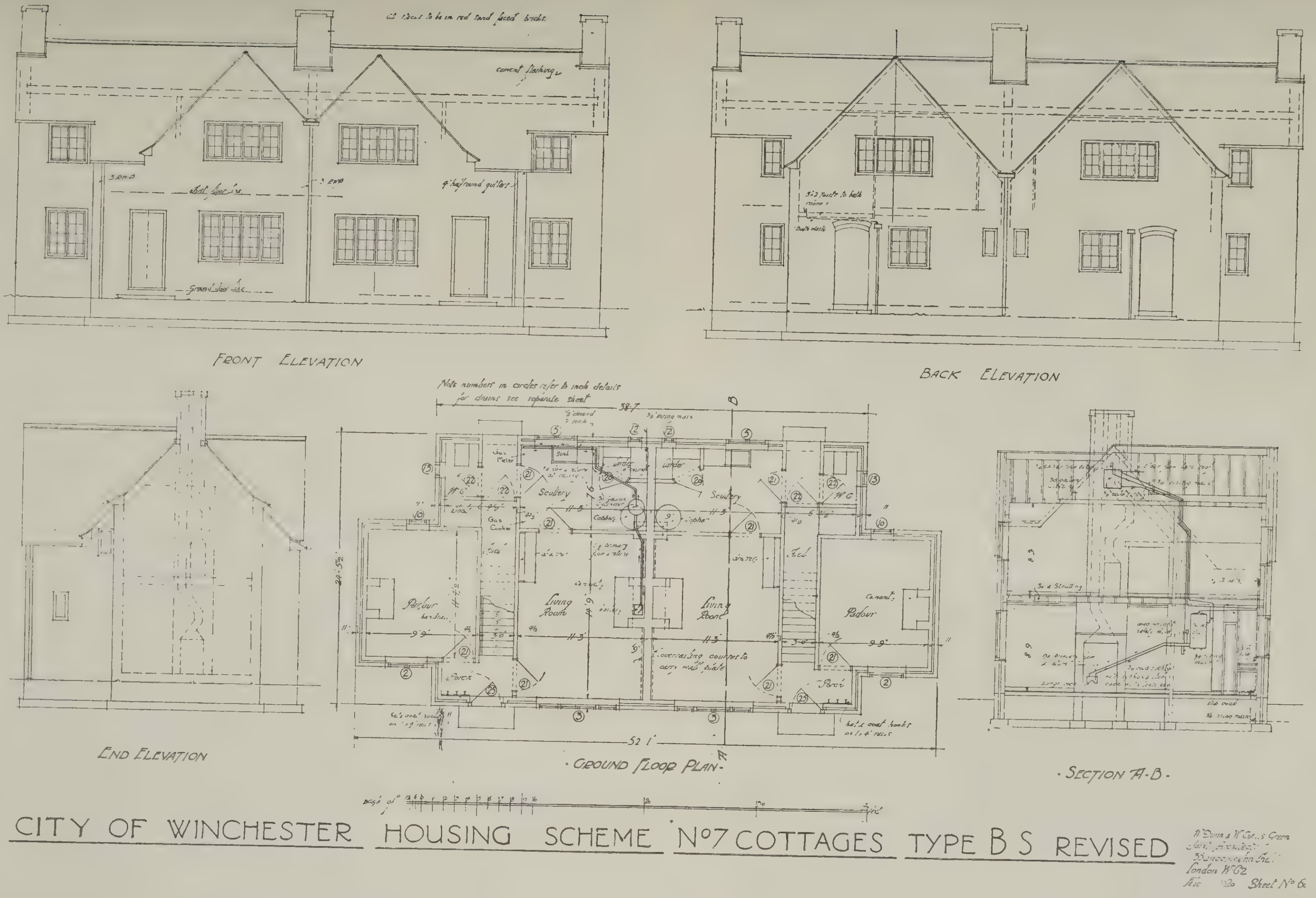
THE CITY OF WINCHESTER HOUSING SCHEME. W. CURTIS GREEN, A.R.A., F.R.I.B.A., ARCHITECT.



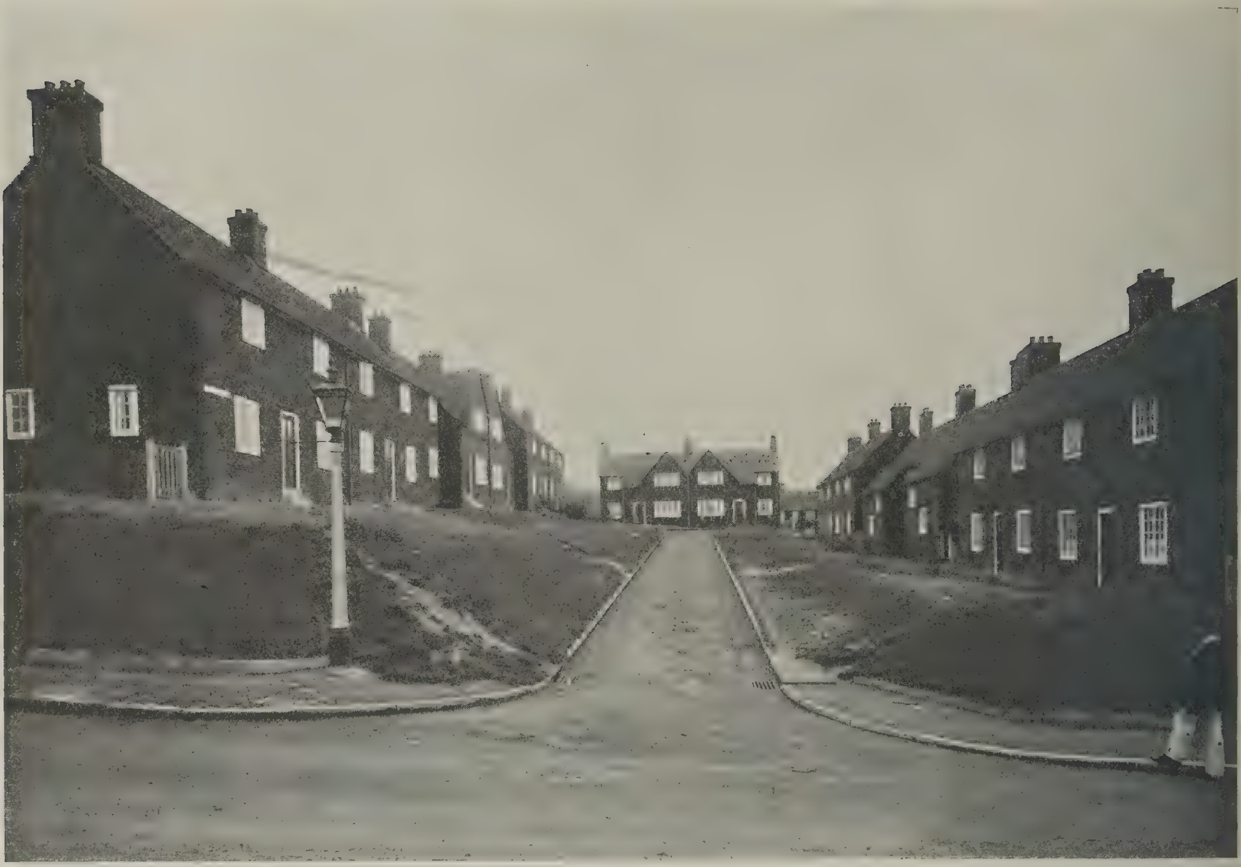
THE CITY OF WINCHESTER HOUSING SCHEME. W. CURTIS GREEN, A.R.A., F.R.I.B.A., ARCHITECT.


CITY OF WINCHESTER. HOUSING SCHEME ~ COTTAGES Nº 17 - TYPE B-S.
W Dunn & W Curtis Green, Joint Architects, 35, Lincolns Inn Fields, London. W.C. 2. September, 1919 F.H.W. del. Sheet Nº 73.
End Elevation.
Section A B.
Detail on Line C.D.
Back Elevation.
Front Elevation.
Roof Plan.
First Floor Plan.
Ground Floor Plan.
Foundation Plan.
Detail at 'A'. ¾" Scale.
The depths of the foundations shown hereon are the depths included in the Contract for all Cottages. They will be varied to suit the sites and details of same will be furnished before each Block is commenced.
For drains refer to separate drawing
Numbers to openings refer to details.
See Specification.
Bedroom 1
Bedroom 2
Bedroom 3
Bath Room
Living Room
Parlour
Scullery
Fuel
Larder
Ceiling Line
Floor Line
R.W.P.
Scale of Feet

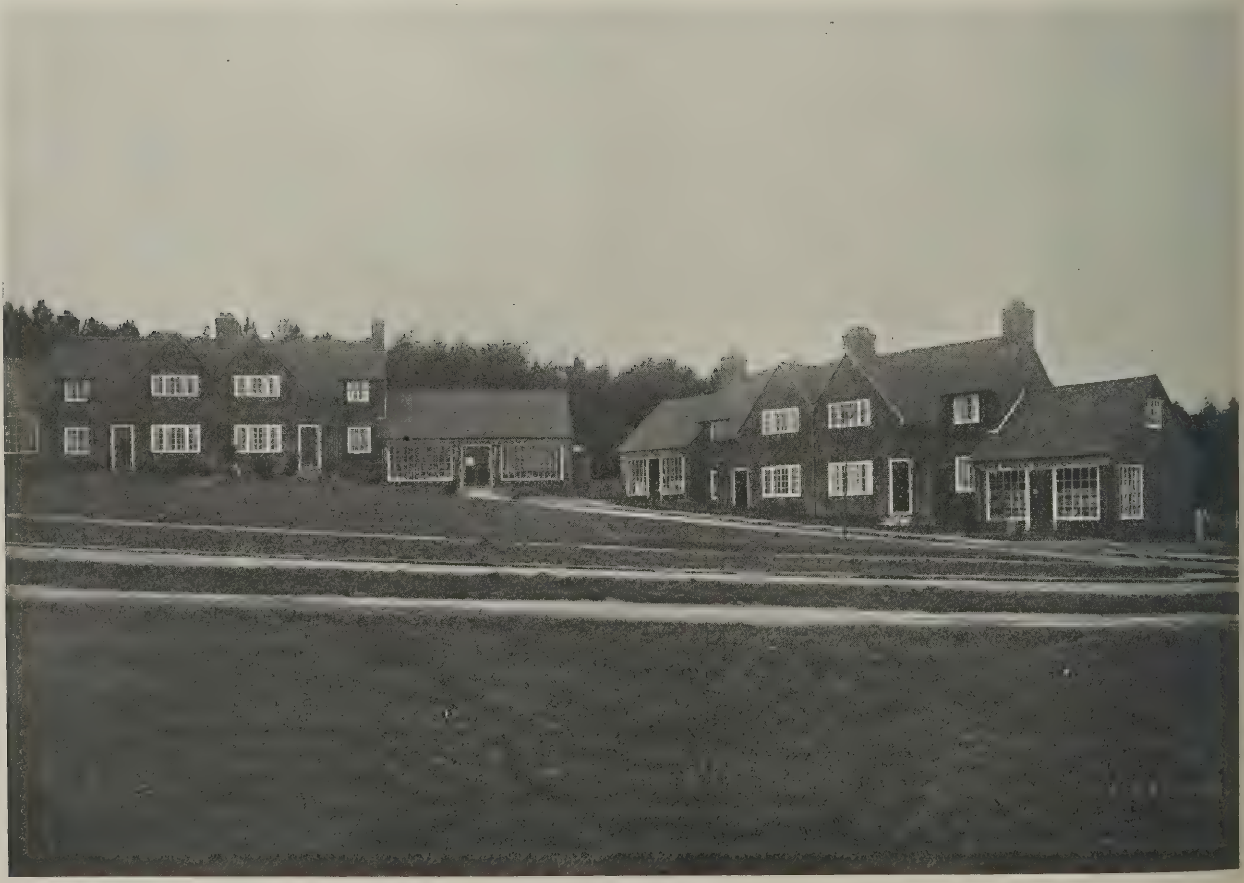
THE CITY OF WINCHESTER HOUSING SCHEME. W. CURTIS GREEN, A.R.A., F.R.I.B.A., ARCHITECT



THE CITY OF WINCHESTER HOUSING SCHEME. W. CURTIS GREEN, A.R.A., F.R.I.B.A., ARCHITECT.

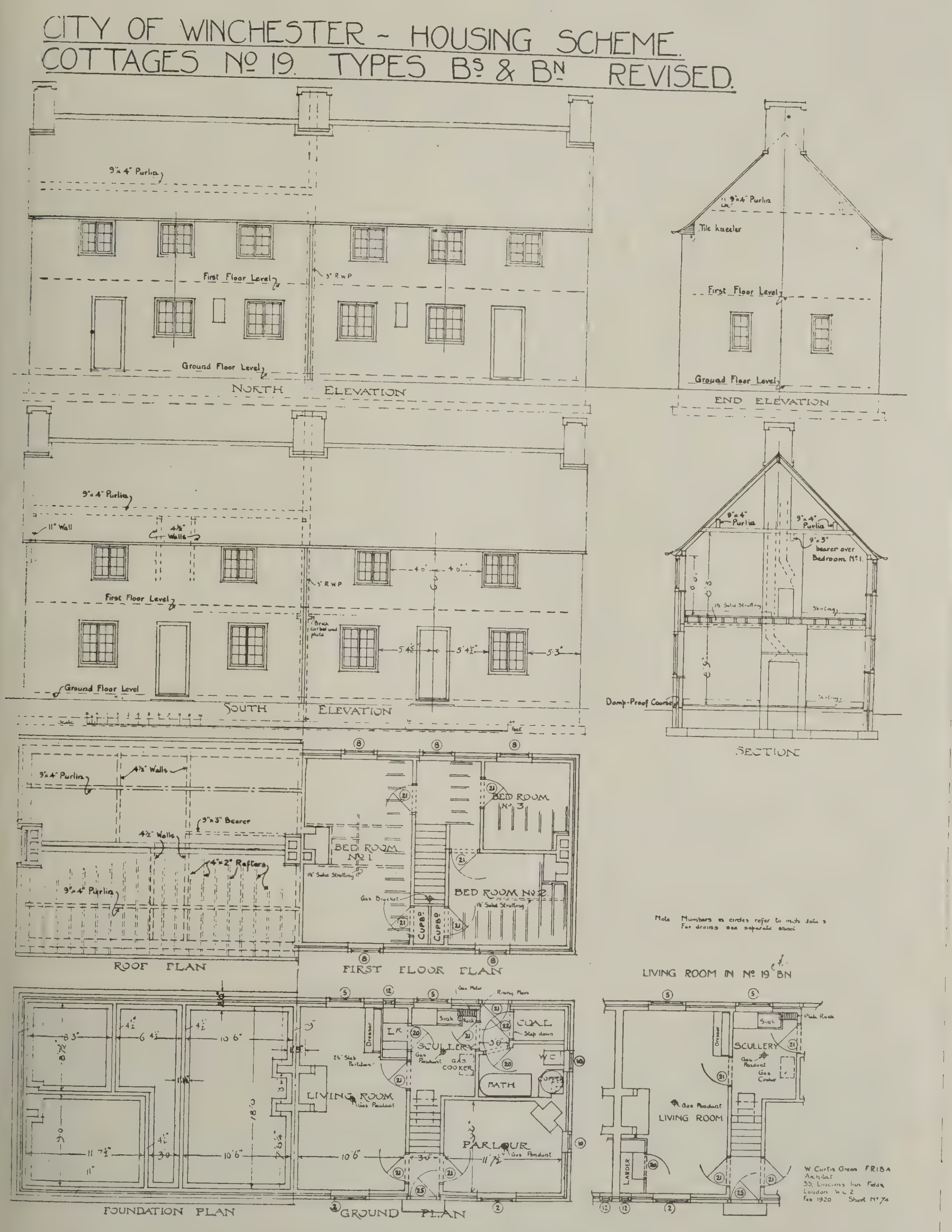


TYPES OF NON-PARLOUR AND PARLOUR COTTAGES WITH THREE BEDROOMS



SHOPS AT STANMORE.

THE CITY OF WINCHESTER HOUSING SCHEME. W. CURTIS GREEN, A.R.A., F.R.I.B.A., ARCHITECT.



THE CITY OF WINCHESTER HOUSING SCHEME: W. CURTIS GREEN, A.R.A., F.R.I.B.A., ARCHITECT.

Airlie Road; it is bounded on the west by Romsey Road, on the east by the London & South Western main railway line, and on the south by Stanmore Lane. The land falls rather steeply from Romsey Road to the railway. A special siding was built to deliver the materials by rail right on to the site, and the contractors for the roads and houses, Messrs. Holloway Bros. (London), Limited, continued the rails and served the whole of the lower part of the site with their own locomotive, with the further assistance of jubilee rails. The upper part of the estate could not be reached by these means, and the haulage was eventually done by horse and cart. The area of the site is about 110 acres. Of this, about 53 acres have now been built upon, giving about ten houses to the acre. The gardens are small, but the lay-out allows for convenient allotments adjoining each group of houses. The subsoil is chalk.

The lay-out plan was designed by Mr. William Dunn during the last year he was in practice, and the houses were designed by Mr. Curtis Green, and the work carried out under his superintendence. The lay-out was not an easy matter, for at the time the Military authorities were in possession of the centre of the site, and this area had to be preserved for them. Recently they have retired, and this open space is now being laid out as a recreation ground. The roads, sewers, and house drainage are designed and built to the requirements of the Ministry of Health.

All the types of the houses sanctioned by the Ministry of Health are to be seen, ranging from the house with a parlour and four bedrooms to that without a parlour and only two bedrooms. The present inclusive rents are 11s. 6d. per week for a two-bedroomed house, from 12s. 3d. to 13s. 9d. per week for a three-bedroomed house without parlour, and from 14s. 6d. to 15s. 3d. per week for a three-bedroomed house with parlour. The houses are built of brick, with 11 in. hollow walls; they are roofed with tiles varied in colour and of the quality obtainable from time to time. The houses range from the single detached cottage to blocks of six. Every house has a bathroom, and those that are upstairs have their own hot-water supply; where the bathrooms are on the ground floor the hot water is drawn off from the copper. Provision is also made for gas-cookers and gas lighting.

The aspects of the rooms and offices have all been studied so that no houses of the same plan are on both sides of th same street. All the accommodation required is within th walls of the house, and there are no "back elevations. The brick box has been avoided, and also restless feature in the elevation. In nearly every case a back porch i provided in which are placed the doors to the sculler the w.c., and the fuel store, an arrangement that saves th appearance of three external doors. It also shields the w.c door, forms a convenient place for boot brushing unde cover, and it enables the scullery door to be left open i bad weather. In most of the houses the first floor wall stand over those on the ground floor, and can thus be o brick instead of studding. In a scheme of this size it wa essential that all the doors, windows, stairs, and chimney should be standardized.

The economies insisted on from time to time by th Ministry of Health involved in the first place the eliminatio of all the specially designed houses at the crossing o junction of the various roads: it reduced the number c designs beyond what was desirable in a scheme of thi size: all porches were omitted, and the scantlings of th joinery and the quality of the timber were reduced beyon what is generally considered good practice. At one perio the authority insisted upon the use of coke-breeze mortar but this was abandoned eventually, as it did not stand th weather. It is interesting and instructive to notice th difference in quality that these houses present to thos that are finished in lime mortar: the fine colour and textur of the red brick is entirely lost with the black pointing. I spite of these economies the estate is a pleasing one on very healthy and pleasant site, and there is nothing mea or cheap in the appearance of the houses.

The recent Government housing scheme has, with all it shortcomings, lifted the whole problem of the housing c the working classes on to a new level. It has raised th standard of comfort and convenience of workmen's house throughout the country, and where the requirements hav been closely studied by architects, and materials suitabl to the locality used, the result is not only pleasing to th eye, but it is a real contribution to the art of building It is, of course, unfortunate that these houses had to b built at a time of unprecedented scarcity, and that econo mies had to be made and materials used that would nc have been allowed in normal times.

THE CITY OF WINCHESTER HOUSING SCHEME: STANMORE, FROM THE TOP OF BATTERY HILL

W CURTIS GREEN, A.R.A., F.R.I.B.A., ARCHITECT

Law Reports

Percolation—Alleged Damage

Howard v. *Griffiths-Marten.*

October 18. King's Bench Division. Before Mr. Justice Bailhache.

laintiff sought damages from the defendant in respect injury caused by percolation. Plaintiff said that con- inated water came through a party wall of a maisonette Brighton. Sergt. Sullivan, K.C., appeared for the ntiff, and Mr. Thorn Drury for the defendant.

ergt. Sullivan said that plaintiff had let the premises o twenty-six weeks at £5 15s. 6d. a week. Shortly after tenant went into occupation it was found that water h an offensive smell had been percolating through from h defendant's premises. On the ground that the flat was fit for human habitation the tenant gave up the flat and right an action against the plaintiff, which was com- mised by payment of £50 and £15 costs by the plaintiff o the tenant. The plaintiff had thus lost some fifteen eks' rent and had to face the loss occasioned by the settle- t of her tenant's action.

r. Thorn Drury, K.C., contended that the water, which e from the inspection chamber, had been forced there ngfully by the flushing of a manhole over which the endant had no control.

is lordship said it was for the defendant to satisfy him the water had been wrongfully put into the inspection h nber by a third party. That had not been shown to his faction. He was, therefore, left to conclude that the er got there from some unknown source, and where a on had an artificial chamber on their premises which a source of damage to a neighbour he was liable. There old, therefore, be judgment for the plaintiff, and he ssed the damages at £150, and he gave judgment cordingly, with costs.

own Planning Act—Question of Order

Adams v. *Tuer.*

tober 19. King's Bench Divisional Court. Before the Lord Chief Justice and Justices Salter and Sankey.

is matter came before the Court in the way of an eal by case stated by the Justices of Barnard Castle and ght by the Clerk to the Rural District Council of Auck- n against the refusal of the justices to make an order er the Town Planning Act, 1919, upon Mrs. Sarah u for the payment of certain work done to dwelling- es owned by Mrs. Tuer to make them reasonably fit for an habitation.

r the appellant, Mr. Mortimer, K.C., explained that in the Council called upon Mrs. Tuer to do certain work er houses within twenty-eight days. Evidence was ced that respondent said that she at once instructed a ler to do the work, but while he was actually engaged Council instructed a contractor to do the work and he ed upon the premises and carried the work out. The cil put in a claim for £342, to which Mrs. Tuer objected. said the Council had not properly expended the r they claimed, that they had charged for work that not done, that timber and materials charged for had been used, that a tender for the work was not obtained, that there was no supervision. The justices found in Tuer's favour and reduced the amount to be paid to 10s. Counsel argued that the justices had no power into the question of the amount due or whether the was necessary or not. That question was one, if ssary, for appeal to the Ministry of Health under the of 1909. Counsel contended that all the justices could as to give judgment for the full amount and they had wer, as had been stated, to say that the matter was or settlement between the parties.

giving judgment the Lord Chief Justice said the only ion was whether the justices had misdirected themselves int of law. After hearing an ingenious argument they had decided that the justices were right in their construction of the Statute. It was open for the respondent to plead that the expenses were not wholly incurred and it was also open to her either to appeal to the Ministry of Health or to the local justices on the question of the notice or the amount claimed. Therefore the appeal failed, as the justices acted quite properly when they investigated the amount of the claim.

Justices Salter and Sankey concurred, and the appeal was dismissed with costs.

Plans and Drawings—Infringement of Copyright

Halden Estate Co., Ltd. v. *The Honest Housing Co., Ltd., and Evans and Sterrett.*

October 19. Chancery Division. Before Mr. Justice Lawrence.

In this case the plaintiffs sued the defendants in respect of alleged infringement of copyright in plans and drawings, and also sought an injunction and damages.

Mr. S. P. Kerr represented the plaintiffs, and said it was understood that the action had been settled on terms, but as defendants had not complied with the terms, and did not appear, the case would proceed. The plaintiffs carried on business as land agents, and architects and surveyors and builders, specializing in purchasing estates. They divided the estates up and erected houses of an artistic character to suit purchasers. Last year they employed the defendants, Leslie Charles Evans and John Edward Sterrett, as draughtsmen at weekly wages of seven guineas and five guineas respectively. Their work was to prepare plans and drawings for prospective houses and for advertising purposes under the supervision of the managing director of the company, Mr. George Harold Humphrey. There was no doubt that the contract was one of service and that the copyright in the plans rested in the employers. After being with the company for some months defendants left plaintiffs' employment in November, 1922. In March, 1923, plaintiffs saw an advertisement issued by the Honest Housing Co., Ltd., which contained a picture of a house which was a reproduction on a small scale of one of plaintiffs' plans. Plaintiffs made inquiries at Somerset House and discovered that the Honest Housing Co., Ltd., was registered in 1923 with a capital of £500 and that the two defendants were directors. They also discovered that defendants were distributing plans and drawings on a fairly large scale and eventually the present proceedings were brought. In their defence to the action defendants denied copying plaintiffs' plans.

His lordship, after hearing plaintiffs' evidence, gave judgment for the plaintiffs, granting the injunction sought and costs, together with 40s. damages.

Right to Posters on Party Wall

Harvey and Thompson, Ltd. v. *T. Smith's Billposting Co., Ltd.*

October 19. Chancery Division. Before Mr. Justice Lawrence.

Plaintiffs sought an injunction against the defendants to restrain them from affixing further advertisements to the south wall of plaintiffs' premises, 79 Albert Embankment, and claimed damages in respect of posters pasted on the wall for five weeks last year. The defendants, while denying liability, paid £20 into Court, which the plaintiffs accepted, and the action proceeded for an injunction restraining any repetition of the acts complained of. Defendants had the permission of the owners of a vacant adjoining plot to post the bills on the wall in question, which the experts called on either side agreed was a party wall.

For the plaintiffs, Mr. Leonard William Goodwin, auctioneer, surveyor and estate agent, stated that from his experience and observation the pasting of posters on a wall had a prejudicial effect on the mortar. It did not injure the brickwork. When bills were pasted over other bills the rain brought them down in festoons and the mortar adhered to them. It was probably due to some deleterious ingredient in the paste.

For the defence, Mr. E. A. Stone, architect and surveyor, said that until this case he had never heard of billposting injuring the mortar or structure of a wall. If a layer of paste was put on the wall, and a bill put on that, and further bills pasted on that one, a kind of mackintosh coat would be formed which would protect the wall and render it to a great extent impervious to the weather. Billposting was a tection and not a danger to the wall.

His lordship came to the conclusion that the plain had failed to establish that the posting of the bills wo cause any damage to the structure of the wall. Insteac damaging the wall the superimposing of bills kept the da out. The plaintiffs had entirely failed to make out case of prospective damage and the action would be missed, and with costs.

Contemporary Art

The Grosvenor Gallery

Henry Rushbury delights in architectural motives, and they afford him most of the subjects for his seventy drawings at the autumn exhibition at these galleries. The massed effects of "Orvieto," the group effect of "St. Cloud," and the quay vista of "Marseilles" are excellent, while the "Busy-ness of Lothbury Court," which is one of the best of the drawings and one of the most elaborate, is admirably restrained. The warm tone of the "Place de la Nation," and the water-colour of "The Walls, Orvieto," are very pleasant.

Village and farm architecture are treated in oil-paint in the same exhibition by Allan Gwynne-Jones, the English exponent of the "toy-box" French school, of which Henri Rousseau, the *douanier*, is the exponent. Gwynne-Jones is, however, less naïve than Henri Rousseau, and his colour is duller. Nevertheless there is truth in all his pictures, and much quiet beauty of presentation will be found in the fifty pictures submitted. Mrs. K. Hilton-Young's ambitious sculpture is seen at its best in the mask of "Mr. John Galsworthy," a good piece of work, but most of the others exhibit a fluency which precludes deep research into structure.

The Twenty-one Gallery

There was never any question as to the powers of William Walcot as a draughtsman, but this exhibition is a reminder that they are by no means reserved for the presentation of architectural subjects. Here there are some twenty figure-subjects, which are no less true and very much alive. They comprise drawings and etchings, and taken *en bloc* would be a perfect decoration for a single beautiful room. W. E. Riley and Robert Gibbings are associated with Walcot in this show, the latter's woodcuts are interesting, and among the former's drawings are two architectural subjects, "Rue D'Apport" and "Bustling Blackfriars."

The Little Art Rooms

Venice has come to the Adelphi in the sixty curious sanguine drawings and monotypes of Petrella of Bologna. Petrella is the Lovat Fraser of Italy, and his designs of masked men and women have a similar intrigue to that of the English artist. In his sanguines he shows a power of direct draughtsmanship of admirable quality. Collectors of the bizarre will find the monotypes much to their taste, while no collection of modern drawings can afford to miss an example of Petrella's distinguished work.

Walker's Galleries

Italy affords almost all the subjects for the water-colours, drawings, and etchings of Edith A. Hope and the water-colour drawings of Mabel Layng. Their combined exhibition is distinguished from among the many by an unusually high quality of work and interest. Almost all the subjects are of an architectural character; in Edith Hope's work the buildings suffer from want of projection in the third dimension; in Mabel Layng's from the want of detail, which is not explained by her figure-subjects, which are solid and massive, designed without regard to light and shade, merely as patterns. Some of this quality might have made the studies of buildings of even greater interest.

The Brook Street Galleries

Colour and life across the Channel are the subjects of works of Gertrude and Henry G. Massey, and both obtained largely from Belgium; from the liveliness of Oste to the modified quietude of Bruges. Gertrude Masse treatment seems to reproduce the vignetted beauties Bruges admirably, and the borderline surrounding her sm drawings gives them a charm similar to coloured woodcu The freely washed-in drawings of Henry Massey are mos of buildings, and the "Old Houses of Dinan" are admiral rendered. "Market Day in Bruges" is a good rendering a somewhat hackneyed architectural subject, and "A Str in Picardy" is a nice drawing. Caudebec has made yield to the busy brushes of these two artists.

The Cotswold Gallery

For the third time the Cotswold group is holding exhibition to which some other artists also contribu Foremost among the latter is William T. Wood, wh facile style is well seen in three charming examples wh differ very much in method from that of the tight detail but most delightful works of the true Cotswold scho Landscape drawings are treated very well in this way Charles M. Gere and F. L. Griggs, but their studies building subjects are treated even better, as also by Jose Southall and Russell Alexander. This Cotswold art is little stream by itself, which runs through contempora English art, freshening it wherever it goes.

The Fine Art Society

The Cotswold touch is seen again in Henry A. Payn water-colour drawings, inducing a quality in this case as old colour engravings. The artist has carried it beyond t range of its original home, from Woodchester and ot spots, along the Severn, and to Wales, but the touch linge and to Norway, where it does not entirely escape. To th drawings are added some charming flower pieces by Edi Payne, and both these artists show some gilded and l quered mirrors of a very decorative character.

The Royal British Colonial Society of Artists is holdi an important exhibition which inaugurates the rearrang galleries of the Fine Art Society, the well-known old roo of which have been entirely remodelled and redecorate Many celebrated artists have contributed to this sho which is varied, and pleasantly includes oil paintings a water-colour drawings of most kinds of subjects. Freder Marriott's large architectural oil painting called "T Sunny South" deals successfully with dappled sunlight white buildings and the open space of a square which th surround; George C. Haite's water-colour "Vendo Morocco," includes a characteristic piece of building as background, and Stanhope Forbes's nocturne, "Mark Jew," is similarly treated, and Borough Johnson's "Ear Morning, Venice," gives new life to an old subject. Amo the water-colours there are interesting drawings of archite tural subjects in Italy, France, and Spain as well as England, by Eyre Walker, Talbot Kelly, Walter Tyndal Gerald Ackerman, W. Lee-Hankey, Moffat Lindnen, a W. E. Riley, and Andrew Prentice exhibits a charming a characteristic design for a Gloucestershire house.

KINETON PARKES.

The Royal Birmingham Society of Artists Autumn Exhibition

The general standard of the work of the Royal Birmingham Society of Artists is gradually rising, but at the present exhibition there are not so many notable individual achievements as at former exhibitions. There is not one great landscape painting, although I liked two views from hills into valleys: one, "The Shropshire Plain," by O. E. Gollins, very clear and graceful, and the other "In Shropshire," by V. de Ville. In another landscape by Mr. de Ville—"A Fête"—good composition is ruined by the fearful colour; the forest is apparently composed of peacock's feathers, and the figures are too loosely indicated. Perhaps the painting is meant to be impressionistic, but one cannot achieve this style merely with loose method and lurid colour. John Keeley, who at the Spring Exhibition exhibited two water-colours worthy of David Cox, now exhibits paintings in which all the virtues of the master are served up as vices. In "Down the Hill" and "A Thunderstorm" the artist vainly revels in Coxian method and Coxian colour; but the Coxian effect is too elusive. The one fine landscape is "A Cheshire Landscape," by James T. Watts. It is very reminiscent of Cox in his calmer moments.

The Memorial Exhibits of the late Arthur Harrison, F.R.I.B.A., are of special interest to the architect. He painted the pantile roofs and weathered walls of old French buildings in a clear, bright method, very sympathetic to the subject, and productive of much very fine work. The water-colours of Ernest Bowlay, F.R.I.B.A., are also interesting; he paints with a free brush and bright broad colour, but his composition is well knit and his method by no means loose. Of his four exhibits "Wareham Bridge" and "A Street in Richmond" are the best; the other two are much inferior. The exhibition of a little pen-and-ink sketch by Edmund New, of Saltley College Chapel, Birmingham, and a photograph of the Infant Welfare Centre, Hockley (Mr. J. L. Ball, architect), will perhaps inaugurate a practice of including illustrations of current architecture in future exhibitions. A very fine piece of decorative mosaic work by Thomas A. Cook is also of interest to architects, as mosaic work is an art which might well be revived in decorative architecture.

There is but one great portrait in the exhibition, "Mrs. Joscelin Rubens," by B. Fleetwood Walker. It is a vigorous expressive painting, which has the fine qualities of Orpen's and Philpott's methods. "Enigma," a portrait by Bernard Munns, of a girl leaning on a stone sill, with a background of hills and castles, has a strong flavour of Early Italian work. "The late Howard Pearson," by W. J. Wainwright, is far below the artist's usual standard; it is dull, flat, and lacks expression and vigour. In contradistinction, "W. J. Wainwright," by Edward Harper, exhibits all the qualities of a good portrait, the pose is unusually real and human, and the method and colour are clear, vigorous, and very expressive: it is a portrait with a soul.

EDGAR LUCAS.

The Rome Scholarship in Architecture, 1924

The Faculty of Architecture of the British School at Rome have granted permission to the following to take part in the preliminary competition for the Rome Scholarship and Henry Jarvis Studentship in Architecture of 1924:—

Charles T. Bloodworth (5th-year student, University of Liverpool).

D. L. Bridgwater, A.R.I.B.A. (5th-year student, University of Liverpool).

Richard W. Briggs, B.A. (Manchester), A.R.I.B.A. Lecturer in Architecture, University of Manchester).

Donald Brooke, B.Arch. (Liverpool) (architectural assistant).

Leo Durnin (5th-year student, University of Aberdeen).

Wilfrid B. Edwards, B.Arch. (Liverpool), A.R.I.B.A. (architectural assistant).

Miss Amy M. Hargroves (architectural assistant, late student University of London).

Leonard C. Howitt, A.R.I.B.A. (5th-year student, University of Liverpool).

John H. L. Owen (5th-year student, University of Liverpool).

Miss Elsie Rogers, B.A. (Manchester) (student).

Miss Frances T. Silcock (4th-year student, University of Liverpool).

H. Spencer Silcock (5th-year student, University of Liverpool).

Marshall A. Sisson, B.A. (London) (student, University of London).

A. Malcolm Stewart (5th-year student, University of Aberdeen).

Herbert Thearle (4th-year student, University of Liverpool).

Frederick E. Towndrow, A.R.I.B.A. (architectural assistant, late student University of London).

Francis X. Velarde (5th-year student, University of Liverpool).

Correspondence

The Danger of Sky Signs

To the Editor of THE ARCHITECTS' JOURNAL.

SIR,—Since it is of little use nowadays appealing for anything on the ground of good taste, may I draw your attention to a practical reason for the abolition of sky signs and road-side advertisements? Let it pass whether night is made beautiful or made hideous by the flashing and whirling of great "electrics," let us not trouble whether or no a country road is improved by being walled-in with mile upon mile of highly-coloured posters advertising sauces and pills, let us be strictly utilitarian and advocate the removal of these advertisements on the popular principle of "safety first."

A friend was motoring on the Great North Road a week or two ago and had his attention distracted from driving by the sight of a particularly startling placard. It was designed to attract notice, and the artist (he was no less an artist through his art being badly prostituted) had designed it well. At that moment the road became unexpectedly occupied, and an accident was avoided only by a dangerous swerving.

In town I am particularly careful of life and limb. If I am at any time run down, I think it will be no fault of mine, but the other evening I was badly taken off my guard. I was crossing from Whitehall to Trafalgar Square when upon a building to my right there suddenly appeared the running words of an electric newspaper. If I wished to look at it at all, I admit I should have waited until I had reached the pavement; but, as I have already mentioned, I was taken off my guard, and my action in trying to read the words was involuntary. I escaped being run over only by the sudden pull of a more sophisticated friend. Piccadilly Circus is, of course, notorious. Not only is one's attention from the traffic diverted, at a point where every sense should be concentrated upon one's safety, but one is literally blinded by the glare.

As we have as yet no Ministry of Fine Arts, perhaps the Ministry of Health could take action in what concerns, if not the *appearance* of our streets and roads, their *dangers*.

MERCUTIO.

The A.A. Excursion to Avignon

At the last ordinary general meeting of the Architectural Association there was a good attendance of members to hear Mr. Gilbert H. Jenkins, F.R.I.B.A., give an address on the A.A. Excursion to Avignon of 1923. The president of the Association, Mr. Stanley Hall, presided. Mr. Jenkins first read a paper describing Provençe, its historical associations and the influences which marked the growth of its architecture. A number of slides, which had been made from some really excellent photographs taken during the excursion, showing the various places visited, were then put on the screen, while Mr. Jenkins described the incidents of the excursion. After the lecture a vote of thanks was proposed to the lecturer by Mr. W. H. Ansell, seconded by Mr. Robert Atkinson. Mr. A. E. Willets and Mr. H. M. Fletcher also testified to their appreciation of the lecture.

Cement and Concrete Finishes

The success which attended Mr. Coleman's recent cinema lectures upon "External Textural Finishes in Concrete" and "The Application of Cast Concrete Stone to Present-day Building," has induced him to repeat them in Manchester, Edinburgh, Glasgow, and Birmingham during the present month. A large part of the prejudice against the use of cement in this country comes from the fact that the grey cement is ugly in itself, and makes muddy any colour which is used with it, but Mr. Coleman has done much to popularize it by the introduction of a special white cement (Atlas White Non-staining Portland Cement), with which clear, clean colours are possible. A great point Mr. Coleman makes is the number of textures stucco is capable of being worked with, resulting in very artistic and beautiful effects. In general, the rougher the texture of the stucco the more attractive the appearance. High lights and shadows on the wall surface give it a "live" appearance, particularly when the house is viewed from a distance. For a house on a city street the finest texture is preferable; for one set back from a country road a rougher texture is generally advisable.

An illustration of stucco treatment, and, incidentally, an example of the class of work being shown by Mr. Coleman, is given on page 689.

Coming Events

Wednesday, November 7.

Royal Society of Arts.—"Exhibitions." 8 p.m.

L.C.C. Central School of Arts and Crafts.—Sir Banister Fletcher on "Greek Architecture." 8 p.m.

Inst. of Heating and Ventilating Engineers.—Sessional Meeting. 7 p.m.

Reading Society of Architects.—"The Roman Point of View." By Mr. Paul Waterhouse, PP.R.I.B.A. 8 p.m.

Thursday, November 8.

British Museum.—"Egypt" etc. By Miss Claire Gaudet. 4.30 p.m.

Friday, November 9.

Town Planning Institute.—Presidential Address. 6 p.m.

Chadwick Public Lectures, at R.S.A., John Street.—"Hygiene and Architecture." By Major Harry Barnes, VP.R.I.B.A. 8 p.m.

No Skilled Builders Unemployed

Sir Montague Barlow, Minister of Labour, received a deputation from the Birmingham City Council on the subject of the shortage of skilled building workers. The Lord Mayor said that housing in Birmingham was held up by a shortage of bricklayers, and, in consequence, the Council were prevented from making the progress called for in improving the present deplorable conditions. Mr. S. T. Talbot (Chairman of the Town Planning Committee) said that with the present facilities the Council were hardly touching the fringe of the housing problem. Their efforts to secure local arrangements had been abortive owing to the national agreements between employers an workers in the building trade. They had a definite buildin programme for the next twenty years, and the men, therefor need not fear unemployment so far as Birmingham was cor cerned. Sir Montague Barlow, replying to the deputatio said there were 5,000 carpenters and 15,000 painters withou work, not to mention 35,000 labourers. But all these wer largely held up by the shortage of bricklayers. Work for a these was impossible unless the number of bricklayers coul be increased. So far as Birmingham was concerned ther was a shortage of skilled workers. He suggested that th building trade employers and operatives should consider together the means for securing an increase of skilled workme to meet the present situation and an increase in the number o apprentices.

Competition News

Wirral Poor Law Institution.

The design submitted by Mr. Vivian Pendleton, o Westminster Chambers, Lord Street, Southport, has beer awarded first place in the above competition.

List of Competitions Open

Date of Delivery.	Competition.
Nov. 15	New Police and Fire Brigade Station in Bridewell Street, Bristol Mr. W. Curtis Green, A.R.A., F.R.I.B.A. (London), and Mr. Georg H. Oatley, F.R.I.B.A., R.W.A. (Bristol), Assessors. Apply Mr E. J. Taylor, Town Clerk, The Council House, Bristol. Deposit £1 1s
Nov. 30	Taunton School War Memorial. The Council of the Taunton Schoo invite designs for a War Memorial, consisting of an Art and Scienc Block, the cost of the building to be approximately £10,000. Th Assessor is Mr. Robert Atkinson, F.R.I.B.A., who will have th power to nominate a second Assessor if desirable. Premium first, £100; second, £50. The first premium will merge in the architect's commission. Particulars, together with photograph of the present buildings, may be obtained from the Secretary of the School, H. J. Pollard, F.C.A., 3 Hammet Street, Taunton, in return for a cheque for £2 2s.
Dec. 10	Designs for a dining-room and bedroom furnished in the style of 1924, to form part of the applied art section of the Palace of Arts at the British Empire Exhibition at Wembley next year. Prizes to the value of £400 have been offered by "Country Life" for the best designs submitted. The Palace of Arts will include among its other interesting features a series of six decorated rooms illustrating the progress of decorative art since 1750. Two of these rooms will be designed and be furnished in the styles of the Georgian and Regency periods covering the years 1750 and 1815: two more will illustrate the standard of interior decorative art, attained respectively in 1851 and 1880. The modern rooms will demonstrate the remarkable advances made in this sphere of applied art since those dates. Competitors must be of British birth or of British parentage, and all manufactured goods to be provided must have been manufactured within the British Empire. The designs are to be considered by a special Jury of Award, consisting of: Sir Edwin Lutyens, R.A., Miss Ellen G. Woolrich, Mr. P. Morley Horder, and Mr. Norman Wilkinson. The Exhibition is to arrange for the carrying out of the prize designs under the supervision of the successful competitors.
Dec. 10	The War Memorial Committee of the Burgh of Coatbridge invite designs for the erection of a War Memorial on a site in the West End Park. The estimated cost of the work amounts to £3,000, and premiums of £75, £50, and £25 are offered for designs placed first, second, and third respectively. Assessor is Mr. James Lochhead, F.R.I.B.A., Hamilton. Apply Town Clerk. Deposit £1 1s.
Jan. 1	The Imperial War Graves Commission invite architects who served during the war as members of the Military, Naval, or Air Forces raised in any part of the British Empire to send in their names for admission to a competition for the designing of memorials to the missing to be erected by the Imperial War Graves Commission at Bethune, Armentières, Cambrai, and Soissons. Applications for particulars of premiums and other regulations from those desiring to compete are to be addressed to the Secretary (Works Branch), Imperial War Graves Commission, 82 Baker Street, London, W.1, and must be received there not later than January 1, 1924, and must be accompanied by a statement giving particulars of the war service and professional career of the applicant and clearly stating which of the memorials it is desired to compete for. Deposit, two guineas for each set of plans. The Assessor is Sir Aston Webb, K.C.V.O., P.R.A.
Jan. 5	Memorial Building and Tower, Dudley. The Council of the County Borough of Dudley invite Competitive Designs from duly qualified Architects for the "Brooke Robinson Memorial" Building and War Memorial Tower comprising a Public Hall, Coroner's Court, small museum, and a new sessions court. Premiums £300, £200, and £100. Mr. W. Curtis Green, A.R.A., F.R.I.B.A., Assessor. Conditions of competition, together with a copy of the site plan, can be obtained on application to E. W. Tame, Town Clerk, Town Clerk's Office, Dudley, with deposit of £2 2s.
Feb. 1	Proposed Concert Hall and Public Baths for Newcastle-upon-Tyne Premiums £750, £250, and £100 respectively are offered, the first premium to merge into the commission or other payment to be made to the author of the successful design. Assessor, Mr. Alfred W. S. Cross, M.A. Apply, with deposit of £2 2s., to Mr. A. M. Oliver, Town Clerk, Town Hall, Newcastle-upon-Tyne.
No date *	The Eastleigh and Bishopstoke Urban District Council invite designs for the extension of their existing Council buildings, and the erection of an assembly hall, on the site adjacent. Premiums: 50, 30, and 20 guineas. Apply, with deposit of £1, to Mr. J. Lawrence, Clerk to the Council, Council Offices, Eastleigh.

* Indicates Competitions whose conditions are not in accordance with those laid down by the R.I.B.A. and the Society of Architects.

The Week's News

Epsom Cottage Hospital.

Epsom Cottage Hospital is to be enlarged at a cost of £6,000.

New Refreshment Pavilion for Southfields.

A £2,500 refreshment pavilion is to be erected in King George's Park, Southfields.

Swimming Pool for Ilford.

A £5,500 open-air swimming pool is to be constructed in Valentine's Park, Ilford.

New Sea Wall for Ramsgate.

A new sea wall costing £7,567 is to be constructed on the west cliff extension at Ramsgate.

New Hall for Kensington.

A new £4,000 parochial hall is to be built by St. Helen's Church, North Kensington.

Additions to the Tate Gallery.

The erection of the additions to the Tate Gallery, Millbank, S.W., is to be put in hand at an early date.

New Pavilion for Wandsworth.

Wandsworth is to spend £1,850 on a sports pavilion for Furzedown Park.

World's Largest Reinforced Concrete Bridge.

France has thrown open to traffic the largest single-arch reinforced concrete bridge in the world. It spans the Seine at St. Pierre-de-Vauvray.

New Marine Drive for Swansea.

Swansea Town Council have decided to proceed with negotiations with a view to constructing a marine drive from Mumbles to Langland at an estimated cost of nearly £50,000.

New Assembly Hall for Leicester.

Provisional schemes for the expenditure of £16,800 on a new assembly hall and sports pavilion for the Wygeston Boys' School have been approved by the Leicester City Education Committee.

New Reservoir for Hastings.

An inquiry was held by the Ministry of Health into the application of the Council to borrow £14,000 for reservoir building as a means to help the unemployed.

£1,000,000 Dock Scheme.

About £1,000,000 is to be spent in making six more berths in the docks at Bristol. So said the Lord Mayor of Bristol at the annual dinner of the Society of Bristolians in London.

New Science Buildings for Bangor.

On November 1 the Prince of Wales laid the foundation-tone of the new science buildings of the University College f North Wales, Bangor. Mr. Alan E. Munby, M.A., F.R.I.B.A., s the architect.

Big Road Schemes for Nottingham.

Road and other improvement schemes, estimated to cost 287,000, have been approved by the Nottingham Corporation o provide work during the winter for the unemployed.

New Open Space for Southwark.

In view of the possible removal of Bethlem Hospital from outhwark, the Metropolitan Public Gardens Association uggest that the grounds should be acquired as an open space.

Barracks as Flats.

With a view to solving the housing problem in Portsmouth has been suggested that Cambridge Barracks, which are ow empty, should be acquired by the Corporation and conerted into residential flats.

Big House Scheme for Doncaster.

At Adwick-le-Street the Industrial Housing Association itend to use the extensive allotments and fields between Highelds and Woodlands, and between Highfields and Adwick, r the erection of houses for workmen of Brodsworth and ullcroft Collieries.

New Edinburgh-Glasgow Road.

The Ministry of Labour has written to the Glasgow Corporation offering a grant of 75 per cent. of the entire cost of the new Edinburgh-Glasgow highway to provide work for unemployed. The whole scheme is estimated to cost £1,900,000, and Glasgow's share will be about £275,000.

Scarborough Improvements.

Scarborough Town Council have decided to proceed with the erection of a café at the corner of Peasholme Road and the North Bay Promenade at an estimated cost of £6,500. An improvement of the roadway between the entrance to the café and the sea is to be carried out at an estimated cost of £7,000.

The late Mr. C. F. L. Horsfall.

Mr. C. F. L. Horsfall, of Dalehurst, Heath Avenue, Halifax, died on October 29, at the age of eighty-six. He was head of the firm of C. F. L. Horsfall and Son, architects, but retired from active participation in the business in July, 1914. During a successful career, his name has been associated with many prominent public buildings in Halifax and district.

Roman Tomb Discovered at Colchester.

The remains of a Roman tomb have been found at West Mersea, near Colchester, during building operations. The tomb, which was 3 ft. below the surface, was of Roman brick and mortar, and the contents included a glass urn protected by a metal cover and placed in a square tile-work flue, and a Roman funeral lamp in perfect condition.

Harwich and Dovercourt Town Planning Scheme.

The Executive Committee of the Harwich and Dovercourt Town Planning Association have approved a scheme for town planning Harwich and Dovercourt under the Town Planning Acts. A petition is being presented to the Ministry of Health, so that a public inquiry can be instituted into the merits of the scheme.

The Victoria and Albert Museum.

The west half of the Cast Court at the Victoria and Albert Museum has just been re-opened to the public, with the exception of a small strip at the south end. This court now contains an important series of casts from mediæval English sculpture and a rich collection of casts from fourteenth and fifteenth century misericords, besides recumbent effigies and architectural details.

Barrow Corporation and Temporary Huts.

At a meeting of the Barrow Council the Mayor drew attention to the large number of temporary huts, railway coaches, and caravans used for sleeping purposes without authority. The Health Committee had given a certain amount of latitude, but now with nearly 300 empty houses people must return to the normal habit of sleeping in permanent houses. Stringent steps, he said, would be taken.

Southampton's £38,000 Scheme.

Southampton Harbour Board have decided to provide a new swinging ground for large liners using the port, at an estimated cost of £38,000, subject to the Southern Railway Company contributing half the cost, and also to an agreement with the United States Shipping Board to contribute the sum of at least £7,500 in dues on the s.s. "Leviathan" in a minimum amount of £1,500 per annum for five years.

Covered Market for Leicester.

A public inquiry was held at the Leicester Town Hall by an inspector of the Ministry of Health into the application of the Leicester City Council for sanction to borrow £11,000 for the erection of a covered market. The Town Clerk said it was proposed to erect a building of three stories, with offices at the top. The demand for market stalls was abnormally great.

New Bridge at Berwick.

The new bridge which it is proposed to construct over the Tweed at Berwick, at an estimated cost of about £200,000, was considered at a meeting in Newcastle of the Bridges and Roads Committee of the Northumberland County Council. It is understood that negotiations are still proceeding as to the apportionment of the cost between the Ministry of Transport, the County Council, and the town of Berwick.

(*Continued on page* 706.)

The Week's News—*continued.*

The End of the Old Strand.

Shopkeepers whose goods now fill the shop fronts between Simpson's and Wellington Street, are preparing to clear out in readiness for a wholesale breaking-down of the Strand frontage. Terry's Theatre, now a kinema, but still called after Edward Terry, who opened it in 1887 with "The Churchwarden," and who made a fortune there out of "Sweet Lavender," closed on Sunday.

The Cavalry Memorial.

The Cavalry Memorial upon which Captain Adrian Jones, the sculptor, has been engaged, is now nearing completion. The memorial, which will be erected next April at Stanhope Gate, Hyde Park, will consist of a bronze model representing St. George and the Dragon, the horse and rider being of heroic dimensions; and placed upon a low pedestal with an architectural background.

Change of Address.

Messrs. Library Bureau, Limited, have moved to 125 High Holborn, London, W.C.1 (opposite the Holborn Restaurant). The firm will be able to make a much larger and more comprehensive display of their systems and equipment in the new showroom, which has been specially arranged for the purpose. During the past year many interesting new features and ideas have been produced by the firm with a view to reducing expenditure and improving efficiency.

Whitby Sewerage and Harbour.

From time to time Whitby Council have spent large sums on the improvement and deepening of their harbour and its protection against storms. Unfortunately the tides still carry sand into the harbour: a sand bar is apt to form at the entrance and obstruct vessels entering at low tide. The Council have asked Messrs. W. H. Radford and Son, of Nottingham, to report fully to them on the improvement of the harbour and of the sewer outfalls.

1,500 *Concrete Houses.*

A large-scale experiment in the concrete construction of dwellings on a new plan has been decided upon by the Birmingham City Council. The concrete will be made on the building sites by unskilled labour, and the material will be so shaped that it can be put in without the aid of bricklayers, thus circumventing the difficulty with regard to skilled labour, and helping to absorb unemployed men with no technical qualification. Contracts have been entered into for 1,500 houses in different parts of the city.

Architecture at the British Empire Exhibition.

At the request of the authorities of the British Empire Exhibition the R.I.B.A. have undertaken, with the assistance of the Architecture Club, to arrange an exhibition of modern architecture at Wembley. The exhibition will be open from May 19 to June 28, 1924, and will consist of photographs and models of buildings erected within recent years from the designs of living architects. Space has been allotted to the Dominions and Dependencies overseas. A Joint Committee of Organization under the chairmanship of Mr. Maurice E. Webb, F.R.I.B.A., is already at work.

New Post Office for Falmouth.

At a meeting of the Falmouth Town Council it was reported that a letter had been received from the architect of the Office of Works stating that negotiations were proceeding with the owners of the Market House site for the erection of a new post office at Falmouth, and requesting an extension of the time fixed by the Council during which a building had to be erected there. The Council decided to reply asking for a rough sketch of the front elevation and sectional elevation of the end of the proposed new post office, which will face the municipal buildings, and enquiring what extension of time was required.

Housing at Manchester.

The Manchester Corporation scheme for assisting people to build or purchase their own houses is meeting with considerable success. At a meeting of the Housing Committee it was reported that more than 1,000 applications and inquiries had been received in connection with the scheme. The Committee decided to offer assistance to about 100 applicants. At present the scheme is limited to about 300 houses, and other applications will be dealt with in due order. It is probable, however, that before the 300 cases are all met, application will be made to the Ministry of Health with a view to extending the number.

London Tube Extensions.

A new programme of tube extensions will be started this month, entailing an expenditure of £6,000,000, and, including the work now on hand, providing employment for between 25,000 and 30,000 men for a period of nearly two years. This additional scheme of construction comprises: the immediate extension of the tube railway from Clapham Common to North Morden, a distance of over five miles, four and a half miles of which will be tunnel work; the construction of seven new stations, the reconstruction of Piccadilly Circus and Leicester Square stations, and the rebuilding and further development of Waterloo tube station as an interchange point.

Hampton Court Bridge.

A meeting of the joint committee of the County Councils of Middlesex and Surrey, which are charged with the maintenance of Hampton Court Bridge, has been held to consider the evidence given at the recent inquiry conducted by the Ministry of Transport, that this bridge is no longer safe for heavy, or even for fast-moving light traffic. A resolution was unanimously adopted urging the highways and bridges committees of the two county councils to give immediate attention to the necessity for providing a new bridge. It was thought that the Ministry of Transport would probably make a grant of 75 per cent. towards the cost of this.

New Power Station at Manchester.

The Earl of Derby, Secretary of State for War, opened the New Barton Power Station at Manchester. It is claimed that when completed, it will be the largest of its kind in the country. It is on the banks of the Ship Canal, from which will be drawn and replaced, after use, a million gallons of water every hour for evaporating purposes. The station will eventually accommodate a power plant of 150 thousand kilowatts. Four feeders will transmit power to the city, and one of the distributing stations at High Street is the first example of a complete outdoor sub-station operating at 33,000 volts.

Garden Cities and Town Planning.

Speaking at a meeting of the Garden Cities and Town Planning Association, Captain R. L. Reiss, the Chairman of the Executive, said the Minister had given adherence to the principle of decentralizing the overcrowded population in our large towns by the establishment of new communities to which industries could and must be moved. The Association welcomed the Minister's statement of policy on this point, and believed it would be of far-reaching importance both in connection with the provision of employment and the welfare of the community.

Monyhull £19,500 Scheme.

The postponement of two building schemes was suggested at the last meeting of the Birmingham Board of Guardians, because of the likelihood of diverting the labour from the erection of houses. Proposals came before the meeting for the erection of two adult homes at Monyhull Colony at a cost of £19,500, and for the extension of the Union offices at a cost of £6,000. In both instances it was suggested the schemes would tend to delay the erection of houses, but on the other hand members pleaded that the work was urgent, and the Board approved the proposals.

Street Across a Station.

A great development scheme intended to relieve traffic congestion between the northern and southern sections of Birmingham is under the consideration of the City Council. Plans have been prepared for connecting the two central areas of the city by a new bridge across New Street Station and making a continuation of the road from Stephenson Place. It is proposed to construct a bridge parallel to the existing bridge across the station and to continue it on a viaduct gradually sloping down to Bristol Road. The new elevated road will be 80 ft. wide, on either side of which shop property will be erected.

A New Forth Bridge.

A proposal has been worked out in detail, and submitted to the Ministry of Transport, for a new traffic bridge across the Forth, to the east of the present railway bridge. A new traffic bridge is to be built across the Tweed at Berwick, and there is also a proposal for building a traffic road over the Tay, close to the present railway bridge. The only remaining link required for the important and direct east coast route would

(*Continued on page 707.*)

The Week's News—*continued.*

e, it is claimed, such a bridge as is proposed across the Forth. he proposal which has been put before the Ministry of Trans- ort shows a bridge of the suspension type, estimated to cost out two and a half millions.

Amateur Exhibition of Arts and Crafts.

An exhibition of arts and crafts is being held in the Galleries, 3-65 Baker Street, until November 17, on behalf of the Artists' eneral Benevolent Institution. The exhibition consists ntirely of amateur products. Princess Beatrice and Lady atricia Ramsay have sent exhibits, as have also many persons hose work is well known, such as the portraits of the Duchess Rutland, the lacquer of Countess Bathurst, the landscapes y Mr. Hallam Murray, Mr. Ernest Thesiger, Mr. E. Guy awber, and Sir John Adye. Various crafts not usual among mateurs are represented, such as garden figures in concrete, ookbinding, glass and shell work, and painted hats.

£14,000,000 for New Works.

The London, Midland, and Scottish Railway Company are repared to expend £14,000,000 on new works, extensions, nd rolling stock. The £4,000,000 to be spent on current orks will be spread over the company's works in building d repairing locomotives, carriages, wagons, and on con- ructional work in connection with the replacement of achinery. The further sum of £10,000,000 is to be allocated the building throughout the country of locomotives, carriages, agons, and steamers, the construction of road motors, oilers, plant, machinery, and tools generally, the widening certain sections of the line, the strengthening of numerous idges, and the electrification of certain passenger lines. ome 30 bridges will be strengthened and partly rebuilt. he improvements at the stations include the remodelling Tilbury Dock Station on modern lines.

Moorgate Station to be Rebuilt.

An important step in connection with the reconstruction the City and South London line will be the entire rebuilding Moorgate Station at an estimated cost of £80,000. This ation was opened in February, 1900, but owing to the enor- ous growth of traffic the existing site has been found inade- ate for further development. Arrangements have accordingly en made to abandon the existing street level station, and to bstitute a new and more commodious station occupying e large site below the roadway. The area of the new booking ll will be 3,575 sq. ft., and from this hall escalators with a pacity of 10,000 passengers per hour will be installed in ace of the existing lifts. Entrance to the new station will be fected by a subway from the site of the present station, and is expected that the whole of the work will be completed rly next year.

City Street Improvements.

Two important City street improvements are to be recom- ended to the Corporation of the City of London by its provements and Finance Committee. One of these concerns scheme for the widening of Houndsditch to 50 ft. from its nction with Bishopsgate to Phil's Buildings, and from 45 ft. om thence to Cutler Street. The improvement on the rthern side of the thoroughfare will cost £192,460, and it is ggested that the London County Council be asked to con- bute half this sum. In 1919 the Corporation adopted a eme for the widening of Old Broad Street on the south-east le between Palmerston House and Adam's Court to 43 ft. e Committee now recommend the widening of the thorough- e in front of Nos. 23 to 27 (Gresham House), towards which London County Council has agreed to contribute half the t cost, not exceeding £15,322.

Ancient City Churches.

In opposition to the Union of Benefices and Disposal of urches (Metropolis) Measure, which, if passed, will legalize sale of a number of ancient churches of the City, signatures a petition to the members of the National Assembly of the urch of England are being collected by the City Churches servation Society. Nothing, the Society urges, could be re untrue than that the churches are no longer able to fulfil purposes for which they were built. With regard to the in reason given for the proposed sales, namely, the need of ney for building suburban churches, the Society points out t by the sale of nine churches in the City £228,328 was lized, but not 50 per cent. of the proceeds reached the poorer tricts, and the churches built there are in many cases far se attended than the great majority of City churches. "What right have we to destroy these landmarks of history?" the National Assembly is asked. "Posterity would cry 'shame' on us. The piety of the past has entrusted these churches to our trusteeship. They are not ours to destroy." The hon. secretary of the Society is Mr. Alfred Moore, C.C., 7 Leadenhall Street, E.C.

Dundrum Castle.

Mr. Jas. J. Phillips, of Dhu Varren, writing in the "Belfast Newsletter," gives an exhaustive architectural and historical description of the mediæval keep and fortress which forms a corona to the "high up" rocky path at Dundrum, in the County Down. He recalls "that this grey old ruin, in a peculiar way, illustrates one of the transition stages in the development of military architecture of the period when Richard Cœur de Lion 'did his bit' in Normandy against the King of France. . . . He built a castle of a new type (a circular donjon) near Rouen, the Chateau Gaillard which John de Courcy on a bijou scale and in an Irish way imitated at Dundrum. Alas," he says, "the tooth of time has been growing at the storm-beaten 'castel,' and some details of stonework were missing which could have been preserved by a little cement properly gauged and carefully applied under skilful treatment. But," he says, "let us be thankful for small mercies, and rejoice that the late Dublin Board of Works have not built here a couple of flying buttresses against de Courcy's donjon, such as it reared, with more zeal than science, against Lady de Courcy's lovely Abbey Church at Greyabbey in the Ards."

The Wonders of Babylon.

Sir Banister Fletcher, F.R.I.B.A., in a lecture at the Central School of Arts and Crafts, on Babylonian, Assyrian, and Persian architecture, said that the architecture of Mesopotamia differed much from the Egyptian in character, for it was vaulted and not trabeated, as was inevitable in an alluvial country which supplied clay for the making of bricks to be used in vaults, but no stone for flat beams. In Assyria, too, there were neither tombs nor temples, but chiefly kings' palaces, whereas among the temples and tombs of Egypt we might well ask, "Where did the Pharaohs live?" This, however, did not apply to the Babylonian period, which began at some remote time in the dim dawn of the world, and lasted till, say, 1275 B.C. This was the temple-building epoch, when every city of the Chaldeans had its "ziggurat," or "holy mountain," a pyramidal observatory-tower with a richly decorated temple chamber on the summit from which the astrologer-priest could study the heavenly bodies. The temple at Nimroud was erected in seven receding terraces, each dedicated to a planet and decorated symbolically in glazed bricks of a different colour. Recent German excavations at Babylon had discovered ground plans, marked out by asphalte, of the Temple of Baal, and of numberless other towers, none of which, however, corresponded to the popular pictures of the Tower of Babel. The attempts to build a tower which should "reach to heaven" were very simply explained by the desire of the Babylonians to break the monotony of their flat and dreary country. The excavators also discovered signs of irrigation, suggesting the site of the hanging gardens of Nebuchadnezzar.

The Lighting of Buildings.

The second of the series of public lectures at the Northern Polytechnic Institute was given by Mr. Lawrence Tye on "The Lighting of Buildings." The lecturer indicated the principal points which must receive consideration in designing a modern lighting scheme, and referred to the various sources of lighting which were valuable for country house lighting, such as acetylene, petrol air-gas, paraffin superheated lamps, and electrical plant, as well as electricity and gas from public mains. Reference was also made to the scientific principles underlying sound lighting and to some of the laws which govern illumination. Diagrams were thrown upon the screen indicating the direction of light rays from various types of fittings, and the value of opalescent, prismatic and other reflecting surfaces. The diagrams and photographs illustrating these fittings showed that to a large extent the direction of light could be controlled with exactitude and that with proper knowledge the fittings could be adjusted to any required height or system of light distribution. The lecture was illustrated by a large number of lantern slides and an exhibition of lighting fittings, photometers, lumeters, and other equipment. An interesting discussion followed, in which the principal speakers were Mr. William Woodward, F.R.I.B.A., F.S.I., and Mr. Keith Braden. A vote of thanks to Mr. Tye was put by Mr. T. P. Bennett, F.R.I.B.A., Hon. F.I.O.B.

(*Continued on page* 708.)

The Week's News—*continued.*

The South Wales Institute of Architects.

We have received a copy of the "Proceedings and Transactions, for 1923–24," of the South Wales Institute of Architects—one of the most energetic of the allied societies of the R.I.B.A. It contains a frontispiece portrait of Mr. Percy Thomas, O.B.E., F.R.I.B.A., the President, and forms an extremely interesting record of the work of the Institute during the past year. There is also much information of general use, such as the Register of Past-Presidents, Past Honorary Secretaries, Honorary Members, Fellows, Associates, and Students of the Institute, suggestions governing professional conduct and practice of architects, and the scale of professional charges. The area covered by the Institute is divided into four districts, and each district forms a district branch called the "Central," "Western," "Eastern," and "Northern" branches, with centres at Cardiff, Swansea, Newport, and Pontypridd respectively. The hon. secretary is Mr. Ivor P. Jones, A.R.I.B.A., and the Institute rooms are at No. 6 High Street, Cardiff.

Town Planning in Rome.

Mr. William Haywood, F.R.I.B.A., in delivering his third lecture on town planning at Birmingham University, said that in ancient Rome there was none of that military precision of road plan so usual in her colonial settlements. Rome developed casually, and might be considered the first community of great size—of which the intimate details were well known to us and which could be compared with modern cities of casual growth. Like all such towns, Rome, in her maturity, was forced to struggle with many accumulated evils, and it could not be said that she achieved much convenience of arrangement in her traffic problem at any time. Yet, had the site of the city been reasonably level, or even hilly in a different sort of way, it was probable that far more would have been done towards effectively opening up the town plan than was actually attempted.

From the close of the Punic Wars in 146 B.C., the city extended rapidly beyond the walls of Servius Tullius; ill-built and unpaved streets were converted into substantial lava-paved causeways, and the city began to take on a better appearance. During the Empire, the construction of great Imperial fora brought spaciousness into the heart of the city, and by the clearances and levelling which these immense works necessitated, opened a much needed connection between the old town and the Campus Martius. After the great fire in A.D. 63, Nero compelled private owners to build more substantially and on wider streets; houses were planned on almost modern lines, including great blocks of flats, and tenements of excessive height, which were limited by Augustus to not more than 70 ft.; by Trajan to 60 ft.; and by Nero to a height equal to twice the road width.

The Roman house differed from that of Pompeii. Whereas the latter developed horizontally, was lighted by internal courts, and had but one opening to the street, i.e., the entrance, the ordinary Roman house and tenement developed vertically, was lighted from the outside walls, and had three or four floors of similar plan. These differences were due partly to land speculation in the overgrown capital city, and partly to a difference of latitude and tradition.

Private Builders and Housing Subsidy.

Mr. A. J. Bennett, M.P., has written to Sir William Joynson-Hicks, the Minister for Health, asking for a closer definition of the statement made by the Minister in an earlier letter that he would endeavour to consider favourably, for the purposes of a grant of housing subsidy, the cases of private builders to whom an assurance was given by the local authority that they would be entitled to it, or that their particular cases would be put forward as deserving recipients. Mr. Bennett urged that any small house conforming to the official conditions and built since the Government appeal should automatically receive the subsidy. In his reply Sir William Joynson-Hicks says that he does not think it possible to lay down in set terms what constitutes an assurance by the local authority, though he is clear that it must be something more than the mere ordinary approval of the plans under the by-laws. Further, he must be satisfied that the builder proceeded on the faith of the assurance given to him, and could not have done so but for that assurance. It did not necessarily follow that every house which fell within the prescribed maximum size was a proper subject for a grant from public funds.

Mr. A. J. Bennett, M.P., has now received a further letter from Sir William Joynson Hicks, M.P., the Minister for Health, on the attitude of the department with respect to the grant of the subsidy to those builders who commenced operations prior to the passing of the Act. "In my letter of October 8," says the Minister, "I think I went as far as I can to meet the case of those builders who, although they had commenced building on the faith of an assurance from the local authority that they would receive assistance, were not strictly entitled to subsidy because the local authority did not obtain prior approval to their scheme of assistance. I do not think it possible to lay down in set terms what constitutes an assurance by the local authority, though I am clear that it must be something more than the mere ordinary approval of the plans under the by-laws. Further, I must be satisfied that the builder proceeded on the faith of the assurance given to him and could not have done so but for that assurance. I am prepared to have full consideration given to any cases on their merits, and I would suggest, if you have any special cases of difficulty in mind, that the local authority concerned should send full particulars to the department for consideration. It is, of course, possible, though very unlikely, that a local authority's scheme for giving assistance under the Act may relate to only one house."

Trade and Craft

The Grand Stand at Blackheath.

With regard to the article on the grand stand, Rectory Field, Blackheath, published in our issue for October 17, the Self-Sentering Expanded Metal Works, Ltd., of London, state that for the parapet panels and curtain walls their product "Trussit" was used. It is a corrugated expanded metal, and is, therefore, very readily and easily plastered. In addition, the reinforcement is equally distributed on both sides of the panel wall.

New Inventions

Latest Patent Applications.

25976.—Hanvey, A. G.—Construction of walls, ceilings, &c. October 18.

25855.—Dicker, S. G. S., Baude Frères et Cie.—Means for securing roof tiles, &c. October 16.

26245.—Boot, C.—Buildings. October 20.

25638.—Cuming, A. J. Roach.—Construction of houses, &c. October 15.

26175.—England, J. C.—Means for securing tiles, &c. October 20.

25957.—Frewen, E. J.—Beams for flooring or arches, &c. October 17.

25844.—Knight, R. E.—Metal reinforcements for concrete structures. October 16.

26103, 26104.—McCaughan, W.—Construction of walls. October 19.

Specifications Published.

205019.—Krauter, K. F.—Building of floors and the like.

205023.—Southern, J. H., and Rider, J.—Metal reinforcements for concrete.

205031.—Palanti, M.—Blocks for building and general construction purposes.

Abstract Published.

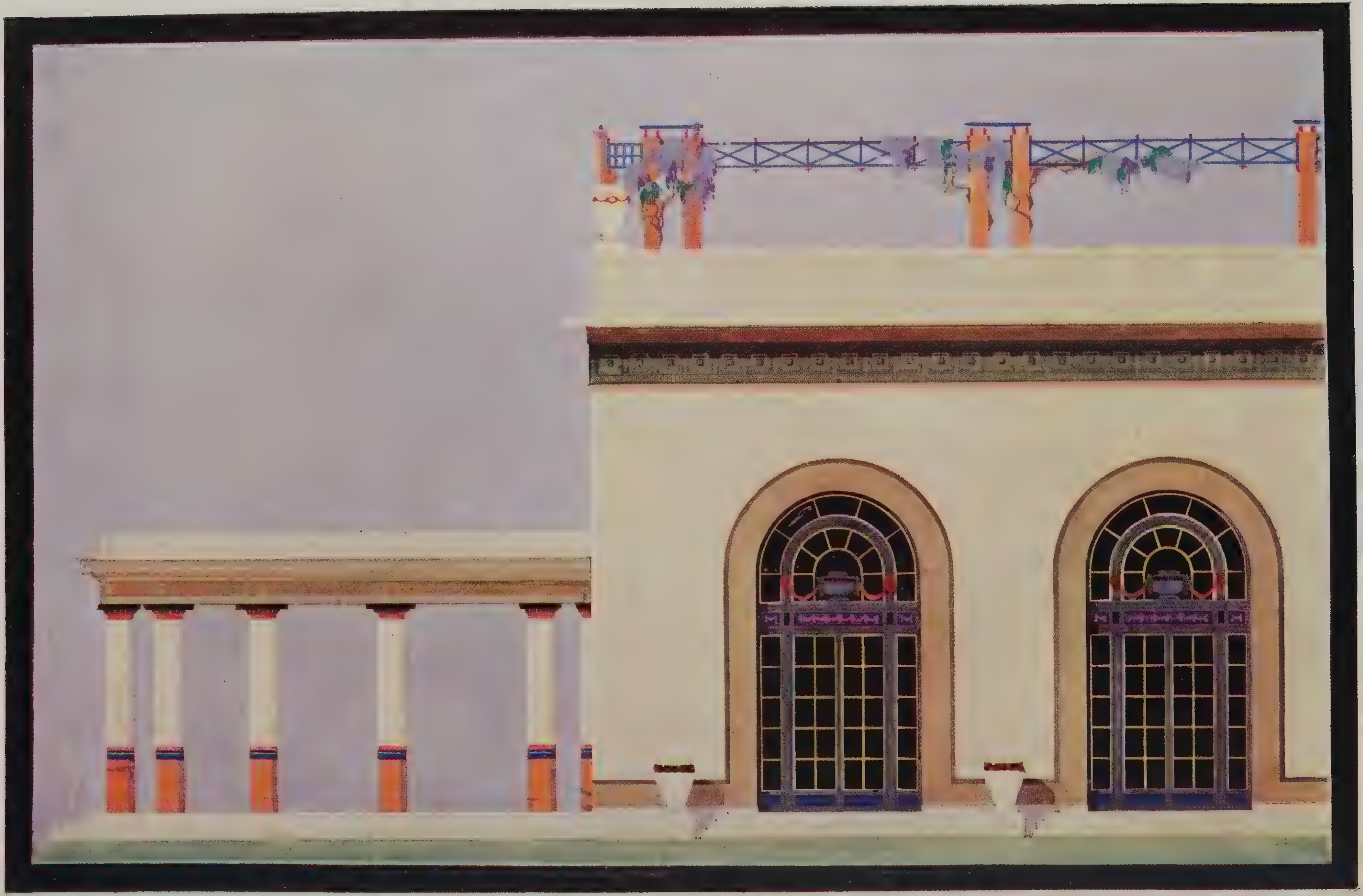
203088.—Moulding walls in situ.—Kirton, R. G., 32 St. George's Terrace, Perth, Western Australia.—Shutters, for use in moulding buildings in situ, and of the type adapted to be raised course after course, are provided by runways on spaced uprights and are separated from these runways during the moulding operation by wedges or blocks, which are then removed to allow the shutters to swing clear of the cast wall. The shutters are raised by drums having dividing flanges and two cables passing in opposite directions over guide pulleys loosely mounted on cross shafts.

The above particulars are specially prepared by Messrs. Rayner & Co., registered patent agents, of 5 Chancery Lane, London, W.C. 2, from whom readers of the JOURNAL may obtain all information free relating to patents, trade marks, and designs. Messrs. Rayner & Co. will obtain printed copies of the published specifications and abstract only, and forward on post free for the price of 1/6 each.

THE LIBRARY
OF THE
UNIVERSITY OF ILLINOIS

Colour Work of the Architectural Association School of Architecture

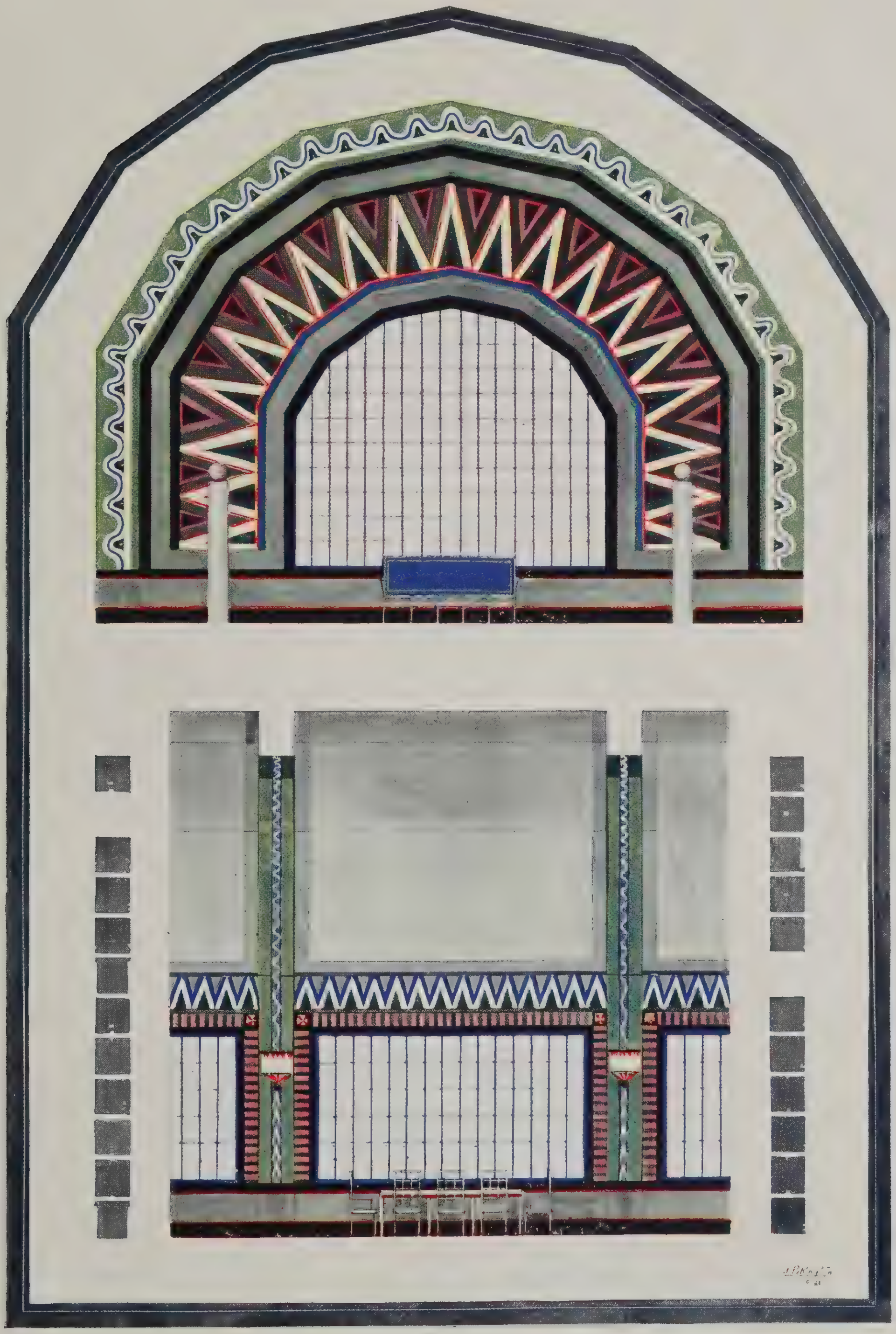
(Fourth and Fifth Year Decoration Course).



DESIGN FOR EXTERIOR TREATMENT OF SEASIDE RESTAURANT.

BY D. PETROVITCH.

Colour Work of the Architectural Association School of Architecture
(Fourth and Fifth Year Decoration Course).



DESIGN FOR INTERIOR OF CAFÉ CONCERT.
BY THE HON. H. PAKINGTON.

THE LIBRARY
OF THE
UNIVERSITY OF ILLINOIS

dnesday, November 14, 1923.

Vol. LVIII. No. 1506

THE ARCHITECTS' JOURNAL & Architectural Engineer

With which is incorporated "The Builders' Journal."

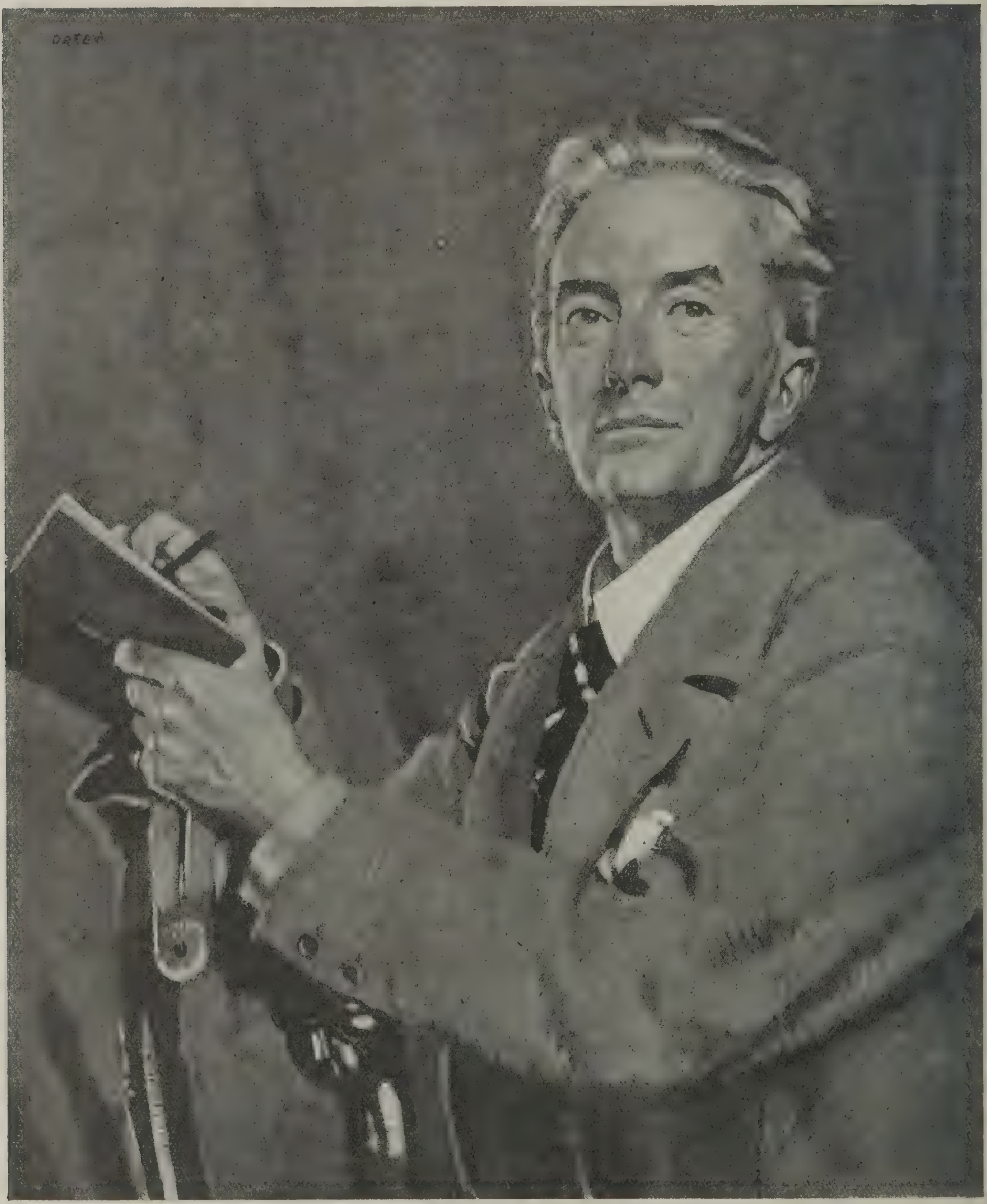
MR. W. CURTIS GREEN, A.R.A., F.R.I.B.A.
Winner of the R.I.B.A. Medal for the best London Street Frontage of the year.

27-29 Tothill Street, Westminster, S.W.1.

c

The Presentation Portrait of Mr. Paul Waterhouse

Painted by Sir William Orpen, R.A.



The above Portrait of Mr. Paul Waterhouse, PP.R.I.B.A., was unveiled last week and presented, in accordance with custom, to the R.I.B.A.

THE

ARCHITECTS' JOURNAL

27-29 Tothill Street, Westminster, S.W.1.

dnesday, November 14, 1923

Volume LVIII. No. 1506

The Revival of the Road

"It is the Road that gives its framework to all economic velopment. It is the Road which is the channel of all ide and, what is more important, of all ideas. In its st humble function it is a necessary guide without which gress from place to place would be a ceaseless experi- nt; it is a sustenance without which organized society uld be impossible; thus . . . the Road moves and con- ls all history."—Hilaire Belloc.

WHEN walking and riding went out of fashion, and steam driving came in, a certain loneliness settled upon the roads over which had once rumbled the heavy wheels of wagon and coach, it seemed likely that from sheer disuse they would ntually become so overgrown that no man would be e to lay his finger upon a modern map and say that from e to here ran the Great North Road or the Icknield Way. n looked to the new "way of iron" as the mode of travel- easily and quickly from point to point, and looked, eed, with such intentness that it seemed they would er again "take to the road." And the road was allowed remain, and kept in but poor repair, only as a sort of nergency exit," which could be used some time if other better ways should fail.

f course, the road for modern requirements had never n given a chance. Macadam did much, but against the wing competition of the big railway companies, it ned that the road could never again take on more than urely local life. The transformation which the railways effected was so rapid that it warped judgment, and it led a revolution in mechanical invention to bring the again into mind. It came in the shape of the internal bustion engine. Where steam-engines were not geared could climb only easy gradients—necessitating an mous outlay upon tunnelling and embanking—the ed motor-car could take gradients which were out of question for railways—it could travel upon the existing s.

en's minds were again turned to the road as to some- g which had perhaps been unfairly neglected. New hods of road construction were tried and adopted, and surprise we found the highways of our forefathers onger in disfavour, but coming again into recognition aving their use. Moreover, new roads were talked of terial roads running straight as a crow-flight between t cities—permanently surfaced, with good foundations, broad enough to take all kinds of traffic, both slow and

One man of imagination—Lord Montagu of Beaulieu rked out the details of such a road running through and from Manchester to London, and which vehicles ing to use would seek at its nearest point and leave at the point nearest to the destination. The advan- of such a road become manifest. Privately owned, d suffer no handicaps of local and general restrictions; the speed and weight of traffic could be practically unlimited, and passengers and goods could be delivered direct from door to door. Though the idea still remains pure theory, and though the political and social obstacles to it are very serious indeed, yet it is one of those things which seem so feasible and sensible that it must before long come into being. Good town planners have always insisted upon the necessity for some such roads, and their importance to the community could not well be over-estimated.

It is a far cry from the days when Daniel Defoe, passing through Sussex, "saw an ancient lady and a lady of very good quality, I assure you, drawn to church in her coach by six oxen; nor was it done in frolick or humour, but from sheer necessity, the way being so stiff and deep that no horses could go in it." Sussex roads had a great and terrible reputation, and, according to Dr. Burton, "the oxen, the swine, the women, and all other animals" of the county became long in the leg from the difficulty of pulling their feet out of the mud. Only the very worst roads of the county are like that now.

It may justly be said that the railways of the country have never been part of the lives of the people, nor even of the towns they serve, in the same sense in which the great roads have. Always they have been something too apart and infernal, with no homeliness and intimacy of character and association, and leaving no opportunity for the expression of individuality in travel. The disfavour with which Ruskin looked upon their invasion into "the quiet valleys" was not wholly without cause. But "on either hand the roads begin, and people walk with zeal therein," and the difference is plain.

A road is something too which has always offered more pleasing opportunities to the reformer. Wherever it runs—from wherever it may start, and wherever it may end—it becomes part of its surroundings. There have rarely been any artistic possibilities about a railway line. But we have a vision of the new roadways being flanked by noble buildings in the cities, and overlooked by pleasant cottages in the villages, and linking up township with township as nothing else but a roadway ever could. The chances it would offer to the clever architect and town planner would be tremendous. At no point should it be allowed to degenerate into a slum. Grand avenues of trees might be planted upon it, and, indeed, its welfare should be watched over as jealously as any of the possessions of our land. "The material rise and decline of a State are better measured by the condition of its communications," says Mr. Belloc, "than by any other criterion. The construction, the trace, and the whole character of the Road change with new social needs and habits, with the facilities of natural science, their rise and decline. But this perpetual change, which affects the Road as it does architecture and every other work of man, is specially marked by certain critical phases—one of which we have now entered."

J.

Notes and Comments

The R.I.B.A. Presidential Address

Mr. Gotch's presidential address to the R.I.B.A. was essentially a literary effort. There was nothing of politics in it beyond a brief reference to the controversy that shook the profession to its foundations during the early months of the present year. If there were any who expected Mr. Gotch to make a statement of policy they were disappointed. The president was wise, we think, in taking a strictly architectural theme for his inaugural discourse, for the occasion is one that has a social rather than a business significance, and anything of a controversial nature is consequently out of place. Politics will doubtless take the centre of the stage in due course; for the moment the subject is off stage, so to speak—presumably in the dressing-room. Critics and admirers both await her entry with expectant interest.

Town-Planning Activity

Town planning is showing a good deal of healthy activity just now, and it would seem that this great modern movement, pregnant with immense possibilities of public benefit, is at last coming into its own. For this gratifying and encouraging state of affairs we have to thank those pioneer enthusiasts who, doggedly and persistently, and in face of much opposition, have preached the doctrine of town planning, up and down the country, in all seasons. Immensely important propaganda work has been done by the various organizations such as the National Housing and Town-Planning Council, the Garden Cities and Town Planning Association, and the Town Planning Institute, by way of conferences, lectures, and exhibitions. Evidence of the success of their work is found in the great projects for new roads throughout the length and breadth of the country, and in the development schemes that have been formulated for many important areas. Town planners are not, however, resting on their laurels. At Olympia, from November 22 to December 1, in connection with the International Commercial Motor Transport and Roads Development Exhibition, organized by the Society of Motor Manufacturers and Traders, an exhibition of town planning by the three organizations mentioned above is to be held. Detail particulars are given elsewhere in this issue. It is very comprehensive in its scope, and is one that will obviously be of great interest and value to architects, town planners, and the general community alike.

Intermediate Stages

The intermediate stages of most things in this life produce an unpleasant reaction on the sensorium. The learning of some musical instrument in a neighbouring house; the acquisition of some new accomplishment; the contemplation of a street in process of reconstruction—all these things (and many others), whether objective or subjective, produce almost exactly the same sense of physical and mental discomfort. The human mind, eye, and ear, in some degree or other, are sensibly affected in their respective spheres by the evidence of incompleteness. To leave the abstract and come to the concrete, let us consider the case of Regent Street. From end to end it is an object lesson in incompleteness. New and old, high and low, alternate with cleared sites and buildings partly erected. The eye can only contemplate it with extreme discomfort. The contrast between the formal rhythm and uniformity of the street as left by the Regency, and the chaotic irregularity which it now exhibits is painful, to say the least. The biggest shock is experienced in the Quadrant. In that wonderful inner curve that for a century has cut the sky with its keen edge there are now two horrible voids. It is as though the strings of the harps were snapped. The frozen music that was the Quadrant is dicord at last. Oh, the pity of it! All that can be hoped is that this intermediate stage will be got through with as much dispatch as possible. Complete twentieth-century, though it may
no match for complete early nineteenth-century, is
finitely preferable to a mixture of both with gaps in betwe

Religious Symbolism

The Vicar of Hook, by his protest against the propo
to erect a broken marble column over the grave of
Hawker, the airman, has aroused a controversy that shou
clear the air of a certain amount of misconception on
subject of religious symbolism. The vicar regards
broken column as a symbol of heathenism, and propo
the substitution of a cross. As a fact, the cross is of equa
heathen origin, having been used by numberless p
Christian religions. A parallel case of unreasoning p
judice is found in the objection that some people have
the Classic style in relation to Christian churches. Th
either forget or do not know that the Gothic architectu
which has their whole-hearted approval itself sprang a
developed from Classic, or, as they would say, pagan forn
Hence it is clear that a Christian may worship with as mu
sincerity in a building that derives from Classic as in
that is or derives from Gothic. The prejudice for Got
is probably explained by the mesmeric power of:—

> Storied windows richly dight
> Shedding a dim religious light.

In other words, sentiment rather than sense rules the ju
ment. Actually one may worship just as effectually
St. Paul's as in Westminster Abbey.

London's Bridge Problem

The proposal to rebuild Lambeth Bridge, which is n
engaging the attention of the London County Council,
one that should be considered, not merely upon its o
individual merits, but in relation to the problem of cro
river communications as a whole. We doubt very mu
whether a new bridge at Lambeth, under existing con
tions, can serve any useful purpose commensurate with
cost involved. If it were to be built, the areas on eit
side would have to be radically remodelled, for at pres
they are hopelessly inadequate for a heavy flow of tra
But would such a flow of traffic result? We doubt
There are no important focal points along this section
the river frontage that are not already more directly ser
by Westminster and Vauxhall bridges. Let us build
bridges where they are wanted. The Charing Cross sche
is surely the one that should receive prior considerat
In this connection we note that Mr. H. V. Lanchester
suggested, as an alternative, the practicability of a
bridge between Waterloo and Blackfriars. Such a bri
is really required. The gap between Waterloo and Bla
friars bridges is far too wide. A new bridge in betw
would serve enormous areas at present unprovided
cross-river communication, and would help materially
relieve the severe pressure on Blackfriars and Wate
bridges.

"Luxury" Building

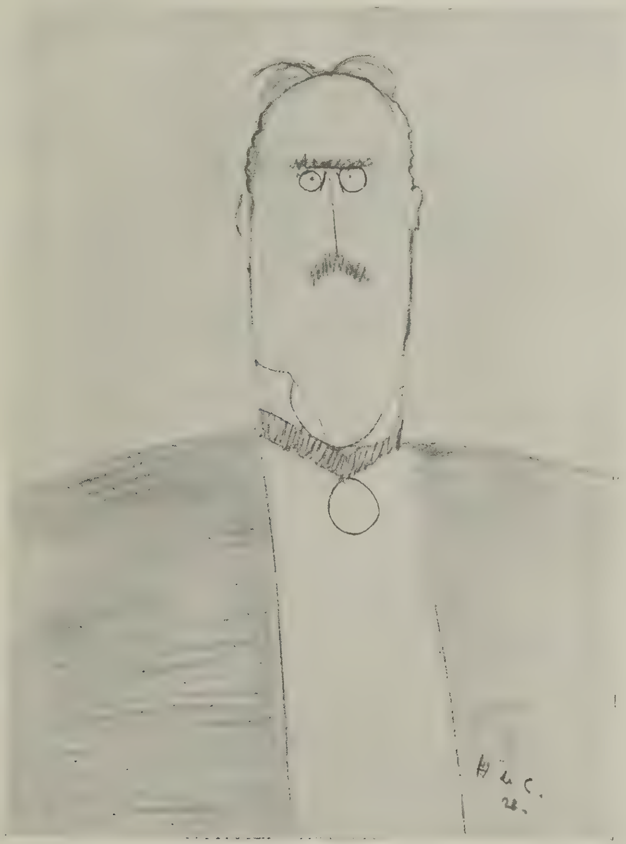
Lately there has been a good deal of controversy in
daily Press on the subject of "luxury" building, wh
it is held, is diverting much skilled labour from house bu
ing. The facts do not fit in with the assumption. In
case of one or two branches of labour there may be s
ground for the charge; but so-called "luxury" build
in addition to employing artisans who might other
conceivably be engaged on housing work, employs g
numbers of skilled craftsmen whose services cannot
utilized in ordinary house building. If "luxury" buil
is stopped, the only possible result must be the creatio
a vast amount of unemployment among skilled work
without the prospect of speeding up the building of work
class houses to any appreciable extent. What is requ
to-day is a great increase in skilled operatives.

"The Best Building of the Year"

Presentation of the Medal to Mr. Curtis Green

AT the opening general meeting of the R.I.B.A., held at the Royal Society of Medicine, No. 1 Wimpole Street, W., on November 5, Mr. J. Alfred Gotch, P.R.I.B.A., F.S.A., delivered his idential address, presented the R.I.B.A. Medal and oma for the best London building completed in 1922 r. W. Curtis Green, A.R.A., for Wolseley House, Picca- , and unveiled the portrait of Mr. Paul Waterhouse, R.I.B.A., which has been painted by Sir William Orpen, . The Council guests of the evening were: Lord ner, Lord Riddell, Sir Ryland Adkins, K.C., M.P., rman, Northants County Council; Mr. H. J. Waring, , B.Sc., F.R.C.S., vice-chancellor, University of lon; Sir W. Hale-White, K.B.E., F.R.C.P., president, l Society of Medicine; Sir Richard Winfrey, M.P.; s. Owen Parker, M.P.; J. C. Squire, president of the tecture Club; E. J. Partridge, president of the Society chitects; W. R. Davies, C.B., Board of Education; ey Smith, chairman of the Kettering Urban District cil; H. G. Gotch, C.A., J.P.; Ernest Hopwood; John , town clerk of Kettering; T. C. Gotch; W. Curtis , A.R.A.; and A. Jacobs, Director of Wolseley rs, Ltd.

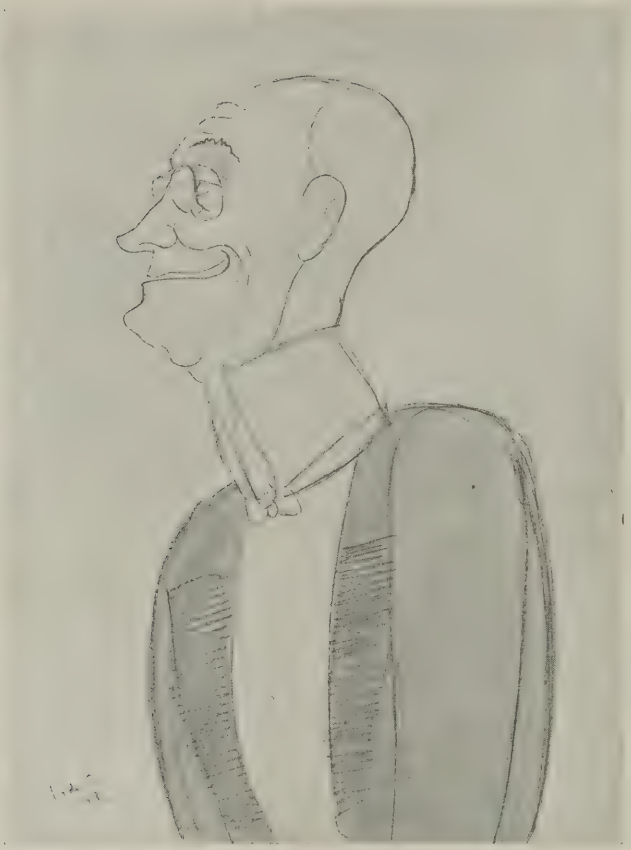
rd Riddell, in moving a vote of thanks to the President s address (extracts from which were published in our sue), said that the selection of Mr. Gotch as president ed an important innovation in the annals of the ute, for he was a provincial architect. London archi- had realized that some of the most eminent members profession lived in the provinces. Mr. Gotch lived thamptonshire, and he expected that all the members profession knew his books. He was one of the most le historians of architecture. The President had ed upon a most interesting point. They all knew that the education of the architect was an important matter, but there was one thing equally necessary, the education of the public. Mr. Squire had been doing a great work in trying to persuade the Press to take an interest in architecture. Architects were reserved, but it lay within the scope of every one to do similar work. The Press required to be moved, and architects did not move it enough. He would like to stress that point. Every architect should be a missionary for good architecture, and should do his utmost to get local papers to take it up. Mr. Gotch in his address had preached the true doctrine of architecture, beauty, and suitability, but he had said nothing of the commercial side. The speaker was much struck with the difference between the working drawings of English and American architects. In America the drawings were prepared in more detail, which was a great advantage.



THE PRESIDENT.
(From a Caricature by H. de C.)

Mr. Sydney Smith, in seconding the vote of thanks, said that probably he had a more intimate acquaintance with Mr. Gotch than any member in the room. In honouring Mr. Gotch by making him their President the members had honoured themselves. He was highly esteemed in his own county, and it was a great thing to say of him that, in addition to being a distinguished architect, he had done his utmost to mould the views of other people through his civic activities.

After the resolution had been put to the meeting the President said he was extremely obliged for the kind way in which the proposer and seconder had referred to him and for the kind way the resolution was received. His next duty was a pleasant and interesting one, to present the medal to the successful competitor in a novel competition, namely, that for the best building erected in London during the past year. This award was a new thing in this country, although it had been in vogue for some time in France and



LORD RIDDELL.
(*From a Caricature by H. de C.*)

America. It was formulated from that chair by the late President, Mr. John W. Simpson, at the instigation of Mr. H. T. Hare. The idea was an excellent one, as it interested both the client and the public, and it helped to improve and ennoble architecture. It also acknowledged the merit of the architect himself. The jury of assessors consisted of the Earl of Crawford and Balcarres, Hon. F.R.I.B.A. (chairman), Sir Aston Webb, P.R.A., Mr. Paul Waterhouse, PP.R.I.B.A., Sir Reginald Blomfield, R.A., PP.R.I.B.A., and Mr. E. Guy Dawber, F.R.I.B.A. The jury had had great difficulty in making the award, but they eventually awarded it for the Wolseley Building to Mr. Curtis Green. He was fully satisfied with the justice of that award, as everyone would be who had seen the building. It showed a great knowledge of materials and colour. The bronze medal had been designed by Mr. Langford Jones. In addition to the medal the winner would receive a diploma signed by the jury of assessors.

Mr. W. Curtis Green, in returning thanks, said he was very fortunate. He thought that every architect was fortunate who had a client who would build within four miles of Charing Cross. He was particularly fortunate in his clients, Messrs. Wolseley Motors, Ltd., who had the foresight, unusual in this country, of seeing that architecture was a commercial asset. He did not think he was revealing any secret when he said they had refused several advantageous offers to part with the building. The fact that as many laymen as architects had spoken of their liking for Wolseley House was encouraging.

The President said that another pleasant duty he had to perform was to add another portrait to the Institute. The occasion was more interesting inasmuch as the portrait of Mr. Waterhouse would join that of his eminent father. All those who watched Mr. Waterhouse's career as president had admired the skill with which he had conducted its proceedings. Part of his presidency was covered with strife during which he showed very great tact and very great fairness. He had brought great culture to the presidential chair.

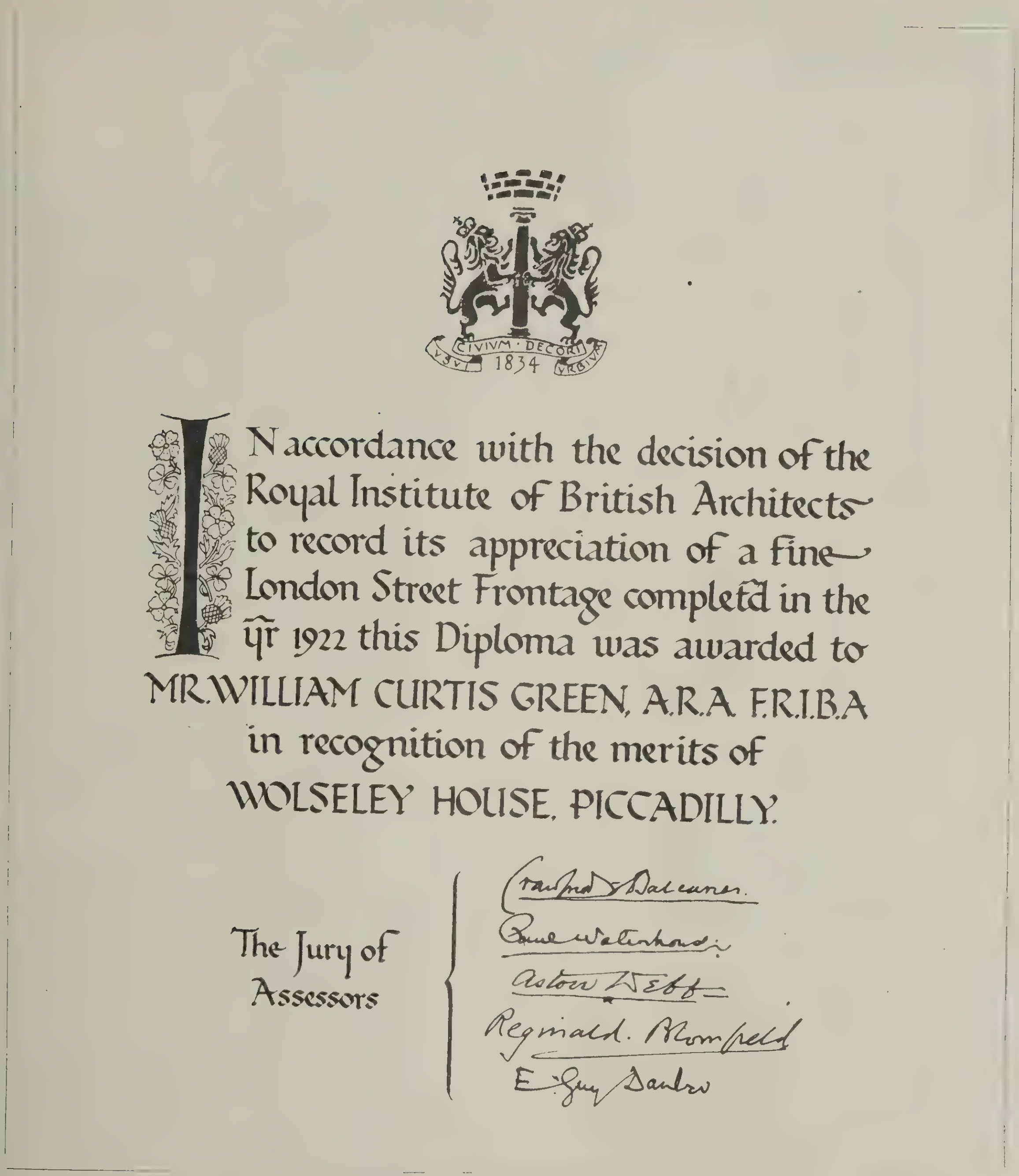
Mr. Paul Waterhouse, in expressing his thanks for the honour they had bestowed upon him, referred to his tinguished predecessors, and mentioned the names Mr. John W. Simpson, Sir Aston Webb, Sir Regin Blomfield, Mr. Thos. E. Colcutt, Mr. Leonard Stokes, William Emerson, the late Mr. Ernest Newton, Sir Ern George, Mr. Francis C. Penrose, and his own dear fath The collection of portraits, he said, was a fine one, included works by many of the most notable painters their period. They already had an Orpen—that of Stokes, which they were coming to regard as one of best in the collection. He had many pleasant recollecti of his sittings to Sir William Orpen, but what would chiefly associated with the portrait in his own mind the number of occasions on which he had had to wear w his family affectionately referred to as father's "B Orpington" suit.

Luncheon in Honour of Mr. Got

A complimentary luncheon to Mr. J. A. Gotch, J. P.R.I.B.A., F.S.A., is to be given to mark the occasion his election as president of the R.I.B.A. Accordingly committee has been formed consisting of : the Right Hono able Lord Lilford, Sir Charles Knightley, Bart., Sir Ryland D. Adkins, D.L., K.C., M.P., Colonel S. G. Stopf Sackville, His Worship the Mayor of Northampton (Char Earl, Esq.), Major Christopher Markham, G. L. T. Bruden Esq., Dr. Leslie W. Dryland, Lieut.-Col. J. W. Fish F.R.I.B.A., Sidney F. Harris, Esq., F.R.I.B.A. (preside of the National Association of Architects), John Pender Esq.

It is proposed that the luncheon be held in Northampt on Saturday, November 24 next, when it is hoped that Marquis of Exeter, Lord Lieutenant of the County, preside, and that Colonel Stopford Sackville will prop the health of Mr. Gotch. The committee hope that securing the attendance of an assembly representative the town and county of Northampton, the appreciation the honour conferred upon Mr. Gotch may be suita expressed.

MR. CURTIS GREEN.
(*From a Caricature by H. de C.*)



IN accordance with the decision of the Royal Institute of British Architects to record its appreciation of a fine London Street Frontage complet̄d in the ȳr 1922 this Diploma was awarded to

MR. WILLIAM CURTIS GREEN, A.R.A. F.R.I.B.A

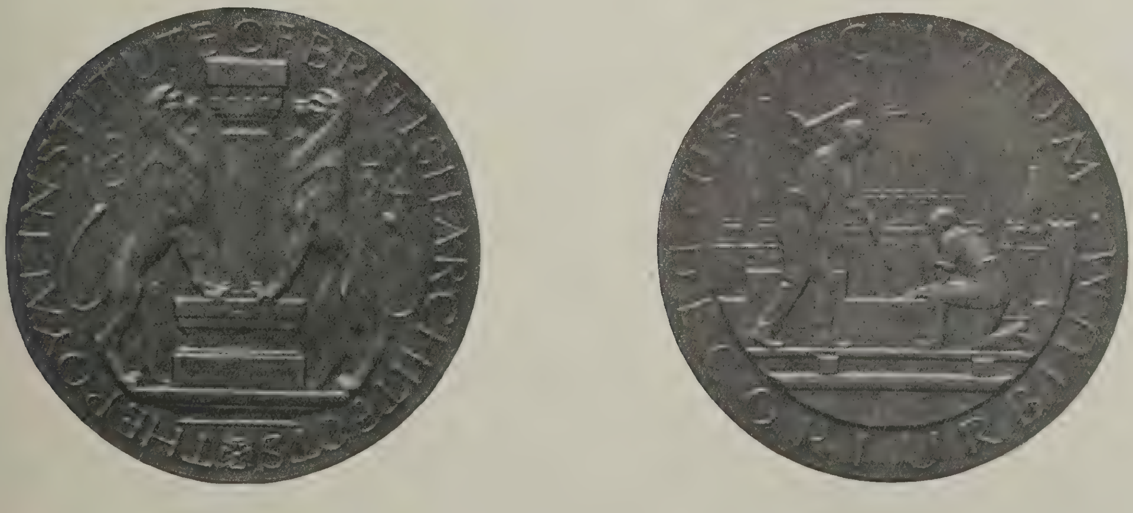
in recognition of the merits of

WOLSELEY HOUSE, PICCADILLY.

The Jury of Assessors

Crawford & Balcarres.
Paul Waterhouse.
Aston Webb
Reginald Blomfield
E. Guy Dawber

THE DIPLOMA.



OBVERSE. REVERSE.

THE R.I.B.A. MEDAL AWARDED TO MR. CURTIS GREEN, A.R.A., FOR THE BEST LONDON STREET FRONTAGE, 1922.

The Caird Hall, Dundee

JAMES THOMSON, F.R.I.B.A., City Architect

THIS week we give some further illustrations of the Caird Hall and Council Chamber, Dundee. The building is a gift to the citizens by the late Sir James K. Caird, Bart., LL.D., and his sister, Mrs. Emma Grace Marryat. In our issue for October 31 we published a plan of the main floor, illustrations of the south front and the main hall, and a description of the architectural features of the building. This week we give some brief particulars of the structural and other engineering work.

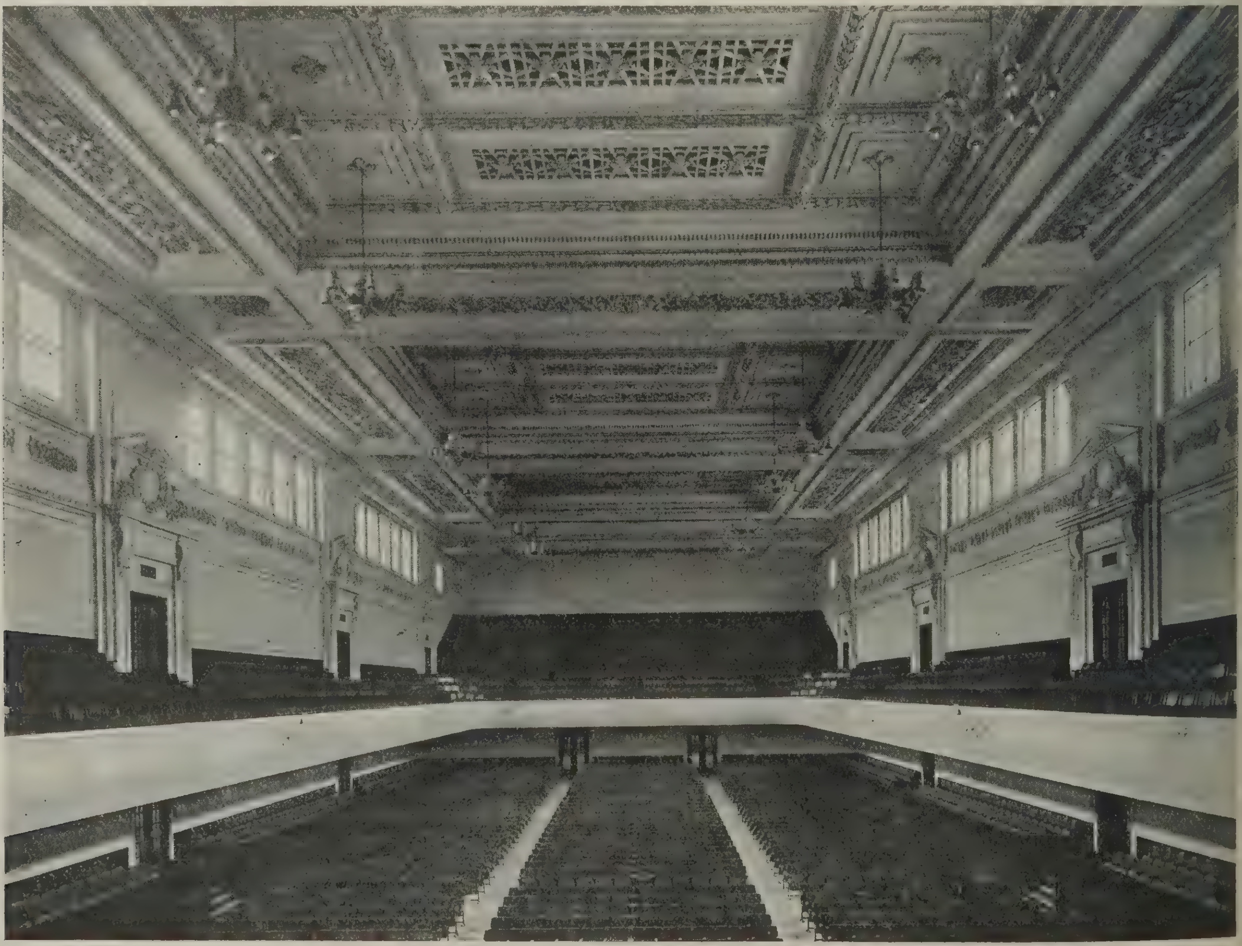
The height and weight of the hall buildings, the unequal nature of the site, and the nearness to sea-level necessitated the use of reinforced concrete piles, and the skeleton of the building, also of reinforced concrete, is carried on these piles. There are sill beams between the heads of the piles carrying the main walls. Many of these piles rest on the walls of the old docks.

The superstructure is carried entirely on a reinforced concrete framework which supports walls, floors, staircases, balcony, gallery, organ chamber, and roof, and this framework has been arranged so that throughout the whole area of the hall there are no columns to obstruct vision. Much of this structural work has been tested up to twice the load it will be required to carry.

The main roof is supported on steel trusses of 84 ft. span, and the disposition of these trusses is reflected in the design of the ceiling and walls of the hall interior. The steel roof was erected by means of cranes on a travelling scaffold, which was wheeled from one end of the hall to the other as the erection of the roof work proceeded. An integral pa of the roof is the metal ventilation duct, 10 ft. wide b 6 ft. high, with outlets to the great openings in the ceilin There are 40,000 rivets in the metalwork of this duc Above the ceiling also are the winches for lowering th electroliers down to the floor level for cleaning. When i position these electroliers hang by chains as well as by steel cable to ensure absolute safety against accident.

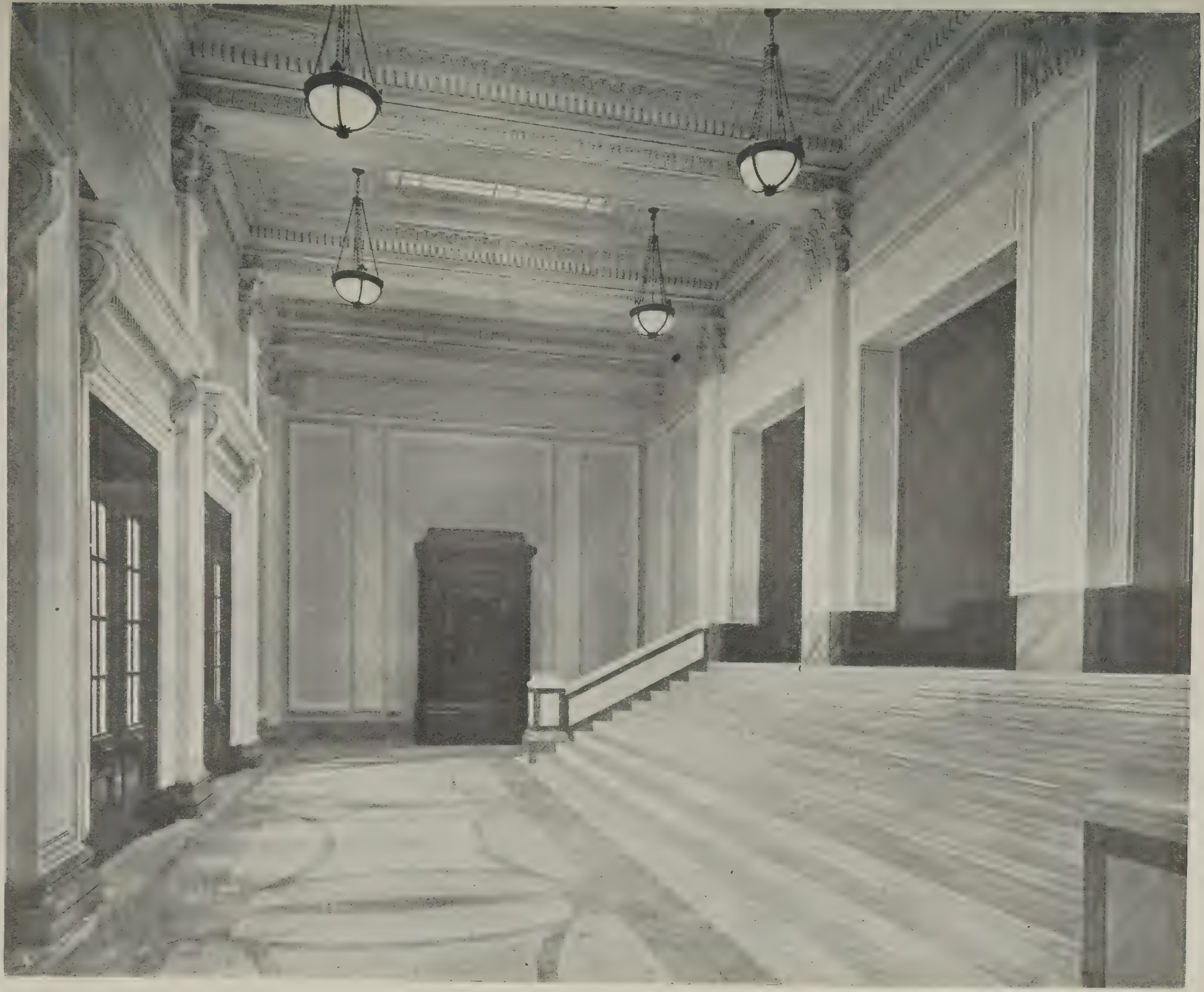
The ventilation and heating of the hall is by the balance "Plenum" system. At the inlet chamber there is a com plete series of air filters and washing apparatus, and th filtered air is driven by a large fan with a 20 horse-powe motor through the heating battery into the duct alread mentioned, and into the hall through the ceiling opening The foul air is extracted through openings in the steps the balcony and gallery, and in the wall under the balcon ceiling. The side walls of the hall are hollow up to the sil of the windows, and thus a maximum area of foul air upcas shaft is gained. A ring duct under the windows collects th foul air, and it passes through the exhaust fan out to th open. The hall is thus heated by the ventilating air. Th Marryat Hall, the corridors, and the retiring rooms ar heated by radiators.

There is a bioscope room at the back of the hall, and th screen, on a roller, lies in a trough under one of the choru seats in front of the organ. Ropes can be lowered from th ceiling and hooked to the batten of the screen, the whol process of raising taking only a few minutes. The screen over 30 ft. wide, and the throw is 220 ft.



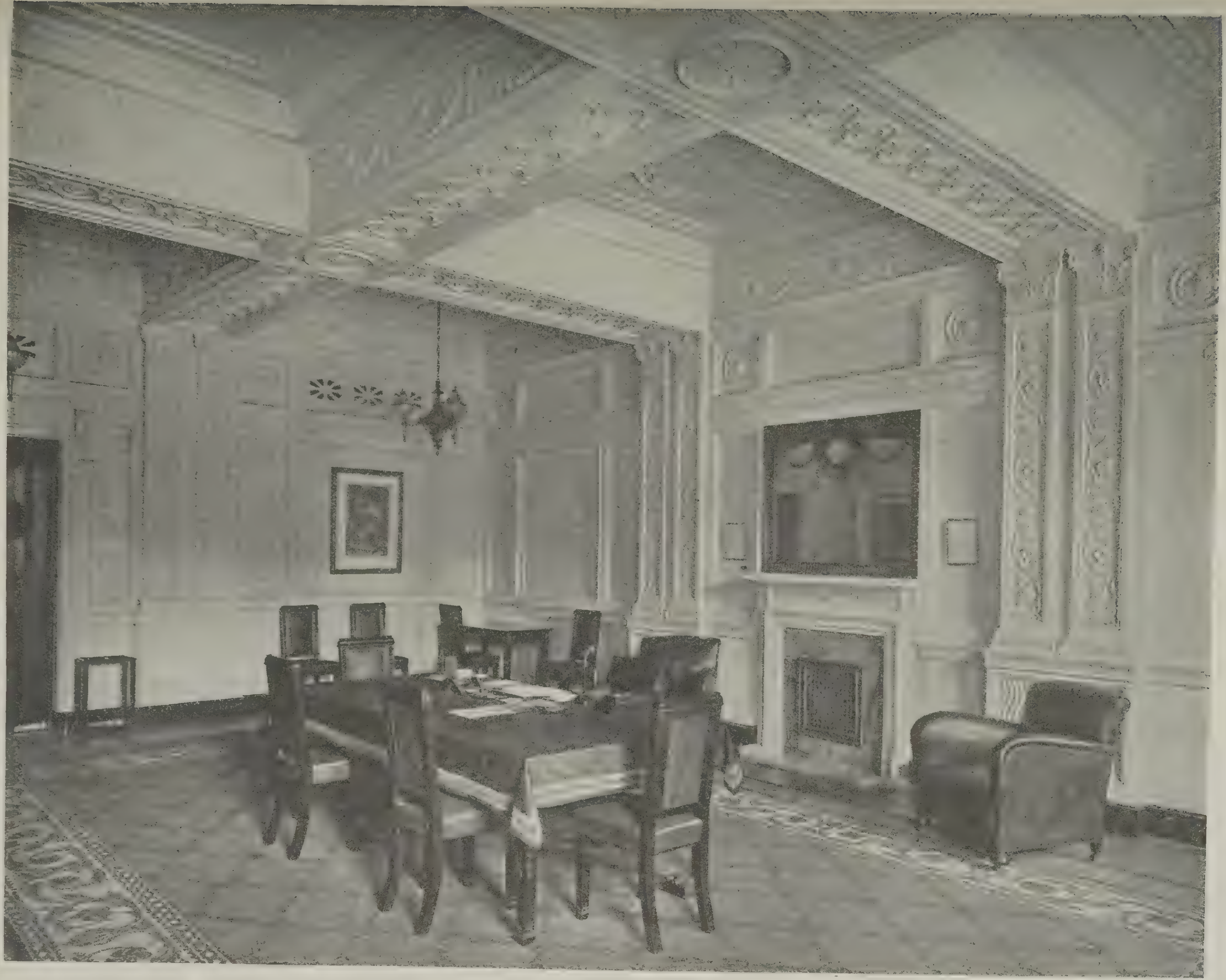
THE INTERIOR, LOOKING WEST

James Thomson, F.R.I.B.A., City Architect

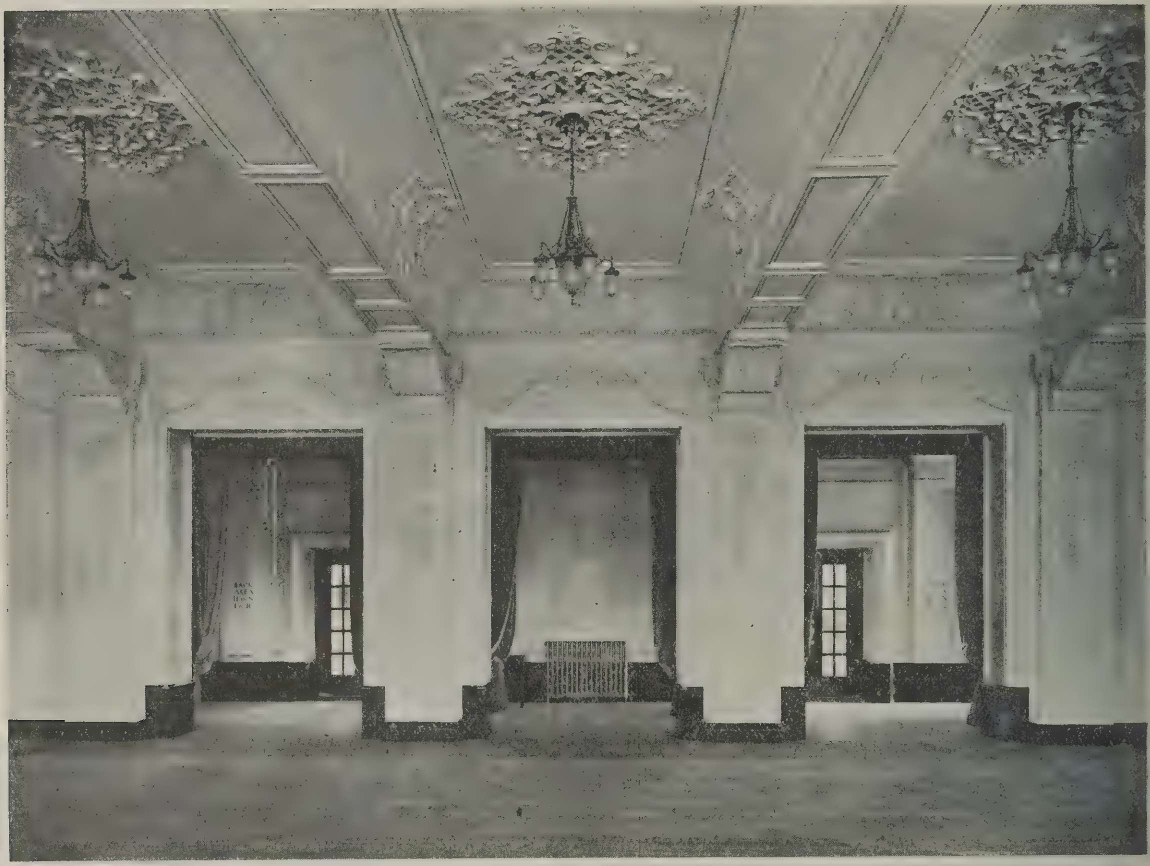


This entrance vestibule is floored with marble and encloses a marble stairway. The ceiling decoration consists of five coffers with fine moulded cornices enriched with modelled work. The capitals to the pilasters are based on one of the best Roman models.

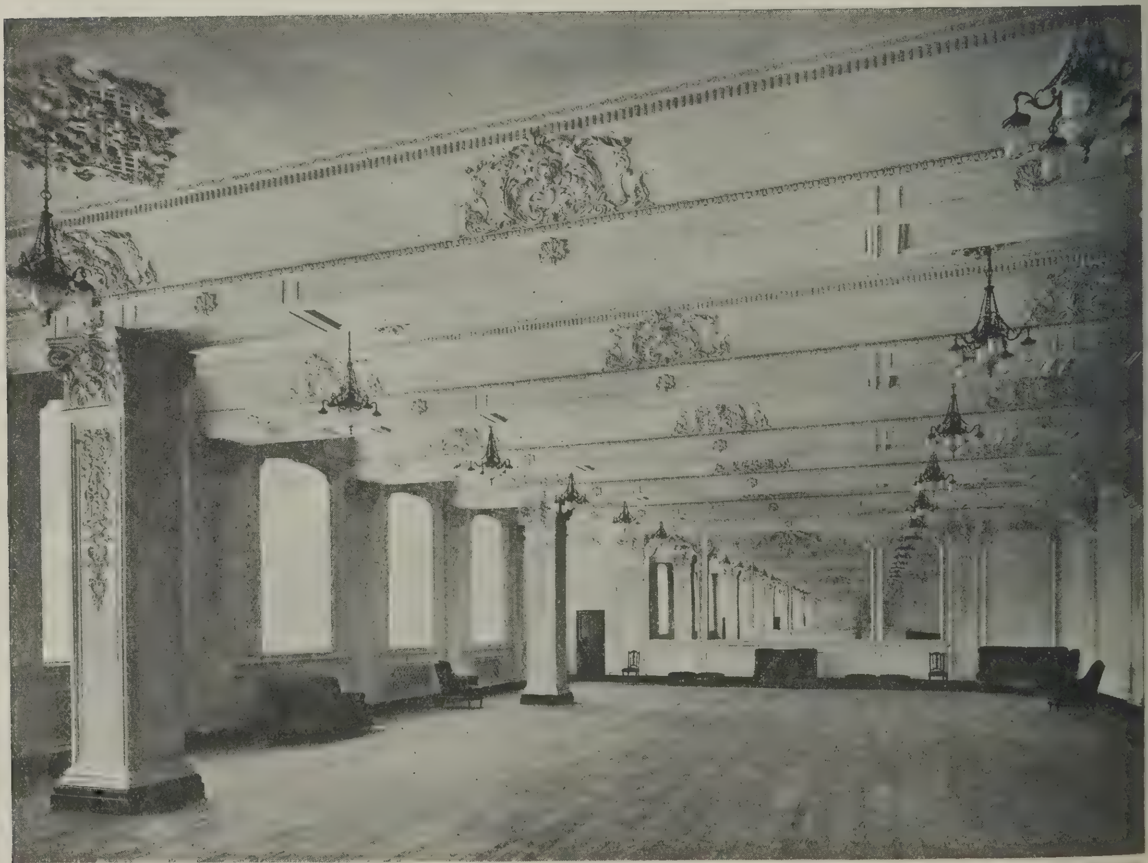
THE LIBRARY
OF THE
UNIVERSITY OF ILLINOIS



THE CAIRD HALL, DUNDEE: THE LORD PROVOST'S ROOM.
JAMES THOMSON, F.R.I.B.A., CITY ARCHITECT.



THE CURTAINED DOORWAYS.

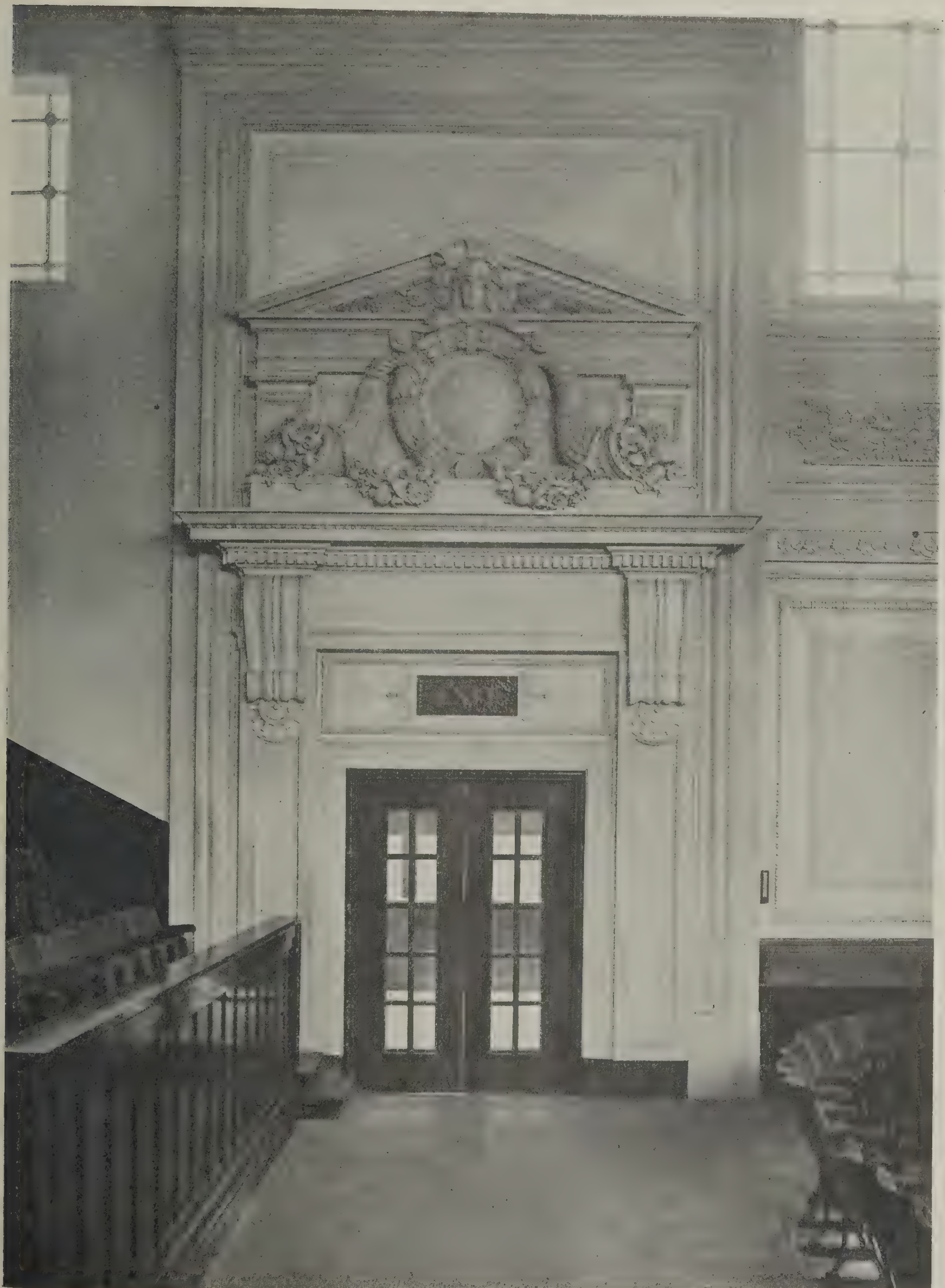


VIEW LOOKING NORTH.

THE CAIRD HALL, DUNDEE : THE MARRYAT HALL.
JAMES THOMSON, F.R.I.B.A., CITY ARCHITECT

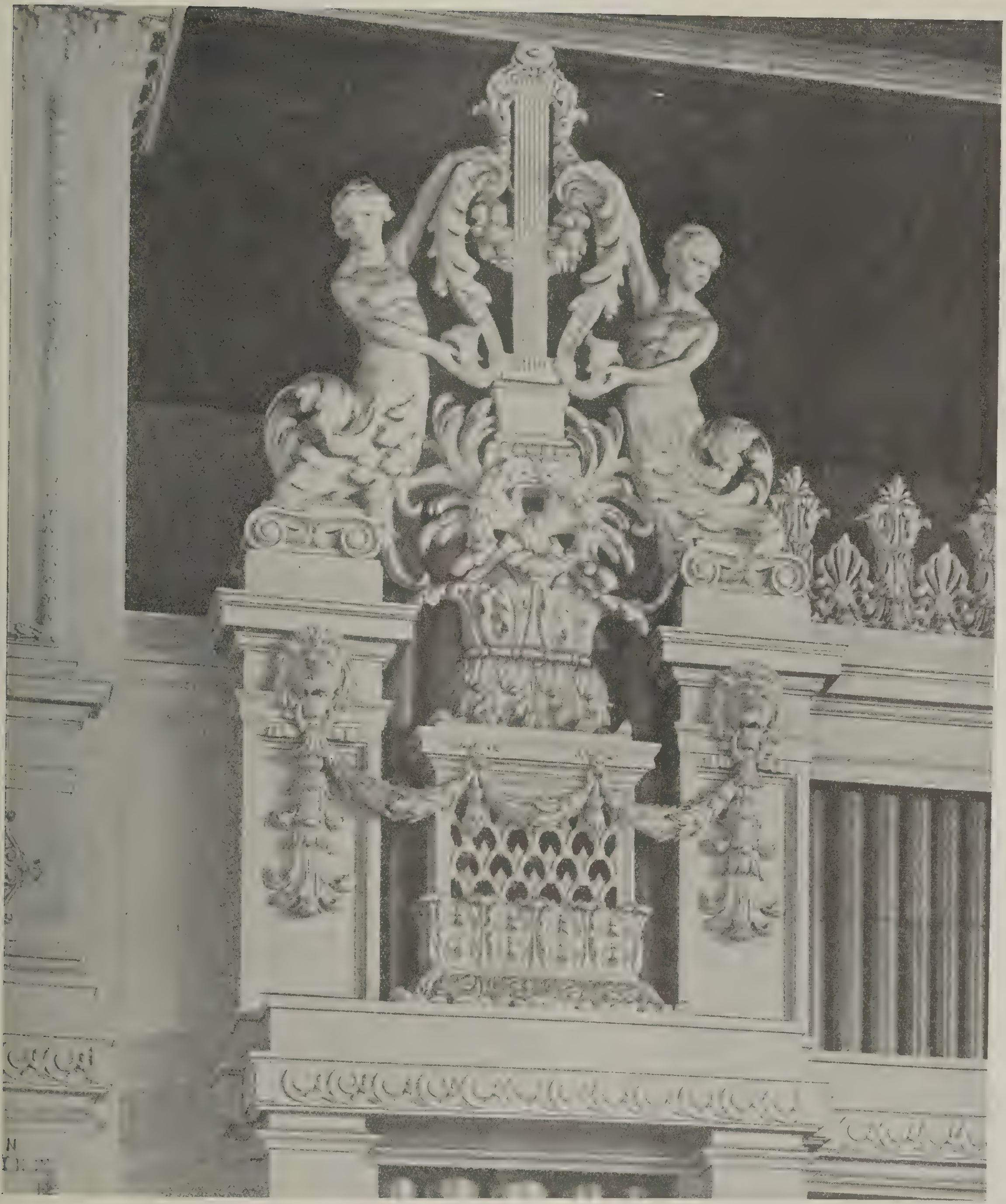
Current Architecture. 211.—The Caird Hall, Dundee: The Balcony Exit

James Thomson, F.R.I.B.A., City Architect



To the hall itself there are sixteen doorways, eight from the lower corridors into the area, and eight from the upper corridors to the balcony and gallery. Two of the doorways on the lower floor are convenient to the platform. The positions of the doorways are accentuated by the enriched panels in the balcony front.

THE LIBRARY
OF THE
UNIVERSITY OF ILLINOIS



THE CAIRD HALL, DUNDEE: A DETAIL OF THE ORGAN.
JAMES THOMSON, F.R.I.B.A., CITY ARCHITECT

The floors in the hall are wood, covered in the passages with cork carpet; the corridor floors are terrazzo with marble insets and Roman mosaic bands; and the main entrance vestibule is floored with marble. The wood finishings of the hall are mahogany, darkened and dull polished, and the window sashes are steel.

Mr. James Thomson, F.R.I.B.A., the architect, was assisted by Mr. Vernon Constable, A.R.I.B.A., who had general charge of the work, including the decoration of the hall; by Mr. James M'Lellan Brown, A.R.I.B.A., who had charge of the council suite and public offices; by Mr. Percy Tomey, engineer for the reinforced concrete work; and by Mr. John Darge, clerk of works.

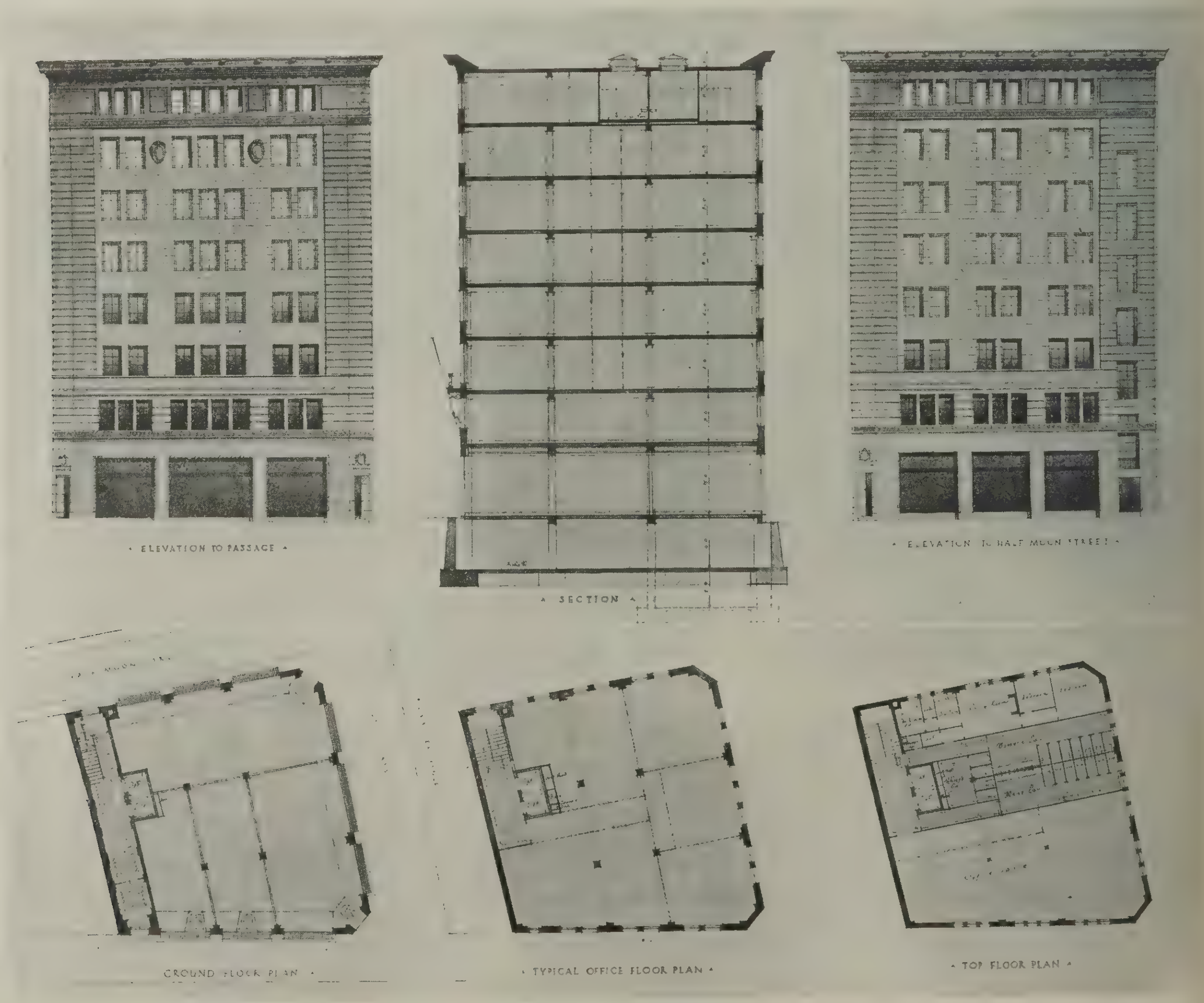
The builders were Messrs. Neil McLeod and Sons, Ltd., of Edinburgh; the joiners, Messrs. Scott Morton and Tynecastle, Ltd., of Edinburgh; and the sub-contractors were follows: The New Bradshaw Asphalt Co., Ltd., Glasgo (asphalt lining work); the Yorkshire Hennebique Constru tion Co., Ltd., Leeds (hennebique concrete construction United States Steel Products Co., Ltd., London (steel wor steel construction, and girders); Geo. Wragge, Ltd., Ma chester (casements and casement fittings); the Pennycoo Patent Glazing Co., Ltd., Glasgow (patent glazing ar fittings); P. Anderson and Sons, Dundee (plumbing ar sanitary work); Toffolo, Jackson & Co., Glasgow (flooring J. Mackersie & Co., Dundee (electric wiring); H. H. Marty & Co., Ltd., Cheltenham (fibrous plaster work); Scott Morto and Tynecastle Co., Ltd., Edinburgh (special woodwork James Combe & Son, Ltd., London and Glasgow (heating an ventilating); and Harrison and Harrison, Durham (orgar

The D.I.C. House Competition, Manchester

The Winning Design

THE design of Messrs. J. G. Prestwich and Sons, of Leigh, for the new D.I.C. building to be erected next to the Royal Exchange, Manchester, has been selected by Professor C. H. Reilly, F.R.I.B.A., the assessor, as the best out of the thirteen competitors. He commends the plans of Mr. H. S. Fairhurst, of Manchester, and those jointly designed by Mr. G. H. Willoughby, of Manchester and Blackpool, and Messrs. Rees and Holt, of Liverpool. Unless an unforeseen obstacle arises the work of demolishing the building at present occupying the site will begin very shortly, so that the si should be cleared ready for the new work in the early pa of the new year.

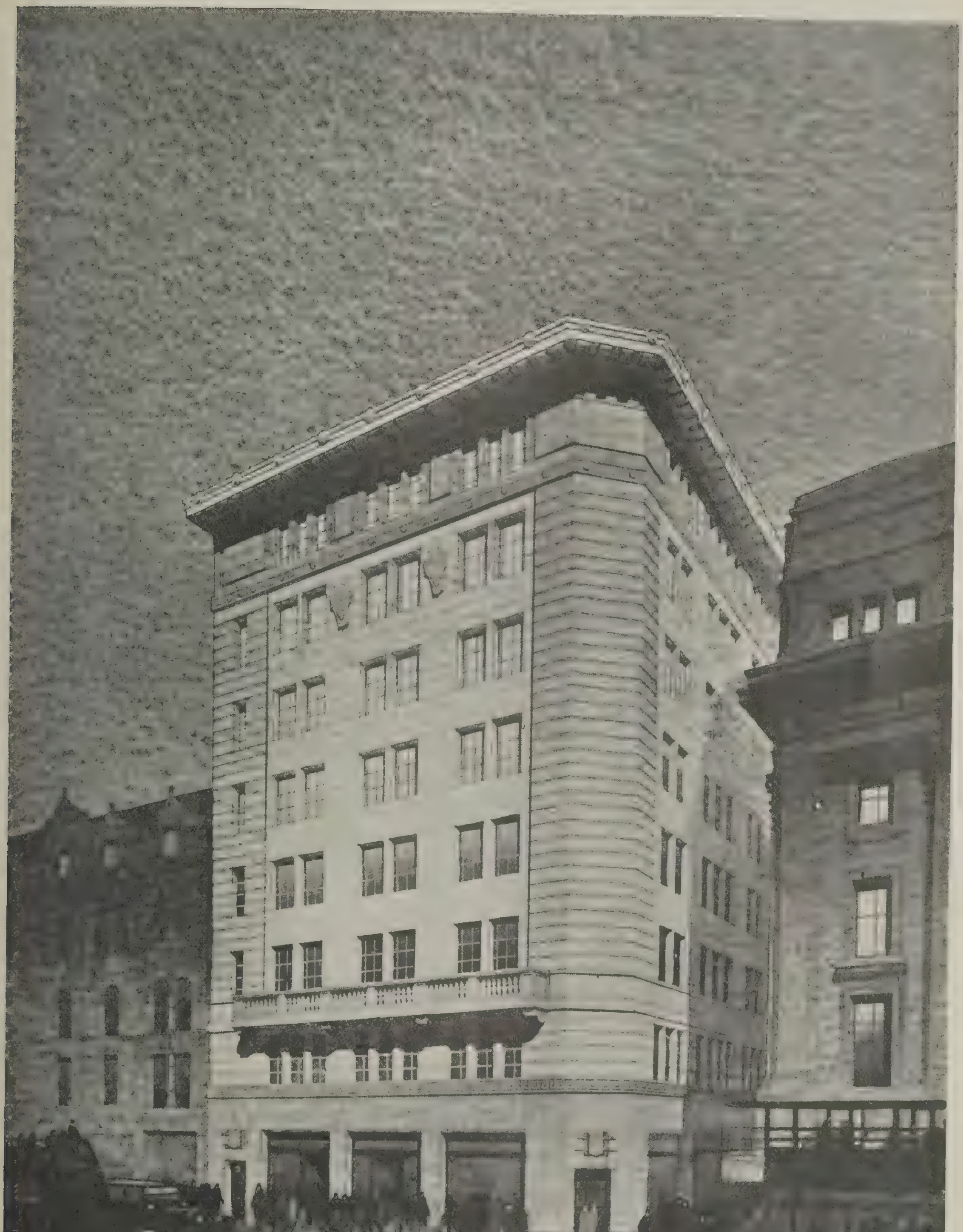
In the conditions the directors of D.I.C. House expresse the desire to obtain a building of the greatest possib dignity consistent with their requirements. For this pu pose they suggested that the building should be designe both externally and internally in as broad and simple manner as possible. It was to contain eight stories and basement, the upper floors to be let for offices. The groun



PLANS AND SECTIONS.

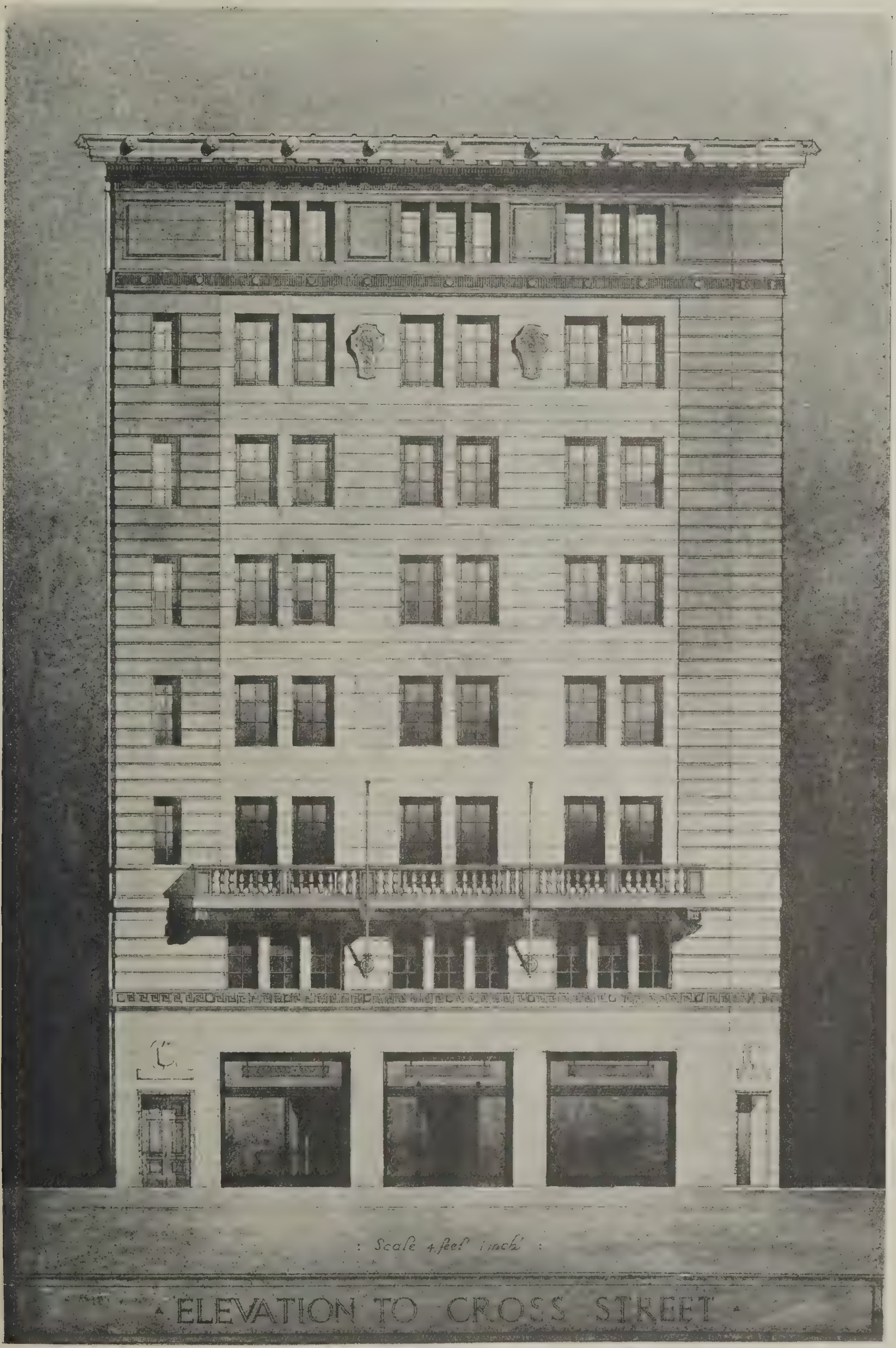
The D.I.C. House Competition, Manchester : The Winning Design

J. G. Prestwich and Sons, Architects



Professor C. H. Reilly, R.I.B.A., the assessor, says the winners have, in his opinion, produced a building which, while answering the requirements of the promoters, will look a strong and impressive structure when erected. The main thing about the design is that the architects have got their effect by spacing and proportion and not by any over-emphasized ornament.

THE LIBRARY
OF THE
UNIVERSITY OF ILLINOIS



THE D.I.C. HOUSE COMPETITION, MANCHESTER: THE CROSS STREET FAÇADE OF THE WINNING DESIGN.
J. G. PRESTWICH AND SONS, ARCHITECTS.

floor was to be for shops, and the office story immediately above was to be made to let with the shops and have separate entrances from them. The cost of the building on estimate was not to exceed, materially, £42,000.

Professor C. H. Reilly, writing in "The Manchester Guardian," says: "The promoters of the building desired a simple, strong structure with a plan sufficiently flexible to allow the floor space on each story to be readily divisible to meet the requirements of tenants. In the winning scheme, Messrs. J. G. Prestwich and Sons, of Leigh, by keeping the stairs, lifts, and public space to the side of the site on which light could not be obtained, though lit from either end, were able to provide a practically unencumbered floor at every level. The height of the building was determined by that of the building at the back for the Manchester Liners.

"The winners have, in my opinion, produced a building which, while answering the above requirements, will look a strong, impressive structure when erected. The building is to be built in Portland stone above a ground floor of gr Cornish granite. This ground floor, with the shop windo near the surface of the granite, is well managed. Althou large areas of glass are obtained for the windows, the fl piers of granite, while sufficiently strong in appearance f the load above, will not compete in interest with goods the shop windows. Indeed, this portion of the design seen to offer a very good solution to the shop-front difficult It is to be hoped that when it is erected the owners w exercise some control over any lettering which may placed on this fine plain granite surface.

"The Italian balcony above the first-floor windows is pleasant feature, echoing the great cornice and marking t transition from shops below to offices above.

"The main thing about the design is that the architec have got their effect by spacing and proportion and not any over-emphasized ornament, as is far too commo Messrs. Prestwich and Sons have been very successful recent competitions, having won, among other things, t Blackpool War Memorial."

Cambridge Collegiate Buildings Competition

A Criticism of the Designs

WE have received the following notes on the above competition from a special correspondent:—

Although it has merits of composition, the winning design, by Messrs. H. Rowse, A.R.I.B.A., and L. B. Budden, M.A., A.R.I.B.A. (illustrated last week), is not free from weaknesses in planning and artistic treatment. With regard to the sets of chambers, the conditions explicitly asked for twenty-two sets. The winners allow twenty only. The extra area so released is devoted to two staircases, almost too adequate and not happily expressed, if we bear in mind the fact that they really face the lawn side, but are lit from Bodley's Quad. It is impossible to hazard their position on the lawn elevation, where their actual position is occupied by a small vertical break. Studying the relationship of plan and elevation it seems clear that throughout the latter are, in essence, "trompe-l'œil," and are solely concerned to maintain dignity and scale against the scale and dignity reached by Gibbs's building, and at no point do they attempt to express the very homely and simple character of the rooms behind.

Another condition, although not laid down so categorically as the first, was that the building should be of three stories, with, perhaps, a fourth in the attic. The winning design discards this solution and gives four stories under the main cornice, which is taken at about the same height as Gibbs's. The wings have the many breaks and the strong main motif to be tolerated in a central building only when, as here, three such are linked together and the variegated ornamental features whose function is seemingly to adorn the façades are somewhat trite, if considered as a traditional echo, and unsatisfactory if considered as a modern sample of decoration. The baths are given ample room; in fact, the very room which most competitors had to devote to the porter who, in this scheme, is lodged on either side of a great central archway. It is hardly in accordance with standards of logical planning that identical rooms, one above the other, should have windows of such different sizes; is there any reason why the undergrad on the ground floor should have windows half the size of his friend above, or why the gyp to one set should be a mere long slit whereas its next-door neighbour boasts of a truly monumental window complete with carved panel?

The design of Mr. H. A. Dod, M.A., A.R.I.B.A., is placed second. The plan is more straightforward, even if the staircase to the wing nearest to the library is made to fa the lawn, whilst the other two face Bodley's Quad. T elevations are simple and reach a degree of dignity witho a pompous display of features. The design of Mr. W. Newton, M.A., A.R.I.B.A., has strength and refinemen and would look well. It is a pity his plan should be marr by oblique cross walls, but the exigencies of the demand f twenty-two sets of chambers being met, something ha to be squeezed in, and here it is at the expense of clea cut planning. Messrs. G. Holt and V. O. Rees, A.R.I.B.A sent in a set of plans and elevations in which a fai reminiscence of Gothic is observable which would blen well with Bodley's building. Their design has the furth merit of expressing with dignity the collegiate charact demanded on such a site. But is the flêche over the libra needed?

The design submitted by Mr. T. S. Tait, A.R.I.B.A., one of the best sent in, and if the planning of one of t staircases is a little groggy—again due to the observance the conditions which asked for twenty-two sets of chambe —the design on the whole is sound and masterly. Mr. Burford, A.R.I.B.A., seems to have tackled the problem a rather lackadaisical way; the planning is cramped, correct, and the elevations fail to convey the proper c legiate feeling, although a good deal of their tameness due to their unfinished state. Mr. N. Adams, A.R.I.B.A made up with many careful drawings what he lost in h uncertain conception of what such a building should b we prefer his elevations to his plans, even though they wou fare indifferently against the unorthodox loveliness Clare, on the one hand, and the majestic substance Gibbs, on the other.

It is a matter for regret that the drawings were n properly exhibited; very rarely has it been our lot to fi only the winning design hung up and all the others heap up on the floor, in a corner of the room. Not the publ alone but those more nearly concerned with the proble involved should be able to judge each design on i merits.

On the opposite page we publish portraits of Mr. Herbe J. Rowse, A.R.I.B.A., and Mr. Lionel B. Budden, M.A A.R.I.B.A., the winners of the competition.

Mr. Herbert J. Rowse was elected an Associate of t R.I.B.A. in 1910, and last month was successful, with M Arnold Thornely, F.R.I.B.A., in winning the limited co petition for a new building to be erected at a cost of ov

MR. HERBERT J. ROWSE, A.R.I.B.A.

MR. LIONEL B. BUDDEN, M.A., A.R.I.B.A.

million pounds at Liverpool for the Ocean Steamship ., Ltd. (Messrs. Alfred Holt & Co.).

Mr. Lionel B. Budden is senior independent lecturer in chitecture at the University of Liverpool. This year was successful in the Birkenhead War Memorial competition, and he has won the following prizes and studentships: Liverpool University Travelling Scholarship in Architecture (1909–10); Holt Travelling Scholarship in Architecture (1909–10); Studentship British School at Athens (1909–10); R.I.B.A. Essay Medallist (1923).

The Origin of London and its Building Laws

MR. W. R. DAVIDGE, F.R.I.B.A., F.S.I., A.M.Inst.C.E., gave a lecture on the "Origin of London and Its Building Laws" at a joint meeting of the Associate members of the titution of Municipal and County Engineers and the chitects' and Surveyors' Assistants' Professional Union, d at the Holborn Council Offices, on Wednesday last. C. A. Austin, architectural assistant under the Holborn rough Council, occupied the chair.

The chairman, in introducing the lecturer, said they all w that Mr. Davidge was a leading authority upon the ject, having been a district surveyor and a head official the late London Housing Board.

The lecturer commenced his subject with the time of Roman occupation. He showed lantern slides of the ds into London at that period, and later showed how se roads are still the main roads to and from London. said that in the Roman times the Forum stood upon the of the present Mansion House; and Sir Christopher en discovered the remains of the Roman temple on the of Bow Church. The plan of Roman London was very metrical, and occupied a very small site north of the sent London Bridge, the main road running parallel h the river. During the Middle Ages London expanded th and west, and slides were shown of the plans at various iods and of the types of buildings then existing. The urer remarked that the old Gothic St. Paul's Cathedral longer and higher than the present building designed Sir Christopher Wren.

n old London, Mr. Davidge said, the riverside was kept free of all buildings, and he showed how gradually this open space was encroached upon, first by little huts, and later by cranes and then by large buildings, the only remaining portion of this old river-frontage being in front of the Customs House. The first Building Act was passed in 1189. It was still the foundation of our building laws and mainly dealt with party walls. Various other Building Acts, which dealt with the height of building in relation to the widths of the roads, had been passed from time to time. The present-day district surveyors claimed to be the official descendants of the "Surveyors and Supervisors appointed in 1667."

London in the Middle Ages, he said, was always built in the Gothic style, the houses increasing in height as the centuries passed along. The first building of Classic design was built on the site of the present Covent Garden. Old plans and engravings showed how in the seventeenth and eighteenth centuries wide roads were laid out terminating in open squares and places, such as St. James's Square and Portland Place. Turning to the present-day overcrowding and traffic difficulties, he showed plans of various proposed schemes, such as that of surrounding the town with a belt of park land, which was proposed years ago. This, he said, showed that the present-day theories of town planning were not new ideas but the reconsideration of old principles. The lecturer concluded his lecture with various diagrams of rates, density of population, etc., in the metropolis to-day.

A vote of thanks to the lecturer was proposed by Mr. C. A. Austin, seconded by Mr. F. S. Akast, and supported by Mr. J. A. Gould and Mr. E. F. Spurrell.

An Exhibition of Members' Holiday Sketches at the A.A.

These sketches are, for the most part, of a purely architectural nature, and as such, they maintain a very high standard. There is a freedom and assurance which is very satisfying, and the exhibitors have been able to keep themselves in hand so that there is no over-assertive look about their work. The exhibition is nothing if not representative. All generations of A.A. students have contributed, and although water-colour is the favourite medium, there are many very good sketches in pen, pencil, and chalks.

The visit to Avignon during the summer provided a vast field of material, and those members who were of the party have not been slow to make use of it. The sketches in this group are some of the most interesting in the exhibition. Although water-colour has chiefly been used, in very few cases has it been used in the traditional manner. The sketches are almost exclusively "rendered drawings," which is rather to be expected in work of an architectural nature, as being the best method of producing the effect desired.

Mr. Maurice Chesterton has a very nice sketch in which the colour is not only well chosen, but is admirably placed. "Siena" by Mr. W. G. Newton, and "A Mosque : Tunis," by Mr. Howard Robertson are both interesting as showing the value of a very light tone with bright colour disposed so as to give life and effect.

Mr. John Grey's work is well worthy of note. His sketches are really a return to the old method, and are very soft in tone. "Rye Town Hall" is the best of an excellent group, and "Rye Harbour" is very striking in its simplicity. The two provide ample proof that Mr. Grey need not confine himself to architectural subjects in order to produce a very pleasing sketch. Mr. F. E. Green is also very fond of the flat wash, which he uses with considerable relish and equal success. "Guildhall Lane, Totnes," and another nameless sketch of some trees, are his two best, and, although they are rather cold, they are excellent examples of this method, and are extremely valuable from the architect's point of view.

"Piccadilly Circus," by Mr. Austin Blomfield, is very attractive, as is "Florence," by Mr. H. A. Pakington. These two may be taken as representative of the "pen-and-wash" group, which is consistently good, and as architectural sketches are very instructive and useful. Mr. C. S. White's "Loggia Lanzi : Florence," is a very nice piece of work executed on grey paper in pencil. It is, however, seen at its worst owing to the bad lighting of the gallery.

There is some very successful work in the photographic section, notably "Greenwich Hospital," by Mr. F. H. Smith. This is a view across the courtyard of the hospital, heavily framed by the silhouette of the columns and cornice close to the camera. "The Palace of the Popes : Avignon" is extraordinarily striking as a composition, and a cynic may be forgiven for wondering where Mr. Yerbury buys his shadow-effects !

The best sketches in the exhibition are the two of "Martigues," by Mr. J. K. Parker, who was one of a party which accompanied Mr. Walter Bayes to the South of France during the holidays. The influence of Mr. Bayes is very marked, and gives to the work an individuality over all the rest of the exhibits. Simplicity is the basis of the schemes, and a desire to produce a *pattern* is evident. Mr. Parker has limited himself both as to tones and to planes. There is no attempt at impressionism in the ordinary sense of the word—each plane is decisively indicated by tone and colour—and there is an entire absence of unnecessary detail. The result is very pleasing, and is a much-needed rest from the usual conventions. These sketches break down the recognized theories about "shadows in varying tones," and give a far more satisfying effect by their complete flatness.

It has been the vogue, particularly among students, to show a hankering after Mr. Walcot's style. This is all very well and may have brought some excellent results, but one may be forgiven if one wonders whether the results of the students were not very largely attained by accident ! Under Mr. Bayes' methods the most amateur draughtsman should be able to make a sketch, knowing *all along* what effect he is going to produce.

The very simplicity of the idea—simplicity of colours, simplicity of tones, and the avoidance of detail—should prove attractive (at least as an experiment), and would certainly be a great asset to the artist who wishes to make a useful sketch.

Certainly, both from the architectural standpoint and as sketches in water-colour, the work of Mr. Bayes' pupils is in a class entirely by itself. M. L. A.

Old Dutch Work in South Africa

The Cape Institute of Architects have sent a portfolio of measured drawings of old Dutch work in South Africa for the inspection of the Board of Architectural Education. The drawings were submitted in competition for the Cape Institute of Architects' Measured Drawings prize. The Board of Architectural Education were impressed with the high standard of the work, and Professor C. H. Reilly, a member of the Board, has written the following appreciation of the drawings :—

"The Cape is fortunate among other parts of the Dominions in having a fine traditional architecture of its own. It is an architecture of great breadth and humanity strong and unaffected, yet showing evidence in the richness of its baroque detail of a hearty appreciation of the good things of life. It is a tradition which should make, and we know does make over there, for comfortable, sane, and happy new work. This being so, the Cape Institute o Architects is to be very heartily congratulated not only in establishing a measured drawings prize to foster it study, but in publishing, in reproductions of a reasonabl size, the best of the work submitted for its prize. May i continue its publication and make it accessible to us ove here until all the good Colonial work has been measured and recorded. In so doing, especially if South African students can produce many sheets of drawings equally good and of subjects equally desirable to those that hav recently been sent to the Institute, they will not only d a great service to their own country, but lay us all unde their debt ; for nothing could be more delightful or stimulating than a whole series of richly-moulded doorways complete with their pilasters and curvilinear fanlights, lik the three or four examples drawn by Mr. F. W. Mullins and Mr. F. N. Glennie. They whet our appetite. Let us hop we shall soon see many more equally interesting and good

"The long building, like some fine range of Georgian stabling, 164 ft. long, the old wine cellar at Groot Constantia, which Mr. Glennie has also measured—is a remarkable building. Only a fine full-blooded race is capable o handling baroque *motifs* without vulgarizing them, and only such a race could conceive so magnificent a wine cellar It is a staid, massive-looking building with pedimente central feature and a single range of small round-arche shuttered windows, but the baroque detail is there in th curved panels of the doors and in a happy plaster compos tion of cherubs, grapes, and wreaths, which fill the centra pediment. If there are more wine cellars like this in th Cape, may we have them too !"

The November "Architectural Review"

The November issue of "The Architectural Review illustrates the residence of Lord and Lady Gerald Wellesle —Sherfield Court, Hampshire—which, purchased in 192 by the trustees of Lady Gerald Wellesley, was converte by Lord Gerald and Mr. Trenwith Wills from farm building into its present character. By the courtesy of the editor the "Review" we give, on the facing page, an illustratio of the house.

erfield Court, Hampshire: The Residence of Lord and Lady Gerald Wellesley

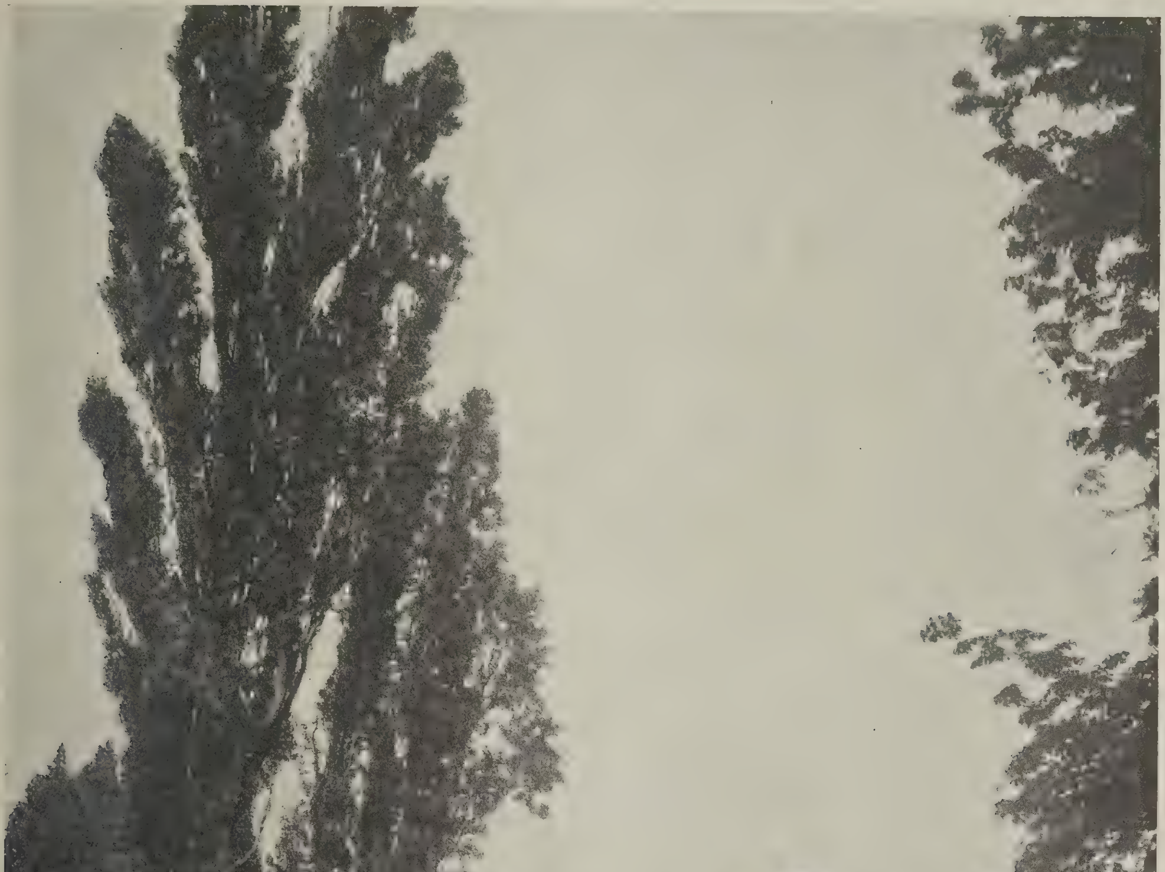


Photo: F. R. Yerbury.

The main part of the front was built about 1700, but the screen wall above the first-floor windows and the porch were added about 1756, while the two side wings were built by Lord Gerald Wellesley himself. The wing on the left contains the Panelled Room and that on the right the servants' quarters.

(From "The Architectural Review.")

THE LIBRARY
OF THE
UNIVERSITY OF ILLINOIS

Book Reviews

Guide for the Architectural Teacher and Student

The reader who expects to find, in any succinct handbook architectural composition, not only a detailed treatise on e elements which are comprised in the design of plan, vation, and section, but also an analysis of the grammar design, is almost inevitably doomed to disappointment. is at once the quality and defect of such works that there rarely an attempt to formulate the guiding principles of stract composition, of proportion, and the handling of m. The danger of attempting to obtain too great finition of rules, which are less the outcome of logic than æsthetic instinct and therefore subject to the infinite varia- ns of individual appreciation and the endless exceptions d deviations which might prove the rule, make it appear part of wisdom to leave the field untouched, or at least orce it from the more detailed study of the successful ndling of those architectural elements, for examples of ich it is possible to cite reputed precedents as chapter and se.

The authors have avoided the pitfalls inherent in any atise on æsthetics, and have produced instead a work ich provides in the English tongue a sort of pocket edition Guadet's celebrated work on the theory of architecture, h the omission, as the limitation of their pages would gest, of the chapters which treat in detail of the special uirements of various categories of buildings. "Architec- al Composition" is a friendly guide to both teacher and dent, packed with sound advice based on acknowledged ts, and lacking only in an attempt to divulge the secret how successfully to blend together the elements which author treats so exhaustively in detail. It is no criticism say that the book is based on the theory of design as ght in the Ecole des Beaux-Arts, for the French teaching theory is admirable. And in addition the authors have ely selected many of their examples from modern work, presented them side by side with classic types. They e drawn freely from French and American plans, and re is at least one German example, but England appears be unrepresented.

ne would have liked to have followed the authors a le farther in their able analysis of the nature of architec- , the subject of the first two chapters, which conclude h a summary of the qualifications necessary for the dent: aptitude, knowledge of architectural master- ces, of building materials, of the primary laws of com- ition, and the ability to draw. For the authors rightly that good draughtsmanship is a valuable aid to good gn.

he bulk of the book consists of a study of the elements building—walls, vaults, the Orders, vestibules, stairs, ulations, and rooms—and explains how these elements be treated in plan and elevation. Some of the chapters hese elements are admirable, and it is interesting to find dern problems, such as the grouping of lifts, explained the accompaniment of useful technical information. examples, apart from the almost total exclusion of hic work, are excellent, and they are presented in ries of attractive sketch illustrations. One only regrets he text a slightly negative view-point, the absence of lance in the use or misuse of certain difficult elements, as, for example, the frequently abused monumental ble staircase. The authors certainly present their ents with clarity, but leave the task of appropriate tion to the reader.

he latter portion of the book will be of great value to hers, particularly those who are insufficiently aware of necessity for well-written architectural programmes. re is here an admirable treatise on the programme, the ch solution, its development, and the presentation of the hed design. The system followed is that recognized e Beaux-Arts and in the American ateliers, and it is ained in full detail supplemented by a bibliography covering the standard architectural works at present most in favour in the schools.

It is curious to note the absence in the English language of certain descriptive terms of architectural technique. We have no real equivalent for "rendu," nor for the excellent word "poché," which is the image on paper, blacked in, of the walls and "points" of a plan. The authors have faced the difficulty honestly, and used the French originals.

The publishers of a book on a technical subject, so well presented as is here the case, must forgive the reviewer for carping at the large number of typographical errors which offend even the casual eye. French words in particular have suffered sadly through mis-spelling, and accents are simply omitted. The writing of Mr. Guadet's name has at least two versions, and Italian and even American proper names are mutilated. But these small blemishes will surely be overlooked in the interest and pleasure with which the book will be absorbed by the architect reader, who knows, better than most men, the difficulty of attaining perfection.

"Architectural Composition," by Nathaniel Cortland and Curtis. J. H. Jansen, Cleveland, Ohio, U.S.A. Price 6 dollars.

Concrete Roads

The great increase in the weight and speed of motor traffic on our highways has made necessary the construction of new roads and the reconstruction of others in all parts of the country. Older methods and materials have in many cases proved unsuitable, and of the new road materials which have been tried concrete is undoubtedly showing itself to be one of the most efficient.

The first edition of "Concrete Roads," published about two years ago, dealt with the first of the roads of this type which had been laid in this country, and described a number of the principal concrete roads in America and the overseas dominions. Since the beginning of 1921, however, great progress has been made in concrete road construction, as will be realized when it is stated that the number of such roads laid in this country alone has increased by 500 per cent. since that date. In view of this enormous increase it is obvious that the concrete road is now being accepted by borough surveyors and others as one of the best types to meet modern conditions, and this book, which gives, in a handy form, particulars of the methods by which nearly all the concrete roads in Great Britain have been laid, should be of great value to those who desire information as to the methods of construction generally adopted.

Among the leading contents of the book are descriptions and illustrations of concrete roads in England, Scotland, Wales, and Ireland, with latest reports regarding condition; weight of traffic; maintenance cost; descriptions of concrete roads in industrial works; list of engineers and contractors who have laid concrete roads; descriptions of concrete roads in Australia, New Zealand, Canada, and America, with latest reports; report of the International Road Congress at Seville, May, 1923; Bates test of concrete and other roads; concrete kerbing and channelling; concrete road accessories, including pavements, fence posts, etc.; data for mixing concrete and choice of aggregates; and a suggested specification for concrete roads which embodies the latest practice in this country and abroad, and which has been prepared by engineers who have had considerable experience of this type of road construction.

"Concrete Roads." Second Edition. Concrete Publications, Ltd., Aldwych, W.C. Price 5s. net.

Publications Received

"Islamic Architecture." By Professor Sattar Kheiri, M.A., Price 3s. 6d. net. John Tiranti & Co., Maple Street, Tottenham Court Road, London.

"The Chemistry of Paints, Pigments, and Varnishes." By J. Gauld Bearn, M.Sc., A.I.C., F.C.S. Price 30s. net. Ernest Benn, Ltd., 8 Bouverie Street, London, E.C.4.

Law Reports

Covenant—Assignment

Russell and others v. *Beecham.*

October 26. Court of Appeal. Before Lords Justices Bankes, Scrutton, and Atkin.

This was an appeal by the plaintiffs against a judgment of Mr. Justice Bailhache, sitting in the King's Bench Division, in favour of the defendant, Sir Thomas Beecham, in which he refused the plaintiffs possession of 36 Bedford Place, Bloomsbury. Plaintiffs claimed possession on the ground of forfeiture for alleged breach of covenant prohibiting assignment.

The facts of the case appear fully in the judgment of the Court, who dismissed the appeal with costs.

Lord Justice Bankes said in his view the case was an important one. The position of Sir Thomas Beecham after the date of the mortgage was that he was allowed to remain in possession as tenant at will. It was said by appellants that the letting by Sir Thomas Beecham to Grice was a parting with possession of the premises which in itself was a breach of the covenant. If the covenant which was said to have been broken contained the words "parting with possession," his lordship said there could be no doubt that this letting by Sir Thomas Beecham to Grice was a parting with possession and a breach of the covenant. But that was not what they had to decide. What they had to decide was whether what Sir Thomas Beecham did was "a parting with the premises or any part thereof." He had been impressed by the contention that upon the true construction of the covenant there had been no breach. It was noticeable that in this particular covenant the word possession was not used. The words of the covenant were: "The lessee shall not during the last ten years of the term assign or part with his lease or the premises hereby demised or any part thereof without licence." It was noticeable that the words "assign or part with" were used in reference to the lease and the premises demised or any part thereof. His lordship thought the decisions came to this, that "assign or part with" this lease did not mean anything other than "parting absolutely with it," and that in substance there was no difference between "assigning" or "parting with" the lease. It was a common form to insert in covenants of this kind a provision that the tenant should not part with possession. Those words were omitted from this covenant. That being so, his lordship thought the Court ought to say that the landlord, not having made it plain beyond question that the intention of the parties was that the mere parting with possession of the premises should mean forfeiture, the tenant was entitled to succeed.

Lords Justices Scrutton and Atkin agreed, commenting upon the ambiguous wording of the covenant.

Building Contract—Alleged Rescision

Henry Boot and Sons (London), Ltd. v. *Uttoxeter U.D.C.*

November 5. King's Bench Division. Before Mr. Justice Bailhache.

This was an action by Henry Boot and Sons (London), Ltd., of Lower Grosvenor Place, London, against the Uttoxeter Urban District Council, arising out of the defendants' housing scheme.

Mr. Barrington Ward, K.C., and Mr. A. Inman appeared for the plaintiffs, and Mr. A. Neilson, K.C., and Mr. Maurice F. Henley, for the defendants.

Mr. Barrington Ward said if his lordship found for the plaintiffs in this action he would not be troubled with the question of damages as the parties in that case had agreed thereon at £5,000.

Proceeding, counsel said the plaintiffs were a large firm of building contractors, and in September, 1920, they were engaged in different parts of the country in erecting local authorities houses under various housing schem sanctioned by the Government. The scheme in questi was at Uttoxeter, and was to provide certain houses for t working classes. In October, 1920, a contract on a print form was entered into between the plaintiffs and the fendants, whereby the plaintiffs agreed to erect 154 hous upon terms contained in the document. The defendar should have had all the land before they started, but as matter of fact they only had a negligible portion of Seventy houses only were built. On January 5, 1922, t defendants purported to give notice to stop the contra when seventy houses had been completed. Counsel's su mission for the plaintiffs was that such notice was a b notice under the contract, that the plaintiffs could ha completed all the houses and have earned their profit.

His lordship: It all seems to me to turn on the validi of the notice.

Mr. Ward said defendants set up as a defence that t work was to be done in sections, and that they could gi notice to stop at any time on the completion of any sectio Counsel's reply for the plaintiffs was that the contract w an entire contract for the erection of 154 houses.

Major Stevenson, for the plaintiffs, said he never agre to rescind the contract.

Mr. John Denton, called for the defence, said he w chairman of the defendant Council, and also chairman the Housing Committee up to March, 1922. The Minist of Health sanctioned the erection of 154 houses, but t Public Loans Board only let them have £75,000, for sevent five houses. That was after the contract was made. Plai tiffs began work slowly, and continued to work slow owing to labour difficulties. Plaintiffs could not deal wi more land than the defendants had at the time, and plai tiffs were not held up for land. Plaintiffs also knew th only £75,000 was available and that the defendants wou not build more houses than that would cover.

Mr. Neilson contended that the contract was rescind before any breach, and that the defendants were therefo excluded from any liability and, further, that in July, 19 it was arranged that no more houses would be built th £75,000 would cover.

Mr. Percival Claud Woodall, late architect and survey to the defendants, and Mr. W. H. Brown, the present arcl tect and surveyor, also gave evidence for the defendants.

His lordship held that the time notice to the plainti by the defendants was not in accordance with the contra and he gave judgment for the plaintiffs with costs.

The Trade Mark "Solignum."

Major and Co., Limited v. Dorset Farmers, Limited.

November 6. Chancery Division Before Mr. Justice Tomlin.

This was an application by the plaintiffs for an injur tion restraining the defendants from (1) infringing t plaintiff company's registered trade mark "Solignum (2) passing off, or enabling others to pass off, goods whi were not of the plaintiff company's manufacture, or me chandise, or not being the plaintiff company's Solignum and for the plaintiff company's Solignum.

Mr. Greene, K.C., and Mr. Trevor Watson appeared f the plaintiffs; and Mr. Hinde for the defendants.

Mr. Greene said that in August, 1923, one Captain Ewa ordered a ten-gallon drum of Solignum from the Wimbor branch of the defendants. A ten-gallon drum was delivere and in the invoice the liquid was described as Solignu Captain Ewart's suspicion was aroused by the appearan of the liquid, and he wrote to the plaintiff company aski them to have the liquid examined. They did so, and th und that it was not Solignum, but consisted mainly of eosote.

The plaintiff company then communicated with the anch of Dorset Farmers, Limited, and received in reply letter saying that on receipt of Captain Ewart's order for lignum they thought that he meant creosote, and that ey supplied it in good faith. It was unnecessary to mment on this. He asked for an injunction.

Mr. Hinde said that the company was prepared to treat the hearing as the trial of the action and submit to a perpetual injunction.

Mr. Greene said that the plaintiffs waived an inquiry as to damages.

Mr. Justice Tomlin said that the injunction would only be in the terms of the second of the two injunctions which had been asked for. The action would be treated as the trial of the action, and the defendant company must pay the plaintiff company's costs.

The Practical Design of Steel Beams and Pillars in Buildings.—3

By W. BASIL SCOTT

I WOULD like you to think of a building in course of erection. Steel pillars are placed on the foundations, and main beams supporting secondary beams are secured to the pillars. Walls, floors, and roof are then mpleted and eventually the building is in use for what- er purpose it was designed.

We are interested in the steel beams and pillars. It may their function to sustain the entire weight of the floors d everything on the floors and, in a building of skeleton nstruction, to support the outer walls and roof in addition resisting wind-pressure.

The questions that we have to reduce to figures are: hat are the values of the loads these steel members have sustain, and how do we know that the beams and pillars designed are capable of sustaining the loads?

Let us see what happens to them in this building in course erection. The first permanent loads they have to sustain those of their own weight, followed by the weights of ch portions of the structure as are supported by them. hese constitute the DEAD LOAD. The application of the ad load is of a gradually increasing nature until the ximum value is reached at which it remains constant.

In addition to the dead load, there is the superimposed or VE LOAD, which consists of all loads other than the dead d. The weights of furniture, people, merchandise and chinery, also wind-pressure, come under the category of perimposed or live load. The nature of the live load is onstant, and it may be applied gradually or suddenly. nd-pressure of varying value may occur at any stage in course of erection.

The superimposed floor loads are not likely to occur until building is completed and occupied, but after occupa- n their value may range from zero to the maximum owed for by the design.

The loading (dead and live) is supported by the secondary ms and transmitted by them to the main beams or it y be supported directly by the main beams. The main ms transmit the loading to the pillars or walls, whence y are transmitted to the foundations.

oads on beams may be: (1) partly live and partly dead; uniformly distributed over their entire length; (3) un- ually distributed over their entire length; (4) either of se over a portion of the length; (5) concentrated at one more positions; or (6) any combination of some or all hese conditions.

oads on pillars may be: (1) concentric with the central gitudinal axis of the pillar; (2) eccentric; (3) balanced; lateral; or (5) any combination of some or all of these ditions.

n each and every case the loads transmitted through the lwork reach the foundations eventually and so to other Earth."

The "earth" presses upwards with a pressure called the REACTION, which is equal in value, but opposite in direction, to the downward pressure of the total live and dead load. This reaction travels upward throughout every portion of the building, so that at the bearing ends of each beam, from the most important main beam down to the smallest secondary one, there are reactions or upward pressures which, taken together, exactly equilibrate the downward load.

The reactions at each end of a beam are not necessarily equal to each other. Their relative values depend on the manner in which the beam is loaded, but they are easily calculated as will be seen later.

The live and dead loads together with the reactions are termed the EXTERNAL FORCES.

The whole question of loading is one of the first importance to which full consideration must be given, but we will leave it for the moment to pursue our general investigation of what happens to beams and pillars in a building.

From the general statement of the problem of steelwork design (article II), we have seen that the external forces have to be resisted safely by the internal forces.

We have learned the nature of the external forces. What are the internal forces?

All the INTERNAL FORCES in a beam or pillar are included in the general term STRESS.

Steel is composed of molecules. As soon as a steel member is subjected to a load or external force, the molecules of the steel are disturbed, and a resisting action is set up in them accompanied by a readjustment of their positions. This resisting action and readjustment of the positions of the molecules continues until a state of equilibrium is reached. This state represents the condition when the strength of the readjusted material is sufficient to balance or equilibriate the pressure produced by the load.

The resisting action set up in the molecules is evidently an INTERNAL FORCE, and it is termed STRESS.

The disturbance of the molecules and their displacement from their original positions is followed necessarily by some change in the shape or form of the steel member.

This change of shape or deformation is termed STRAIN.

Every loaded member is subject to STRESS and STRAIN.

The strain may be too minute to be observable by the naked eye, but nevertheless it is there.

A steel member under load is said to be stressed.

Theory teaches us how to calculate the nature and amount of stress set up in a steel member by a given load, and also how to calculate the amount of resisting stress that may be developed with safety in the loaded member.

In this way we arrive at the solution of the general problem already enunciated that the external forces must be safely resisted by the internal forces.

The external forces (loads and reactions) acting on a beam tend to BEND or flex it. The resisting action or internal force set up in the beam against bending or flexure is a combination of three varieties of stress, and it is termed BENDING or flexural stress.

The amount of bending effort to be resisted by the internal forces of tension and compression is ascertained from the calculation of the BENDING MOMENT, and similarly, shearing effort by the calculation of SHEAR. The visible effect of bending is termed DEFLECTION.

The amount of resistance a steel beam is capable of developing is ascertained by means of quantities known as PROPERTIES of the section.

Certain of these properties are dependent entirely on the shape of the cross section of the member. These are the AREA of the cross section, the MOMENT OF INERTIA, and the SECTION MODULUS. (Modulus simply means measure.) Another very important property, termed the MOMENT OF RESISTANCE, derived conveniently from the section modulus, takes the strength of the steel into account in addition to the shape of the section.

For equilibrium, the MOMENT OF RESISTANCE of a beam must be not less than the BENDING MOMENT.

In the case of a beam, therefore, for the bending effect of the external forces, we calculate the value of the bending moment, and for the resisting action of the internal forces against bending, we calculate the value of the moment of resistance.

The effect of shear on a beam has to be considered also. The tendency of vertical shear is to buckle the web of the beam. The method of calculating the strength of the unsupported web of a beam is allied to that for pillars. Calculations for horizontal shear are made chiefly in connection with riveting.

The external forces or loads acting downwards on a vertical pillar tend to compress it, in the first place, and then to bend or buckle it. A lateral force, such as wind-pressure, tends to produce bending as in a beam. The resisting action or internal force set up in a pillar is a combination of tensile and compressive stress.

The amount of compressing and bending effort on a pillar is calculated, for the first, from the value of the load directly; and for the second, by the calculation of the bending moment as for a beam.

The amount of resistance a steel pillar is capable of developing is calculated by means of an acceptable formula of the empirical type, in which a property known as the RADIUS OF GYRATION plays an important part.

This sketch of what happens to beams and pillars in buildings has brought into use a number of technical terms, which I shall proceed to explain, and at the same time it has indicated how various items of theory, now to be considered separately, are linked together in the most intimate manner.

Statics.

The statement of the general problem of steelwork design contains the words: "that the state of equilibrium will be maintained."

STATICS is the name of the branch of the science of mechanics that is concerned with the maintenance of forces in equilibrium, in opposition to dynamics, which considers forces in motion.

It is obvious that stability is essential in a building. To ensure stability, the motion of each and every force or load must be arrested as it is applied, and each force or load must be maintained in its arrested state by the structure itself. If this were not so, the unarrested motion would be followed by collapse.

All the forces we deal with in buildings have the capacity of motion. Wind-pressure is capable of horizontal motion, and all vertical dead and live loads are capable of gravitational or downward motion, but it is in their arrested, stationary, or STATIC condition that we consider them; in other words, when their capacity of motion is held in a state of equilibrium by the internal forces of resistance set up in the material of the structure. The special effect of a load applied suddenly or with impact before it is reduced to a static condition, has to be taken into consideration.

Because of the capacity of motion, it is not inconsistent that the language of motion, for instance, "bending" and "elasticity," is used in statics to describe forces and conditions productive of motion.

Further, in practical steelwork design it is not possible to eliminate motion absolutely.

Elastic strain, deflection, vibration, and subsidence are movements or motions to be provided for and kept within prescribed limits.

It does not matter how the forces imposed on the steelwork are induced, they must be maintained in equilibrium with a suitable margin of safety.

Stress and Strain.

We have seen that STRESS is the resisting action or interna force set up in the molecules of a body subjected to the action of external forces, and that STRAIN is the change of shape or the deformation of the body accompanying the action of stress.

It is important that the terms "stress" and "strain" should not be used as if they were synonymous. If the external forces are likened to the "cause," then stress and strain are two "effects" of entirely different kinds.

STRESS is a force, and it is measured by the units of force usually tons, less frequently, kips or pounds. (A kip is 1,000 lb. avoirdupois.)

STRAIN is a change of shape, and it is measured by the units of length, usually inches.

Stress is of several kinds, and each kind of stress is accompanied by a strain of the same name, thus: tensile stress and tensile strain; compressive stress and compressive strain; shearing stress and shearing strain. These are also termed SIMPLE stresses and strains.

In addition to the simple stresses there is bending or flexural stress, being a combination of the three, and tortion or twisting stress, which we have little to do with in the subject under consideration.

If a body is subjected to the action of two externa forces tending to pull its molecules apart, it is said to be in a state of TENSION. The resisting action or internal force set up in the body is a TENSILE STRESS, and the amount by which the body is elongated or stretched is the TENSILE STRAIN.

If a body is subjected to the action of two external force tending to push its molecules together, it is said to be in a state of COMPRESSION. The resisting action or interna force set up in the body is a COMPRESSIVE STRESS, and the amount by which the body is compressed or shortened is the COMPRESSIVE STRAIN.

If a body is subjected to the action of two external forces tending to slide its molecules past one another, it is said to be in a state of SHEAR. The resisting action or interna force set up in the body is a SHEARING STRESS, and the amount by which the body is distorted in an angular direction is the SHEARING STRAIN.

These simple stresses and strains are of rare occurrence by themselves in beams and pillars in buildings.

Simple tension is met with in the tension bars of lattice girders, simple shear occurs in rivets and bolts, but simple compression is practically negligible in this class of structura steelwork.

Beams are subject to the combination termed flexure or bending, and pillars to the combination of compression and bending.

It is the combination of different kinds of stress that make the complete analysis of stress in a beam or pillar a matter o such complexity, but theory has evolved methods, to which the shapes of the steel sections in general use lend themselves, whereby the combinations of stresses may be resolved into simple stresses, and the latter considered separately, as will be seen shortly.

[*The previous articles in this series appeared in our issues for September 5th and October 17th.*]

Contemporary Art

The Goupil Gallery Salon.

A fairly comprehensive view of the more modern aspects f contemporary art may be had in this exhibition, which, owever, includes a not inconsiderable quantity of undistinuished material. The most striking feature is the sculpture f Eric Gill: three pieces of carved and coloured stone of vomen of stoutish build, entitled "The Splits" (sitting), The Splits" (standing), and "Woman Bending." These re entirely pagan in character, in violent contrast with heir author's religious work, and immensely intriguing. ohn Tweed's "Carmen" is a nude sitting marble statuette, nd his "Baby's Head" in marble is a delightful subject enderly handled.

One of the largest and most important of the oil paintings Walter Russell's "Shoreham," a crowded canvas full f buildings and figures, and in the water-colour room the ame artist is represented by eleven of his beautiful drawings f the same place. An interesting interior is James Pryde's Ragged Room," which is not so large as is generally the ase with Pryde's decorative pictures, but has the same fine uality. A painting that shows an advance on his previous vork is Henry Lamb's "Roof View at Poole," and there re fine examples by Sisley and Le Sidauer of architectural ubjects as well as still life and landscape. A very charming icture of houses and trees is Fairlie Harmar's "The Garens, Cheyne Walk," and the artist has seized one of helsea's most pleasing and characteristic moods. Chelsea also represented by two small drawings by Walter Greaves. London Houses" is another good study, by H. M. Livens, nd Dieppe again offers to William Ratcliffe subjects for vo delightful drawings. Buildings in the country afford andolph Schwabe good material, and in Italian buildings . H. S. Shepherd exercises his obviously sound architecıral pictorialism. H. Davis Richter's "Witch Ball" is an dmirably decorative piece. Gilbert Spencer, John Nash, ernard Meninsky, Robert Bevan, Powys Evans, Mark ertler, Robin Guthrie, as well as Charles Ginner, among ne advanced men, are represented, and further architecıral subjects give Madeline Wells, Douglas Wells, and orman Howard the chance of making pleasant and ccomplished drawings. A good decorative piece in oils E. Barnard Lintott's "Glass and Silver." Among the reign works exhibited are oil-paintings by Degas, Ganiin, Daubigny, Louis Charlot, and J. E. Blanche, and ere is a fine large "Pietà" of 1850, in oils, by Puvis de havannes, which gives distinction to the whole salon.

Royal Society of Painters in Water-colours.

The drawings of architectural subjects in this exhibition ntribute ably to the maintenance of the high standard the whole. The broad, bare style of Frank Brangwyn is ell seen in three fine works, and as a contrast to their mantic spirit, E. T. Holding contributes a study of imneys and colliery works and furnaces in the Black ountry, in which realism is made to fulfil an essentially ctorial function, and these drawings are matched by mes Paterson's "Study of Roofs from An Edinburgh indow." More picturesque buildings provide subjects r the charming drawings by Arthur Rackham at Orta, Lamorna Birch at St. Antonin, by Henry Rushbury at sisi and Marseilles, by Robert W. Allan at Venice, while hens at sunrise provides the material for a fine expanse architecture which the president of the society, Sir erbert Hughes-Stanton, has used to excellent purpose. lin B. Phillips's "Hillside and Buildings at Amalfi," and rald Moira's ruined church in "September Evening," d "The Fish Market," are charming drawings.

Galerie L'Effort Moderne, Paris.

M. Léonce Rosenberg is showing an interesting set of all rough models by "Les Architects du Groupe 'de Styl,'" Holland. Works are included by Théo van Doesburg, van Eesteren, Huszar W. van Leusden, J. P. Oud, G. etveld, Mies van der Roke, and Wils. KINETON PARKES.

New Thames Bridge

The R.I.B.A. have sent the following letter to the London County Council:—

"In view of the proposals that have recently been revived for the construction of a St. Paul's Bridge, the Council of the R.I.B.A. wishes to reiterate its considered opinion that there is a real necessity for a bridge at Charing Cross.

"My Council desires to place on record its conviction that the London County Council should direct its policy and financial commitments towards the construction of a bridge at Charing Cross which is urgently wanted in order to relieve the traffic over Westminster and Waterloo Bridges. The construction of such a bridge would in addition provide several years' work for a great number of men.

"My Council also desires to enter a strong protest against any contribution from public funds by the London County Council towards the cost of the approaches to St. Paul's Bridge which, in its opinion and apparently in the opinion of the Corporation of the City of London, as twice expressed at recent meetings of the Court of Common Council, is not wanted. Indeed, the Council of the R.I.B.A. believes its construction would involve a serious waste of public money. On the other hand, the moment seems opportune for co-operation between the Government, the London County Council, and the Corporation for the purpose of building at Charing Cross a magnificent bridge which would be one of the glories of the metropolis, and assist greatly in solving the very urgent problems of traffic and unemployment.

IAN MACALISTER, *Secretary*."

A.A. Musical Evening

On November 9 a musical evening, arranged by Mrs. Lanchester, was held in the library of the Architectural Association. The artists were: vocalist, Miss Doris Vane (soprano); violin, Miss Elise Steele; and piano, Mr. Harold Hulls; and the programme included three groups of songs. Violin solos: Pugnani-Kreisler, Castier-Kreisler, Cyril Scott, etc. Piano solos: Scarlatti, Ravel, Chopin, and sonata for violin and piano in D major by Handel. Accompanist: Miss Dalzell. Future musical evenings will be held on January 25, February 29, and March 28.

"Homes of Queen Elizabeth's Courtiers"

The first of the series of lectures, organized jointly by the local branches of the South Wales Institute of Architects and the Institute of Builders, was given at Cardiff by Mr. Alfred Gotch, P.R.I.B.A., who took for his subject, "The Homes of Queen Elizabeth's Courtiers." The chair was taken by Mr. Percy Thomas, President of the South Wales Institute of Architects, and a vote of thanks to the lecturer was proposed by Mr. James Turner, J.P., President of the Institute of Builders, and seconded by Mr. T. Alwyn Lloyd. Mr. Turner, expressed appreciation for the honour which Mr. Gotch had conferred upon them by coming down himself to open the winter session.

The Oldest Throne in Europe

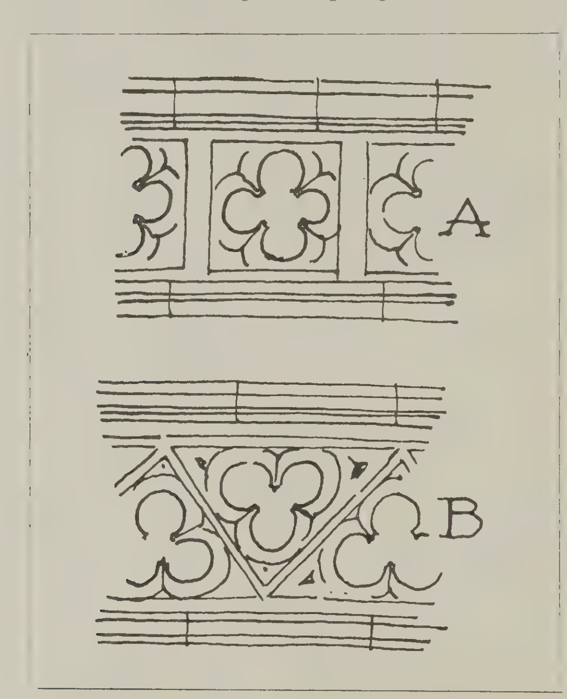
In a lecture at the Central School of Arts and Crafts, dealing with the early period of Greek architecture and its remains, Sir Banister Fletcher described the primitive walls of the oldest cities of Greece, called "Cyclopean," from the gigantic blocks of which they are composed. This early work contrasts strangely with the refined and delicate work of the temples erected centuries after, evolved from it by the constructive and artistic spirit of the Greeks. Sir Banister described the citadel of "wall-girt" Tiryne, looking out over the sea; the celebrated "Gate of Lions" at Mycenæ, another stronghold looking over the Argive plain; and the walls of legendary Troy on the great trade route, east and west. The remains recently discovered in Crete formed his favourite theme. Egypt, Babylonia, and Greece have in turn told us their story of ancient civilizations; but Crete kept her secret until Sir Arthur Evans revealed the site of Minoan civilization and the birthplace of European architecture, by his excavations at Knossos—a wonder story which Sir Banister told anew by the valuable aid of graphic lantern views.

Enquiries Answered

Enquiries from readers on points of architectural, constructional, and legal interest, etc., are cordially invited. The will be dealt with by a staff of experts, whose services are specially retained for this purpose. If desired, answer will be sent direct through the post. In no case is any charge made for this service.

Tudor and "Perpendicular" Stone Parapets.

"B. S." writes: "Are we correct in piercing a stone parapet built in the Tudor or Perpendicular style? Professor Banister Fletcher, in his 'History of Architecture,' page 147, shows the Perpendicular parapet unpierced (Fig. A.), but on page 128 we find Henry VII's Chapel at Westminster has a pierced parapet (Fig. B.). There is a church at Redcliffe, Bristol, which also has a pierced parapet."



—The Gothic parapet seems to have originated in the desire to afford protection to archers stationed on a roof, but by the fifteenth century it had become little more than an ornamental feature, and in the Perpendicular and Tudor periods was frequently pierced, though by no means invariably, just as it occasionally retained, even so late, its original crenellated form of alternate embrasure and battlement. A beautiful variant, found much in the late work of the Eastern Counties, consists of ornament of freestone, having the trefoils or quatrefoils filled with hammered flint.

G. A. T. MIDDLETON.

The Housing Subsidy.

"B" writes: "A client wishes to build a small bungalow in a seaside urban district, in which he does not at present reside. If built he will live in the house permanently. He at present shares a house in an adjoining town. He made application for the subsidy, and the district surveyor replied that his Council is only recommending grants for houses for persons resident within its district. Have the Council power under the Act to restrict the grant of the housing subsidy? If not, what steps can we take to obtain it?"

—I doubt whether this Council are carrying out even the letter of the Act—much less its spirit. What does it matter where the person lives who finds the capital, provided the house is to be built within their particular area? A letter addressed to the Secretary, Ministry of Health, Whitehall, S.W., will speedily bring a definite answer, which may be shown to the Council officials. When writing you must, of course, give all details, including the name of the place and the Council area in which it is situated.

F. S. I.

Strength of a Concrete Floor.

"X" writes: "With regard to your expert's reply t "G" published in your issue for October 24 (page 622), i would be interesting to know how deflection is affected i R.S. joists when used in the manner described; also, wha is the formula (or graph) giving the variation in strengt when one of the flanges of such a joist does exceed ·675 pe cent. of the sectional area of the concrete between joists?

—According to reinforced concrete theory as embodied i the R.I.B.A. report and L.C.C. regulations, the permissibl working stresses are 16,000 lb. per sq. in. for steel in tension and 600 lb. per sq. in. for concrete in compression, th modular ratio being 15. These stresses are developed if th area of steel in tension (as with round rods) is ·675 per cen of the concrete area. If the percentage of steel is increase the stress in it is lowered, with loss of economy. The area of steel H beams embedded in concrete usually exceed thi percentage, and the rules quoted in reply to "G" mak allowances for the otherwise undeveloped steel, it bein argued that the above theory is not strictly applicable t stiff self-supporting sections. I am not able to quote an authoritative rule for deflection, but it may be assumed tha this will not exceed the deflection of H beams (withou concrete) stressed to 7·5 tons per sq. in.

W. BASIL SCOTT.

New Inventions

Latest Patent Applications.

26452.—Bell & Co. Proprietary, Ltd.—Concrete floor October 23.
26698.—Martin, J. W.—Ceiling slab. October 25.
26611.—Savory, E. W.—Reinforced-concrete constructio October 24.
26578.—Soc. Anon. Alumine et Derives.—Manufacture c cements, &c. October 24.
26452.—Stanley, M. S.—Concrete floors. October 23.

Specifications Published.

205204.—Law, E.—Concrete wall construction.
205221.—Carter, G. H. S.—Perforated bricks or gratings use for ventilating buildings and other purposes.
183477.—Gouyard, G. M.—Method of constructing arches c reinforced concrete without using any mould arched falseworks or scaffoldings.
205338.—Christie, J., and Lang, A. R.—Form of mouldin concrete and like structures.

Abstract Published.

203528.—Ventilating buildings.—McLean, D., 145 Howdo Road, North Shields.—Ventilating conduits, passage and pipes, arrangements and adaptations of.—Means for ventilating cavity walls and the spac beneath the floors of a building comprise a pip arranged immediately beneath a fireplace and havin extensions running under the floor to the hollo walls. The space below the floor is fitted with an ai brick and a current of air, induced by the heatin of the pipe enters a short open pipe and, traversin other pipes, passes to the hollow walls from which i escapes through an outlet which may be provide with a draught inducer. To assist the flow of ai into the pipe a pipe arranged in the chimney an fitted with a cowl, terminates at its lower end in bell mouth arranged immediately above the junctio of the pipes. Specifications 153,758 and 190,021 ar referred to.

The above particulars are specially prepared by Messrs. Rayner & Co., registere patent agents, of 5 Chancery Lane, London, W.C. 2, from whom readers of the JOURNA may obtain all information free relating to patents, trade marks, and design Messrs. Rayner & Co. will obtain printed copies of the published specifications an abstract only, and forward on post free for the price of 1/6 each.

New Methods of Building*

NEW methods of construction never fail to interest the architect and the builder, and any new method of house construction which endeavours to relieve the present abnormal tuation is deserving of consideration.

In these latter days, when labour is at an unwontedly gh premium, when material is not to be had simply for e taking, and when time means money, a gigantic effort being made to concentrate on the construction and plan-ng of buildings so that a client may be able to have a ngalow or country residence to his heart's desire at a asonable cost. With this end in view many and varied e the attempts to solve the difficulty and a few of the ethods adopted with success might be mentioned here.

Local conditions govern to the greatest extent the con-ruction which should be used in various districts. For stance, in a mining area the best method to adopt is the el frame structure veneered with stone, bricks, concrete, cement reinforced with expanded metal. In this type construction a reinforced concrete raft is laid over the hole site and the steel framework erected upon it. The of may also be of concrete by arranging inverted rolled el tees on the steel roof principals and placed about t. 6 in. centres, and between the tees are placed precast ncrete slabs 2½ in. in thickness, thus eliminating almost tirely the use of timber on the roof. In fact, it is possible do without timber by using expanded metal lathing to pport the plaster. A roof of this kind is very successful garages and fire-proof buildings, and very speedy and onomic in building. Witness the fact that in days gone it was the usual practice when erecting a concrete roof prepare an elaborate system of timber centering, with a est of timber underneath to support the concrete while was wet and for a period of fourteen days or thereby, give the concrete ample time to set, other tradesmen were atly hampered and the progress of the work very seriously ayed until the timber centering was removed.

This method was successfully used in Kilbirnie, and the at advantage of a roof of this kind for fireproof con-uction must be perfectly clear to the thinking man. e slabs may be jointed in bitumen instead of cement, ich would give a certain amount of elasticity to the roof expansion and contraction, thus overcoming one of the atest difficulties of the roof made of solid concrete, which no elasticity and would crack before it would yield.

he outer surface of the roof may then be treated with mastic solution of various colours, or if the slabs are de of breeze, may even be covered with slates, tiles, or other material to suit the amenity of the district in ch the house may be built.

t may occur to some people that this is an expensive em, but it is actually as cheap as any other system. ed is a great factor in economical building, but by inary methods unless ample time is allowed for settle-t, the result may be very damaging to the quality and ility of the building, and no real economy thereby cted; but with this system, although the steel frame can rected in one day, for an ordinary dwelling-house, and outer walls in one week, there can be no lowering of lity or stability due to settlement since the steel frame erfectly rigid almost immediately after erection, and walls, being only self-supporting, require the minimum unt of time.

America many attempts have been made to speed up ding with new methods of construction, and perhaps of the most interesting is that in which the walls are ed on the ground, lying on the flat, hinged at the base, then raised to the perpendicular by means of winches. expense and danger involved, however, did not justify esult.

The late T. L. Watson improved on this system by forming the walls also on the horizontal, but hinged along the centre of gravity of the walls, and in this way deleted entirely the use of machinery.

The underlying principle is the discarding of moulds or blocks in wall construction. The walls of the house were formed on horizontal platforms a few feet above the ground and hinged as nearly as possible along the centre of gravity, so that when the concrete had set each wall was turned over on its hinges into the exact position.

As this platform in its horizontal position is balanced in the middle, due allowance being made for door and window openings, it follows that the lower half of the wall, in descending, automatically raises the upper half. No force was required and no apparatus employed (other than rope). The platform was adjusted to its vertical position before the concrete was applied, and the wall naturally assumed its destined place with accuracy.

The door and window frames were laid down on the platform before the concrete was filled in, so that the house was then ready for its roof, and internal finishings. The platforms were formed of the roof spars and boarding, and the greater part of the material was therefore on the site and ready for use. The time taken to erect the four walls after the concrete had set was only one and a half hours.

The greatest economy might have been achieved by placing a flat concrete roof on the top of the walls, but every attractive quality of the kind associated with cottage architecture would have been lost. Fortunately, there is nothing to prevent the concrete cottage from being roofed as any other cottage might be, and from becoming as picturesque and delightful as we choose to make it.

Grooves were left in the concrete of the side and end walls where they meet at the corners of the building; these grooves were filled in from above with liquid cement, thus binding the walls together into one homogeneous and monolithic structure.

The humble dwelling of pise-de-terre or the modest concrete cottage are commendable efforts to solve the problem of housing the poor, and many beautiful results have been obtained, but some people look upon these with contumely.

The modest concrete cottage does not appeal to them, but it must be accepted that concrete for home building is particularly suitable for the low cost house. For the structure which is built with hard-earned savings, and where economy must be practised, but where permanence, beauty, and safety from fire are essential, concrete offers more for the money spent than any other material.

The best type of plan for the concrete house is that which is the most simple and compact, and novel types will invariably be found more expensive than a straightforward arrangement.

The use of reinforced concrete generally is not extensively adopted for cottage work, as it is not necessary; and it will not prove economical to provide steel for the sake of reducing the concrete, as the former is, comparatively, an expensive material, and its use is only justified where heavy loads have to be carried or exceptional circumstances are met with.

It is, however, very useful and often employed for lintels, floors, roofs, and such portions of the work, and, when judiciously applied, it will prove an excellent material for those purposes. It should be designed by a thoroughly competent designer and not carried out by any rule-of-thumb method, and it should be kept as simple in character as possible.

There is another system where by buildings which give one an impression of being in a ruinous and dilapidated state can now, at small cost, assume the massive rusticated appearance of the Palazzo Riccardi. For several years a builder in the North of Scotland has been performing these transformations in his native town. The whole secret lies

---

tracts from a Paper read by James Houston, A.R.I.B.A. and M.S.A., A., M.C.I., M.I. Struct.E., A.I.A.Scot., to the Royal Technical College ctural Craftsmen Society on Friday, November 2, 1923.

in the use of cement panels, the average size of which are 16 in. by 8 in. by 1 in. in thickness. Their composition is two of sand to one of Portland cement. They are easily handled, easily packed for transport, and have stood the test of the rigorous climate of the north. The cost of this "clothing," whether for an old wall or for a new timber frame building, or for a completely fireproof steel-framed structure, is trifling indeed.

In summing up, let me assure you that, whilst much thought has been given, perhaps too much, to patent systems of construction, yet, for the present, at any rate, I have formed the impression that for domestic work the 12 in. hollow brick wall built in cement mortar is difficult to beat either for efficiency or economy.

Town-Planning Exhibition

The Town Planning Institute is taking a very active part in regard to the Town Planning Section of the exhibition which is to be held at Olympia from November 22 to December 1. It will be represented by exhibits from many countries of the world, and is likely to prove of very exceptional interest and value.

The exhibition is in connection with the International Commercial Motor Transport and Roads Development Exhibition organized by the Society of Motor Manufacturers and Traders. When approached by the society responsible for the exhibition, with the request that a representative town planning exhibit should be organized, it was at once recognized by the three organizations cooperating in the arrangement of the exhibit, viz., the National Housing and Town Planning Council, the Garden Cities and Town Planning Association, and the Town Planning Institute, that a public service of great value would be rendered.

The space available for the exhibit in the gallery of the new hall at Olympia covers approximately 15,000 sq. ft. of wall space and 30,000 sq. ft. of floor space.

The committee find that the exhibits already promised are so numerous that it will be necessary to make a selection, as the exhibits are greatly in excess of the space available.

The range of exhibits will cover several sections, comprising :—

Section 1.—The civic survey, covering statistical information necessary for the complete study of present conditions, and to assist in formulating a town plan, or future extensions of an existing town.

Section 2.—Plans, photographs, and models illustrating town-planning schemes under Town Planning Acts, British and foreign.

Section 3.—Road forms, plans, photographs, and models of arterial roads, road and street design, parking spaces in street, road junctions, parking stations for char-a-bancs, traffic centres, petrol filling stations, tree planting and conservation.

Section 4.—Great London traffic problems generally.

Section 5.—City development, British and foreign.

Section 6.—Regional or joint town planning.

Section 7.—Zoning.

Section 8.—Parks, open spaces, and athletic grounds.

Plans, etc., of town planning work generally have been furnished from regional committees and important towns in the following foreign countries : Austria, Czecho-Slovakia, Denmark, France, Germany, Holland, Hungary, Sweden, U.S.A.

"The Roman Point of View"

The second of a course of four lectures on architecture, arranged by the Reading Society of Architects in conjunction with the Reading branch of the Workers' Educational Association, was given in the large hall at University College, Reading, on Wednesday evening last, when the chair was taken by Mr. Edward P. Warren, F.S.A., F.R.I.B.A., the President of the Berks, Bucks, and Oxon Architectural Association.

The lecture, which was on "The Roman Point of View, was illustrated by numerous beautiful lantern slides, an was much enjoyed by the appreciative audience of som four hundred who were present.

The lecturer, Mr. Paul Waterhouse, opened his discours by disclaiming any intention of proving that the Roma people would have acknowledged a point of view at al Probably, since the best art was spontaneous, they had n consciousness of a policy in architecture as a natior National views on architecture were, he pointed out, ver different affairs from the traditions and secrets within th craft itself.

Setting aside as erroneous the notion that the Roman were mere blind copiers of the Greeks and artless appr priators of the achievements of other and earlier nations, h proceeded by the aid of slides to develop his opinions on th trend of architectural cause and effect in the greater period of Roman supremacy. The conditions and problems c Rome had, said the lecturer, a quite extraordinary parall in the circumstances of modern England. There wa hardly a problem of our own, however baffling, to which w could not apply the test "what would Rome had done, and very few to which Rome did not supply either a answer or a suggestion.

The Roman position as regards anterior architectur wherever found, was not that it was foreign stuff to b borrowed, but that, Rome being mistress of Europea civilization, it was Rome's.

Further, the employment of anterior forms developed c undeveloped was not pillage, but merely the carrying out c that process of leaning on the past which was the onl acceptable method of architecture in any of the grea periods.

The City Churches

The following letter from the President of the R.I.B.A appeared in "The Times" last week :—

SIR,—The threatened demolition of a number of th City Churches has been considered by the Council of th Royal Institute of British Architects, and I have bee authorized to state publicly that the R.I.B.A. protest against the proposal to demolish any of the City Churche and pledges itself to do all in its power to prevent th demolition in the capital of the Empire of buildings whic are of great historic value and artistic interest.

I am, sir,
Your obedient servant,
J. A. GOTCH.
President, Royal Institute of British Architects.

Election of New Members at the R.I.B.A

At a meeting of the R.I.B.A., the following candidat were elected :

As Fellows (21).

Allner, J. [*A*. 1909], Poole.
Conder, A. R., P.A.S.I. [*A*. 1902], Crouch End.
Drysdale, G. [*A*. 1911], London.
Francis, E. C. [*A*. 1915], St. Tewdric, near Chepstow.
Godwin, W. H. [*A*. 1914], Kidderminster.
Greenaway, F. H. [*A*. 1891], London.
Hatchard-Smith, W. H. [*A*. 1914], London.
Hepworth, P. D. [*A*. 1912], London.
Hill, O. [*A*. 1921], London.
Hutt, Harry [*A*. 1895], Reading.
Markham, J. H. [*A*. 1905], Harrow.
Marshall, C. J. [*A*. 1887], Cheam.
Mayston, A. R. [*A*. 1891], Finchley.
Morton, R. H. [*A*. 1898], South Shields.
Newberry, J. E. [*A*. 1889], Bedford Park.
Newton, W. G., M.C., M.A. (Oxon.) [*A*. 1913], London.
Sharp, A. [*A*. 1902], Toronto, Canada.
Sullivan, L. Sylvester [*A*. 1908], London.
Unsworth, G., M.C. [*A*. 1920], London.
Wilson, G. C. [*A*. 1910], London.
Wood, Douglas, O.B.E. (Mil.), F.S.I. [*A*. 1902], Stanmore.

As Associates (31).

Alexander, T. M., Liverpool.
Billimoria, H. F., B.Arch. (Liverpool), Colombo, Ceylon.
Black, K. E., Highgate.
Buchia, S. N., B.E. (Civil), Bombay.
Bush, S. P., Rangoon, Burma.
Clark, R. J. B., Penzance.
Clist, H. A., London.
Davidson, A. E., Toronto, Canada.
Deuchar, C. C., Pretoria.
Doddington, W., New Cross.
Eales, W. H., Victoria, Australia.
Fearn, S. W., Wellington, New Zeala
Foreman, L. R., Brighton.
Hall, L. W., Watford.
Halliday, F. L., Manchester.
Haughton, V. P., Wellington, N Zealand.
Igglesden, S. D., Hampstead.
Lawrie, A. F., Johannesburg.
Masey, R. J., Anerley, S.E.
May, A. J., Bristol.
Milligan, T. W., Cape Town.
Moffat, J. A. C., Durban.
Monk, S. G., London.
Parham, A. D., Colombo, Ceylon.
Riding, R. A. F., London.
Ross, W., Glasgow.
Sterrett, J. E., Walthamstow.
Toy, S., F.S.A., London.
Trengrove, W. H., Christchurch, N Zealand.
Walker, H. A. H., M.C., Pretoria.
Wilson, J. G., Pretoria.

As Hon. Fellow (1).

Burnham, the Rt. Hon. Viscount, C. M.A., LL.D., D.Litt., London.

As Hon. Associate (1).

Kenyon, Sir Frederic George, K.C. M.A., D.Litt., Director and Princi Librarian at the British Museum, W

R.I.B.A. and Non-Members

Mr. Ian MacAlister, the secretary of the R.I.B.A., writes as follows: "The Council of the Royal Institute desires me to call attention to the fact that the use of the R.I.B.A. affix or of any affix suggesting membership of the R.I.B.A. by those who are not members of that body is illegal, and that if any cases are reported to the Council legal proceedings will be taken."

Coming Events

Thursday, November 15.

Incorporated Institute of British Decorators, Painters' Hall, E.C.—Council Meeting. Paper by Mr. Walter J. Pearce: 'How, When, and Where to Use Colour and Ornament." 7.30 p.m.

British Museum, Bloomsbury, W.C.—Lecture VII. By Miss Claire Gaudet: "The Great Pyramid and others." 4.30 p.m.

Northern Polytechnic Institute, Holloway, N.7.—Lecture by Mr. F. Broadhurst Craig, "Heating Systems used in Buildngs." 7 p.m.

Friday, November 16.

Art-Workers' Guild, 6 Queen Square, W.C.1.—(Election of Iaster). "The A.W.G. Masque of 1899."

Chadwick Public Lectures, at the Royal Society of Arts, ohn Street, Adelphi.—Lecture No. 3, by Major Harry Barnes, V-P.R.I.B.A., "Rededial Hygiene—Health and the Hospital."

Royal Technical College, Glasgow.—Open night.

Monday, November 19.

R.I.B.A., at 1 Wimpole Street.—General Meeting. "The ebuilding of Ypres." By Mr. G. Topham Forrest, F.R.I.B.A.

Tuesday, November 20.

Liverpool Architectural Society, 13 Harrington Street.—'aper by Mr. Ernest C. Bewlay, F.R.I.B.A., "Outdoor Sketchıg."

Competition News

Ryde Pavilion Competition.

The Council of the R.I.B.A. have expelled a Licentiate r taking part in the above-mentioned Competition, which ad been banned on the ground that its conditions were not accordance with the regulations of the R.I.B.A.

Parsons' Colour Scheme Competition.

The following awards have been made in the competition for e best colour schemes for a vestibule connecting 315-317 xford Street with 17, 19, 21 Dering Street—Messrs. Thos. arsons and Sons' new premises. The judges were Sir Edwin utyens, R.A., F.R.I.B.A., Sir John Lavery, R.A., Sir David urray, R.A., P.R.I.H.R.S.A., and Messrs. Frank Brangwyn, A., and E. Guy Dawber, F.R.I.B.A. :—

First prize (100 guineas): Mr. E. Albert Cox, 120 Adelaide oad, London, N.W.3.

Second prize (50 guineas): Mr. Kenneth Anns, 5a Sinclair ardens, London, W.14.

Third prize (25 guineas): Mr. A. W. Wall, 33 Bonnington rescent, Sherwood, Notts.

Consolation prizes (10 guineas): Mr. Leslie E. Robinson, Southampton Street, Bloomsbury, London, W.C.1; Miss iolet L. Timms, 42 West Street, Croydon, Surrey; Mr. Robt. rancis Wilson, 103 Castle Boulevard, Nottingham; Mr. dwin R. Phillips, 11 Abingdon Road, Plymouth; and Mr. Morton Sale, 121 Lower Richmond Road, Putney, London, W.15.

The colour schemes received number 796, and the task of lecting the prize schemes was a heavy one. The judging was mpleted on November 1. The prize-winning designs may viewed at Parsons' showrooms, first floor, at any time uring business hours, viz., 9.30 a.m. to 6 p.m., and 1 p.m. on turdays.

Engineers' Assistants' Prize Competition, 1923–4.

The Council of the Institution of Heating and Ventilating gineers are offering the following prizes for original papers subjects connected with heating and ventilating during 24: Lumby premium, £10 10s.; Sirocco premium, £10 10s.; and Preston premium, £5 5s. The Lumby premium will be awarded for the best paper submitted dealing with heating in the generally accepted sense of the term. The Sirocco premium for the best paper submitted dealing with fan engineering and the general application of fans; air washing, air conditioning, dust and fume removal, etc., and the Preston premium for the next best paper on any subject included in the above. Papers submitted must be the sole composition of an assistant. The only qualification is that such assistant is actively connected with the business or profession of heating and ventilating, and is not a principal or an employer. Any subject may be chosen, and "The List of Subjects for Papers," prepared by the Institution, a copy of which may be obtained on application to the secretary, 38 Victoria Street, London, S.W., is suggested as a guide. The paper must be written under a *nom de plume*, the name and address of the author in a separate sealed envelope to be sent with the paper to the secretary. The paper to be posted to the secretary of the Institution of Heating and Ventilating Engineers, not later than March 31, 1924.

List of Competitions Open

Date of Delivery.	COMPETITION.
Nov. 15	New Police and Fire Brigade Station in Bridewell Street, Bristol. Mr. W. Curtis Green, A.R.A., F.R.I.B.A. (London), and Mr. George H. Oatley, F.R.I.B.A., R.W.A. (Bristol), Assessors. Apply Mr. E. J. Taylor, Town Clerk, The Council House, Bristol. Deposit £1 1s.
Nov. 30	Taunton School War Memorial. The Council of the Taunton School invite designs for a War Memorial, consisting of an Art and Science Block, the cost of the building to be approximately £10,000. The Assessor is Mr. Robert Atkinson, F.R.I.B.A., who will have the power to nominate a second Assessor if desirable. Premiums first, £100; second, £50. The first premium will merge in the architect's commission. Particulars, together with photograph of the present buildings, may be obtained from the Secretary of the School, H. J. Pollard, F.C.A., 3 Hammet Street, Taunton, in return for a cheque for £2 2s.
Dec. 10	Designs for a dining-room and bedroom furnished in the style of 1924, to form part of the applied art section of the Palace of Arts at the British Empire Exhibition at Wembley next year. Prizes to the value of £400 have been offered by "Country Life" for the best designs submitted. The Palace of Arts will include among its other interesting features a series of six decorated rooms illustrating the progress of decorative art since 1750. Two of these rooms will be designed and be furnished in the styles of the Georgian and Regency periods covering the years 1750 and 1815: two more will illustrate the standard of interior decorative art, attained respectively in 1851 and 1880. The modern rooms will demonstrate the remarkable advances made in this sphere of applied art since those dates. Competitors must be of British birth or of British parentage, and all manufactured goods to be provided must have been manufactured within the British Empire. The designs are to be considered by a special Jury of Award, consisting of: Sir Edwin Lutyens, R.A., Miss Ellen G. Woolrich, Mr. P. Morley Horder, and Mr. Norman Wilkinson. The Exhibition is to arrange for the carrying out of the prize designs under the supervision of the successful competitors.
Dec. 10	The War Memorial Committee of the Burgh of Coatbridge invite designs for the erection of a War Memorial on a site in the West End Park. The estimated cost of the work amounts to £3,000, and premiums of £75, £50, and £25 are offered for designs placed first, second, and third respectively. Assessor is Mr. James Lochhead, F.R.I.B.A., Hamilton. Apply Town Clerk. Deposit £1 1s.
Jan. 1	The Imperial War Graves Commission invite architects who served during the war as members of the Military, Naval, or Air Forces raised in any part of the British Empire to send in their names for admission to a competition for the designing of memorials to the missing to be erected by the Imperial War Graves Commission at Bethune, Armentières, Cambrai, and Soissons. Applications for particulars of premiums and other regulations from those desiring to compete are to be addressed to the Secretary (Works Branch), Imperial War Graves Commission, 82 Baker Street, London, W.1, and must be received there not later than January 1, 1924, and must be accompanied by a statement giving particulars of the war service and professional career of the applicant and clearly stating which of the memorials it is desired to compete for. Deposit, two guineas for each set of plans. The Assessor is Sir Aston Webb, K.C.V.O., P.R.A.
Jan. 5	Memorial Building and Tower, Dudley. The Council of the County Borough of Dudley invite Competitive Designs from duly qualified Architects for the "Brooke Robinson Memorial" Building and War Memorial Tower comprising a Public Hall, Coroner's Court, small museum, and a new sessions court. Premiums £300, £200, and £100. Mr. W. Curtis Green, A.R.A., F.R.I.B.A., Assessor. Conditions of competition, together with a copy of the site plan, can be obtained on application to E. W. Tame, Town Clerk, Town Clerk's Office, Dudley, with deposit of £2 2s.
Feb. 1	Proposed Concert Hall and Public Baths for Newcastle-upon-Tyne Premiums £750, £250, and £100 respectively are offered, the first premium to merge into the commission or other payment to be made to the author of the successful design. Assessor, Mr. Alfred W. S. Cross, M.A. Apply, with deposit of £2 2s., to Mr. A. M. Oliver, Town Clerk, Town Hall, Newcastle-upon-Tyne.
No date *	The Eastleigh and Bishopstoke Urban District Council invite designs for the extension of their existing Council buildings, and the erection of an assembly hall, on the site adjacent. Premiums: 50, 30, and 20 guineas. Apply, with deposit of £1, to Mr. J. Lawrence, Clerk to the Council, Council Offices, Eastleigh.
	* Indicates Competitions whose conditions are not in accordance with those laid down by the R.I.B.A. and the Society of Architects.

The Week's News

More Houses for Walsall.

Walsall Town Council propose to proceed with the erection of fifty-one additional houses.

New Civic Buildings for Bolton.

New civic buildings are to be erected at Bolton from the designs of Messrs. Bradshaw, Gass, and Hope, architects.

Grooved Concrete Roads.

Nottinghamshire County Council are experimenting with grooved concrete roads to prevent the skidding of motor-cars.

Salford Housing.

Salford Town Council have decided to erect 100 more houses, and to apply to the Ministry of Health for sanction to a loan of £120,000.

More Houses for Becontree.

Another 1,000 houses are to be built on the Becontree estate of the London County Council.

Housing at Glasgow.

During the two years allowed by the Act the Housing Committee will endeavour to erect 5,000 houses.

More Houses for Bingley.

Bingley Urban District Council have passed plans for a hundred new houses within the last few months.

£2,000 for Peterborough Cathedral.

£2,000 has been left to the Peterborough Cathedral Restoration Fund by the Rev. A. J. Abbey, former vicar of Cotterstock, Northamptonshire.

Walsall Housing Sites.

About 35½ acres of land near new Ring Road at Walsall are to be set apart by the Corporation for housing.

New Bridge over the Dee.

Flintshire County Council have decided to apply for Parliamentary powers to construct a new bridge over the River Dee at Queensferry.

The Prusom Street Area.

A big scheme was foreshadowed at the last meeting of the London County Council for the clearance of the Prusom Street area of Wapping.

Housing at Sheffield.

The City Council are applying to the Ministry of Health for sanction to a loan of £50,000, from which to make grants to private builders for the erection of houses.

Proposed New Promenade for South Shields.

A scheme has been approved by the Council, in committee, for a sea promenade from South Shields to Marsden. The estimated cost is £100,000.

Langton War Memorial.

It is proposed to erect a war memorial at Langton (Staffordshire) from the designs of Mr. J. H. Beckett, A.R.I.B.A. It is estimated to cost £5,000.

Belfast War Memorial.

A site on the east side of the City Hall has been selected for the war memorial, which will take the form of a cenotaph. Sir Brumwell Thomas is in favour of the site selected.

Northumberland Road Schemes.

Northumberland County Council have adopted a scheme for improving the county roads and bridges in the coming year at a cost of £216,442, the amount to be borrowed over five years.

Southwark Road Schemes.

Supplemental road works estimated to cost £1,720 and £580 have been submitted by Southwark Borough Council to the Ministry of Transport for a grant from the Road Fund.

Hendon Road Schemes.

The Ministry of Health have sanctioned the application of the Hendon Urban District Council to a loan of £41,667 for making up a number of roads at Golders Green.

Rhyl War Memorial.

The architect for the Rhyl War Memorial Hospital, opene by the Prince of Wales on November 3, was Mr. F. A. Robert of Mold.

The late Mr. R. Jameson.

Mr. R. Jameson, for many years secretary of Messrs. Dormai Long & Co., Limited, and a well-known figure in the iron an steel trade, has died at Stockton.

The Gothenburg Jubilee Exhibition.

In the article on the Gothenburg Jubilee Exhibition pul lished in our issue for October 31 the name of the architec associated with Mr. Bjerke was printed Grieson instead c Ericson.

New Institute for Leeds.

The Leeds Improvements Committee recommend the sal to the Crossgates Tenants' Association of an area of abou 5,000 sq. yds. of land on the housing estate for recreatio purposes, and the erection of an institute.

Manchester's Cenotaph.

The foundation stone of Manchester's cenotaph was laid b the Lord Mayor in St. Peter's Square, in the centre of th city. The cenotaph will be 42 ft. in height. It has bee designed by Sir Edwin Lutyens, R.A.

Bridlington Promenade Scheme.

Bridlington Town Council have decided to extend the flor pavilion, on the Prince's Parade, and to construct an overhea promenade, at a cost of £10,500, to be completed, if approve by the Ministry of Health, by next spring.

Roman Pavement Found.

While the foundations for some new houses were being du in Yeovil, Somerset, a considerable piece of Roman pavemen was uncovered. The pavement, of red and white mosai is in good condition, and is not far below the present surface.

Leicester Remodelling Scheme.

A scheme for the gradual remodelling of the centre c Leicester is under the consideration of the Corporation. I provides for the compulsory acquisition of property, the cor struction of new streets, and the widening of existing ones.

New Teesside Dock.

The directors of the London and North Eastern Railwa propose to construct on the south bank of the river, at Estor either a new wharf or a modern dock suitable for accommoda ing great liners. The former project will cost £800,000; th latter nearly £2,000,000.

Manchester and Ancient Buildings.

Manchester and District Joint Town Planning Advisor Committee are inviting local authorities in the region t forward particulars of all ancient or historical buildings c places of natural beauty, with a view to action being taken t secure their preservation.

Hartlepool Harbour Scheme.

The scheme for the construction of a large new harbour a Hartlepool by the lengthening of the existing breakwater an the construction of a southern pier 80 ft. less than a mile i length is estimated to cost £600,000. The work would occup some seven or eight years.

£7,000 Gift for Flintshire.

Mr. H. N. Gladstone, of Hawarden Castle, Lord Lieutenan of Flintshire, has offered the Flintshire County Council £7,00 towards establishing a maternity home for Flintshire, subjec to the institution being called the "Catherine Gladston Memorial Home." The Council have accepted the gift.

Brighton Aquarium.

Another scheme has been prepared for the future of th Aquarium, bringing the total before the special committe of the Town Council to six. The latest plan stipulates for a entire clearance of the existing building, the construction of sheltered garden, the linking up of the upper portion with th Marine Parade promenade, and the provision of a hall.

(*Continued on page* 743.)

The Week's News—*continued.*

Brighton Town-Planning Scheme.

The unsatisfactory character of the rapid building developents in the vicinity of Brighton have caused the Town Couns of Brighton and Hove to form a Joint Committee for preing a town-planning scheme for Brighton and Hove and e districts immediately adjoining.

Upsall Castle.

The foundation-stone has been laid in connection with the uilding of Upsall Castle, the residence of Mr. E. R. Turton, P. Upsall Castle occupies the site of the ancient castle of the opes of Upsall, who for nearly two centuries held this castle d occupied a prominent position in the country.

St. Paul's Restoration.

The statues of St. Simon and St. Jude, on the south front St. Paul's Cathedral, are being cleaned and repaired. The rk will cost about £1,000. Like the rest of the Cathedral, statues have suffered badly from London soot, and, in lition, these two statues have had the south-west wind tinually beating against them.

New Hospital for Hampton.

Mr. I. Foster Knowles, of Hampton-on-Thames, has handed r St. Mary's Cottage Hospital, which he has erected at a al cost of £15,000, with an endowment to the parish of mpton. It was the occasion of the opening of a new wing, ich has been erected through Mr. Knowles's generosity at a t of £2,000.

New Reservoir at Frankley.

he construction of the new corporation reservoir at Frankto safeguard the Birmingham water supply will, it is hoped, commenced next year. A report that the preliminary otiations had been advanced a further stage was made at eeting of the Water Committee. The new reservoir will e a storage capacity of 500,000,000 gallons.

Scarborough Bricks for Hampton Court Palace.

ricks from the old barracks on the Castle Hill at Scarough are to be utilized for repair work at Hampton Court ace. They are a Dutch brick of small dimensions, and a d match for the old brickwork at Hampton Court. It is bable that the barracks, which were wrecked in the bomlment of Scarborough in December, 1914, will be removed rely.

Olympic Swimming Pool.

he swimming pool in which the swimming contests of the Olympic Games will be held is being constructed within walls of Paris, at the Porte des Lilas. It is built of reined concrete, above the level of the ground, and is 165 ft. and 82 ft. wide. The shallow end is 2 ft. 6 in. deep and deep end 16 ft. 5 in. The stands will accommodate oo people.

New Building Offer.

r. G. Hicks, general secretary of the National Federation of ding Trade Operatives, says "if the Government would put ard a real national scheme of housing and slum clearance would meet them with a view to devising a proper national ne of apprenticeship, and discussing the whole position e building industry in the light of national requirements all the cards on the table."

Staircase Death-trap.

't should be compulsory for some kind of handrail to be on every staircase in dwelling-houses," said the coroner Luton (Beds.) inquest.

"here are many houses in Luton," he added, "where stair are perfect death-traps. To own or build houses without ase handrails is almost criminal." The inquest was on a an who had been killed in falling downstairs.

Wooden Village.

ere is a wooden village at Castle Bromwich. It has from 700 inhabitants. Many houses are of the army hut type, ach of these is divided to make two houses. In most of wellings there is a sitting-room the full width of the house, llery, bath, coal shed, pantry, and two good bedrooms. home is lit by electricity, and each has its fire bucket and cal extinguisher.

Lambeth Bridge.

en the question of building a new Lambeth Bridge, at a f £600,000, came before the London County Council, Mr. E. L. Meinertzhagen, chairman of the Improvements Committee, asked for a postponement until the next meeting, when, he said, a scheme would be submitted, including a further improvement on the south side of the Thames. This was agreed to.

New Buildings for South Africa.

A Johannesburg firm's tender of £100,000 for the erection of new Government printing works in Pretoria has been accepted. Together with the necessary machinery, the cost will probably amount to £150,000. Messrs. Reid and Kenuckey, also of Johannesburg, successfully tendered for the erection of the medical block of the new university at Cape Town. The amount involved is £107,000.

New County Hall Extension.

The new extension to the London County Hall, upon which work has now begun, will involve an expenditure of another £800,000. In clearing the site for this extension old concrete foundations have had to be removed, and the new process of breaking these up by means of the hydraulic mining cartridge is in full operation. This appliance has been used with success in one of the Lancashire collieries.

The Art of Illuminating.

The first sessional lecture of the Sheffield, South Yorkshire and District Society of Architects and Surveyors at the University, Sheffield, was given by Mr. Lawrence M. Tye on the "Art of Illuminating." The lecturer invited closer co-operation between the architect and the illuminating engineer. By the combination of both, he said, it was possible to secure effects which were correct architecturally, and much more satisfactory from the utilitarian aspect.

City Church Discovery.

As the result of excavations at St. Helen's, in Bishopsgate, substantial evidence has been discovered of the lay-out of an old thirteenth-century nunnery, and there is evidence of a building on the site in Roman-British times. One of the most interesting discoveries has been a small window or opening, through which the prioress could see from her cell when the nuns arrived in the choir for their devotions. There are six slanting openings cut through the walls to enable the nuns to see the high altar and hear mass from the cloister outside.

London Housing.

A circular issued by the London County Council announces that that body is prepared, with the help of the Government, to give financial and other assistance to builders, investors, and others in order to encourage the provision of housing accommodation to meet the needs of London, in accordance with the recent Act. Requests for the necessary forms of application should be made by letter addressed to the clerk of the Council, County Hall, Westminster Bridge, S.E.1, or by personal application at the County Hall, Room 307.

Town-Planning Scheme for Dovercourt.

A scheme, by which it is hoped to give employment for about three years to local labour, has been adopted by the Harwich and Dovercourt Town Planning Association. Provision is made for a new arterial road and a further extension of the sea-wall promenade. Plans are to be prepared for the erection of a pier, and an endeavour will be made to extend existing parks and to open a public sports ground. A new town hall with concert and dancing rooms is included in the scheme, and several model housing settlements are projected.

Development of Southampton.

The Southern Railway Company are endeavouring to obtain powers from the Ministry of Transport for the construction of a new line in the Ramsgate district. They also intend to promote a Bill in Parliament next session for powers to carry out considerable new works in the Southampton area, including the reconstruction of Southampton West Station, the doubling of the line between Southampton West and Millbrook, and extensive works in connection with the proposed Southampton Docks extension. When the whole of the proposed electrification is carried out, the company expects to be in a position to deal with about 200,000,000 passengers per annum on their electrified lines. In addition to big railway extensions at Stourbridge, the Great Western Railway Company is beginning a £50,000 scheme for remodelling and extending Rowley Regis and Black Heath Stations.

(*Continued on page* 744.)

The Week's News—*continued.*

Chislehurst Girls' School Extension.

At a meeting of the governing body of Farrington's Girls' School, Chislehurst, the chairman, Sir George Chubb, Bt., announced that the Right Hon. Thomas R. Ferens, the donor of a previous gift of £20,000, had given a further £10,000 in order that the whole of a proposed scheme of extension may be carried out immediately. The governors have accepted a tender for the erection of an assembly hall, a block of classrooms, etc., at a cost of £40,000, the buildings to be begun at once. The total expenditure, including fittings and furniture, will amount to £50,000.

The Wren Churches.

Opposition to the Bill for the disposal of a number of the Wren churches in the City of London, which is to come before the Church Assembly at its meeting this month, is being organized vigorously. Sir Aston Webb, P.R.A., and a number of other distinguished artists and architects, are interesting themselves in the matter, and a meeting has been held in the City to further the protest. The movement is entirely one of the laity, and the chief figure in it is Sir Francis Younghusband, who has a scheme of his own for utilizing the churches in the City for purposes of social welfare.

Remodelling Black Country Railway Stations.

The Great Western Railway Company have commenced a scheme for the remodelling and extension of the passenger and goods stations of Rowley Regis and Black Heath. The proposals include the erection of new goods offices, with the provision of increased siding accommodation and an entire alteration of the existing passenger station. It is intended to widen the bridge in Station Road to the extent of about 50 ft. and to provide a booking office on the bridge, with steps to each platform, so as to avoid the present method of reaching the down platform by way of the level crossing. The scheme is estimated to cost about £50,000.

Institution of Heating and Ventilating Engineers.

The first of the informal sessional meetings arranged by the Institution of Heating and Ventilating Engineers for this season was held at the Engineers' Club, London, on November 7, when a paper was read by Mr. Fredk. G. Whipp, A.M.I.Mech.E., entitled "Some Common Faults in Fan Design." He advised those contemplating a fan installation always to consult the expert, whether it be consultant or manufacturer. The author stated that the fan engineer was not always to blame for the bad behaviour of his apparatus, but he was of opinion that a list of "don'ts" for fan users could with advantage be included in makers' catalogues.

Reconstruction of Exmouth Station.

The Southern Railway Company have decided to pull down the present station at Exmouth and construct a more commodious one. The ground floor will consist of a booking hall 42 ft. by 28 ft., parcels office, cloakroom, waiting room, and an open space 105 ft. by 30 ft., giving access to the platforms and providing room for bookstall and shops. The upper floor will provide accommodation for the station master, with a private side approach. An extensive goods yard will be laid out close to the station. The work will involve an expenditure of £70,000. New locomotive and engineering sheds are also to be constructed at Exmouth Junction at a cost of £159,000, and improvements are being effected at Barnstaple Junction at a cost of £17,600.

London Survey Committee.

The annual joint publication of the London County Council and the London Survey Committee for 1923, which will be issued in a few weeks, should prove one of the most interesting volumes of the survey of London. It comprises the first volume of the parish of St. Helen, Bishopsgate, and has been compiled by Mr. Alfred W. Clapham, F.S.A., and Miss M. Reddan. A full description of the church of St. Helen and its monuments, with detailed drawings and photographs of the details of value, follows an historical account of the nunnery of St. Helen and the parish church. Full advantage has been taken of the recent discoveries during building operations in St. Helen's Place to bring the account up to date. The Survey publications are issued gratis to subscribers to the committee (address: 27 Abingdon Street, Westminster, S.W.1), and a limited number are on sale at £2 2s. to the public.

The British Empire Exhibition.

Elaborate arrangements are being made for organized partie to visit the British Empire Exhibition at Wembley next yea Tourist agencies are organizing parties, and the railway companies will run special excursions to London at reduced rate from all the principal stations in the country. This will giv to those who are travelling individually, as well as to smalle parties, an opportunity of visiting the great exhibition at th lowest possible cost. Special reduced rates of admission ar also being given by the exhibition authorities for organize parties booked before March 1. Tickets for these parties ma be obtained from any travel agent, or direct from the Controlle of General Services at 16 Grosvenor Gardens, London, S.W. The Palace of Engineering and the Palace of Industry, th two largest buildings in the British Empire Exhibition a Wembley, are finished. The official handing-over took plac last Monday, and the floor space in both buildings is no available for exhibitors. The palaces together cover an are of nearly 25 acres. The Palace of Engineering, which probably the largest concrete building in the world, is itse six and a half times the size of Trafalgar Square, and has floor space of over 500,000 sq. ft.

The Heating and Ventilation of the London County Hall.

The system on which the L.C.C. council-chamber ventilated was described by Messrs. P. M. B. Grenville an T. Moodie, M.I.Mech.E., at the autumnal meeting of th Institution of Heating and Ventilating Engineers, in the paper entitled "The London County Hall Plant: Fact Figures, and Reflections." Ventilation is obtained partly b a system of trunking under the council chamber, providing a individual supply to each seat. Besides the main inlets, speci registers are arranged to every seat so that each member ca direct the incoming air either towards himself or vertical out of his range. The plant is capable of delivering 3,0 cubic feet per hour for every occupant of the chamber. Th apparatus consists of a humidifier, heating batteries, aut matically controlled from the chamber itself, and fans ar ice tanks for cooling. The main building is heated by means forced circulation of hot water to over 2,000 radiators, havi a total heating surface of 68,349 sq. ft. The 800 lavato basins and sinks are capable of providing 71,400 gallons of h water in one hour.

The Town Planning of Mediæval Citi

Mr. William Hayward, F.R.I.B.A., in another of his lectu at Birmingham University, dealt with "Mediæval Cities He said that there was a general impression, derived large from historical novels, that mediæval cities were always roma tically irregular; but that impression was far from bei correct. In the great town-planning period of the thirteen century many cities were built, the military and politi character of which called for virgin sites, and for wholesa building at short notice. Towns built under those conditio were invariably regular in plan; and the simple chequer-boa arrangement—varieties of which were found in all ages a places—was obviously the first thought towards orde planning when there was occasion to build a complete ci Many such towns were built in Provence after the Albigensi Wars with the object of consolidating military success by policy of peaceful penetration. Many also were built in Fran England, and Wales by Edward I, examples being Montpazi Hull, Conway, and old Winchelsea.

It must not be inferred from the emphasis placed upon form ism in books which treat of ancient town plans that this qual was desirable and that irregularity was to be avoided. Bo qualities had their use; and in those towns which grew slow out of local conditions, where irregularities had been fou convenient by experience or were compelled by local top graphy, the mediæval designer built informal settings to hance the effect of existing buildings, the æsthetic value which had only recently been fully appreciated. That su settings were carefully designed and not haphazard shown by what happened at Ulm, where—the Cathedral p cincts having been cleared of near-by buildings which w thought to obstruct the full display of its beauties—they w then found to have so enhanced its effect that equival buildings were planned at once to re-establish the old conditio The utility of designed irregularity was best seen in mediæval arrangement of churches in narrow streets, where building was recessed from the line of traffic to give roomin for occasional crowds and, at the same time, to provid foreground suitable to a building of size and importance.

Wednesday, November 21, 1923.

Vol. LVIII. No. 1507.

THE ARCHITECTS' JOURNAL & Architectural Engineer

With which is incorporated "The Builders' Journal."

PETERBOROUGH CATHEDRAL : THE NAVE, LOOKING EAST.

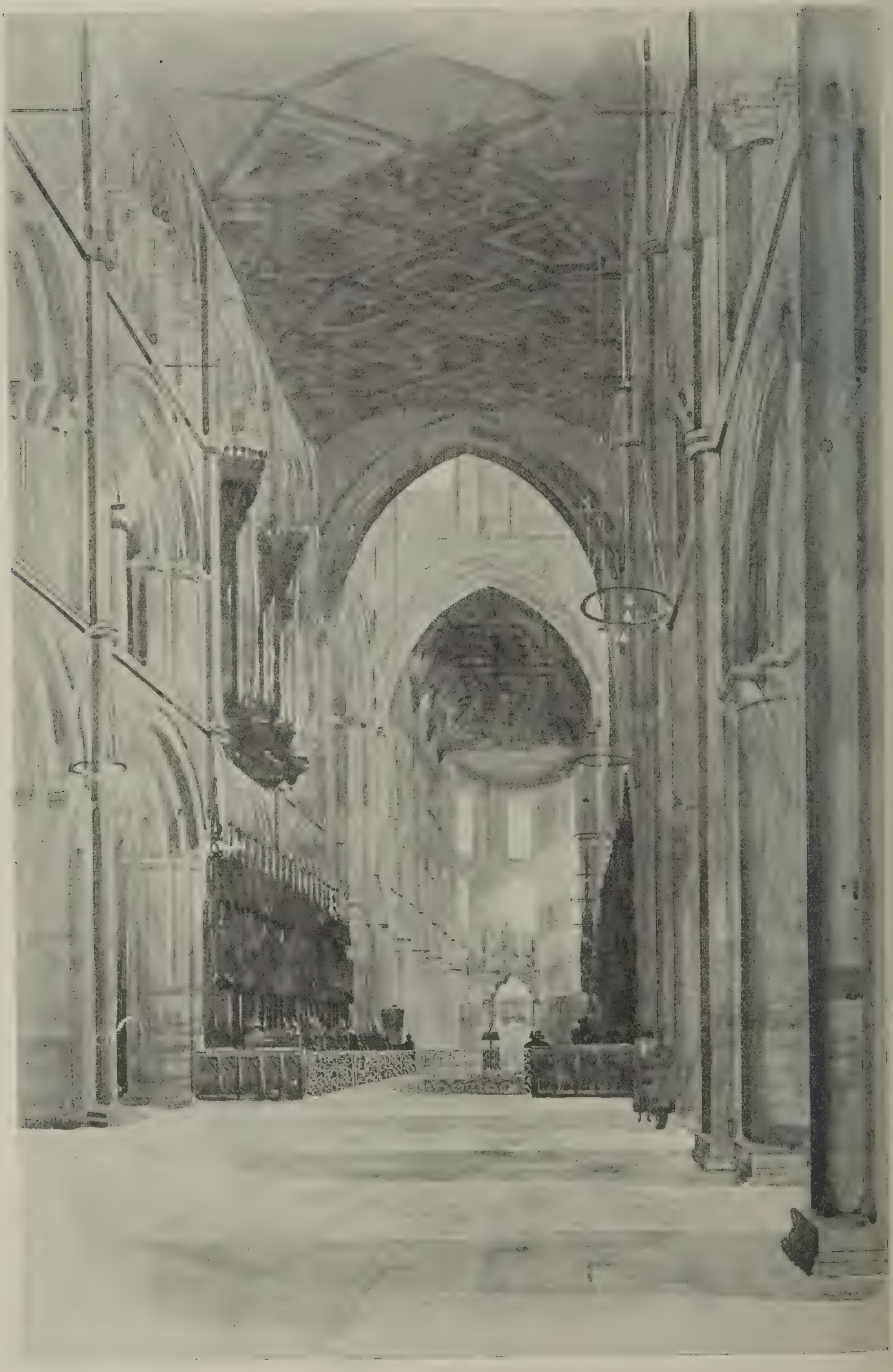
(See also next page.)

27-29 Tothill Street, Westminster, S.W.1.

c

Peterborough Cathedral

A Perspective Sketch of the Nave, Looking East



A Special Committee is to consider the electric lighting of the cathedral, and the pendants suggested are indicated. The stalls, too, are to be altered by turning the return stalls back. The small photograph on the previous page shows the present arrangements. Mr. Leslie T. Moore, F.R.I.B.A. (Messrs. Temple Moore and Moore), is responsible for the alterations.

THE
ARCHITECTS' JOURNAL
27-29 Tothill Street, Westminster, S.W.1.

dnesday, November 21, 1923

Volume LVIII. No. 1507

Architecture and Photography

T is interesting to observe how every material advancement or discovery tends to follow the lines of that which it supersedes or resembles before developing along individual lines of its own. A few examples perhaps serve to make this clearer. The first railway riages resembled stage coaches; the first motor-cars e but horseless carriages, until both evolved a form most ed to their purposes (and hence incidentally evolved a uty). In architecture we still find a tendency to use crete as if it were stone, and we shall continue to do so il the form most suitable to the particular qualities of crete has clearly emerged. But this tendency is not ted to matters of form. Perhaps the best modern mple is to be found in the cinematograph which has, as ne can doubt who has seen some of the best travel and ure films—the latter, either by speeding up and show- in a few minutes the growth of a plant, or by slowing n and showing the muscular movements of a trotting e, enabling a process to be observed in a way not ible by any other means—a definite and useful place ng the instruments subservient to man's comprehension fe, but which, nevertheless, still, quite foolishly, persists tile attempts to compete with drama and the ordinary e. Finally, we may instance, as an example of an in- ion concerning which as yet no attempt has been made erly to exploit it, the pianola or piano-player. Since instrument is not subject to the physical limitations of human hand, musical effects could be obtained which not possible by any other means. As far as we know, ever, no special music has ever been written for the o-player.

w photography (excluding the cinema) is, curiously gh, somewhat an exception to the generalizations that ave been making, for it is only in comparatively recent s that any serious attempts have been made to com- by means of the camera, with the art of painting. this is a purpose for which the camera is obviously itted, since a picture is something more than an *effect*, he expression of a certain personal reaction to a given f circumstances, and a machine cannot replace a per- ity. What, however, is the purpose for which the ra is most suited? In the first place we must cease y on the shibboleth "the camera cannot lie." It is as lacious as its manipulator chooses to make it. Every- nows, for example, how a wide-angled lens can make all room appear large, and everyone knows how an or lens entirely distorts distances, making a back- d appear in the photograph far more distant than it rs in reality to the human eye. And it is capable re subtle mendacity. Thus in portraiture a bad photo- is often one which has captured and rendered per- nt an expression of its subject which, although ate, is nevertheless not typical, and thus it gives a mpression of a personality—it lies.

vertheless, the camera can attain to comparative acy in recording impressions which are similar to recorded by the human eye, and it is along such lines that its main use lies. It should be a clear and accurate recorder of objects, and in such a capacity it is obvious that it can serve architecture.

The decline in architectural draughtsmanship and sketching is often deplored, and the camera blamed for it. But it must be remembered that architectural drawing is rarely an end in itself, but only a means to an end. When the end is the creation of a building the camera cannot assist; where, however, the end is to record an existing building the camera is often both more accurate and more expeditious.

But architectural sketching has a third purpose, and that is to familiarize the sketcher with a building. Here again, the camera cannot compete, for the process of photography does not involve that prolonged study and contemplation of a building from which alone intimacy is to be obtained. For this purpose then, architectural sketching will never be abandoned. But as a mere recorder of things encountered in the course of travel the advantage of the camera over the pencil is immense. Indeed, it may be said that the camera bears a similar relationship to the pen and pencil as do the train and motor-car to the post-chaise and horse. It enables more ground to be covered in a given time. In fact, by speeding up, it lengthens life.

When we speak of the accuracy of the camera we use the term relatively. The accuracy lies in recording an impression which is similar to that recorded by the eye, but the record of the eye is far from possessing any absolute accuracy. Of two buildings of the same size, that which is more distant appears smaller than that which is closer, and lines which we know to be parallel appear to converge, and so on. If, therefore, we wish for a more precise record of a building reliance neither upon the eye nor upon the camera will suffice, and we must record each dimension of the building, its length, breadth, and thickness separately. In fact, we must measure it. This, then, is another form of architectural draughtsmanship which the camera cannot supplant. The measured drawing still remains, not only the most complete record of a building that it is possible to make, but it also affords the best medium for its study.

A further advantage—one, however, fraught with dangers—is that it permits of a quick interchange of ideas. Buildings in any part of the world can be quickly recorded by means of the camera, and these records distributed whenever and wherever required, both quickly and cheaply. And just as rapid transport facilities are breaking down the use of local building materials, so the rapid interchange of architectural ideas, made possible through the camera, is breaking down local building traditions. This in itself is neither to be deplored nor commended, it is simply inevitable. The danger lies in an abuse of these facilities.

So far the only bad effect of the camera upon architecture has been to produce a certain confusion just on account of its power rapidly to record in distant places. This, however, is, we hope, but a temporary effect, and before long the power of the camera will be turned wholly to good, at least as regards its relation to architecture.

Notes and Comments

The City Churches

THOSE who have read the reports in the papers of the debate on the City churches by the Church Assembly must feel themselves as much confused as old Omar who—

> "— did eagerly frequent
> Doctor and Saint and heard great argument
> About it and about."

To judge from the speeches of Lord Hugh Cecil, the Dean of York, and the Bishop of London himself, it would appear that the thought of demolishing any of the City churches is the very last that would enter the heads of those who are behind the Union of Benefices and Disposal of Churches (Metropolis) Measure. Said Lord Hugh, there was "no more grotesque suggestion made than that this was a measure to destroy nineteen churches." Said the Dean of York: "The Assembly was unanimously conscious of the great value, not only to the City of London, but the whole country, of the art and beauty of some of these priceless buildings." (Note that dubious word "some".) Said the Bishop of London: "He did not wish anyone to feel that there were others who cared more for the beautiful churches in the City than he did." Very noble sentiments, but extremely vague. The Bishop was careful to emphasize his regard for the "beautiful" churches; he said nothing of those that he might consider "unbeautiful." The plain man who knew nothing of that little schedule of nineteen churches marked down as being of little or no architectural value might very well believe that this Union of Benefices Measure was specially framed to preserve these buildings from vandalistic hands. The fact of the matter is, as Sir Aston Webb, representing the principal architectural, art, and archæological bodies in London, has pointed out in a letter to the Press, that if the measure is enacted "there would appear to be nothing in principle to prevent the sale and demolition of any of the most important ecclesiastical buildings." The only reliable safeguard against the destruction of the City churches is to have on the Benefices Board a sufficient representation of the artistic and learned authorities. For the moment the whole matter is in abeyance, a committee of twelve having been set up further to consider the measure and, if possible, to adjust points of difference. There it must stand for the present. In the meantime the defence of the City churches is continually being strengthened by the accession of new forces to the ranks. The Bishop of London must by this time be fully aware that public opinion is resolutely set against the destruction of any of the City churches.

The Building Exhibition: A Suggestion

Public exhibitions in this country, while they are invariably of supreme utility, seldom make a satisfactory appeal to the eye. This is no doubt explained by the fact that in exhibitions, as in most other things, the Englishman is an individualist, and dislikes the idea of conforming to a general scheme. Up to a certain point this attitude is healthy; it makes for variety and avoids monotony. The principle of individualism has, however, been carried to an absurd extreme, and we are glad to note that there is a reaction towards the ideal of control in the design, planning, and general treatment of exhibitions. The Building Trades Exhibition is one that lends itself supremely well to architectural treatment. It appeals primarily to architects, who are naturally sensitive to the value of design. It is obvious, therefore, that the greater its architectural attractiveness the more successful it will be both as a spectacle and a business proposition. The time seems to have come when a definite programme might with advantage be laid down for the architectural treatment of the exhibition. The difficulties in the way of an architectural lay-out are recognized, but, notwithstanding, much could be done to improve the exhibition in this respect. It is in connect with the stands, however, that scope for improvement more readily found. Some stands do not, of course, l themselves readily to architectural treatment, but in great majority of cases they certainly do. It needs v little imagination to realize the great improvement t would be brought about if every stand were designed an architect. The exhibition, by the adoption of architectural principle, would gain in many ways; it wo be more attractive to the eye, would increase the interest architects, would help to improve the taste of the gene public, and, by example, would tend to raise the standar exhibitions generally. There is plenty of time for suc reform to be carried out in connection with the n Building Trades Exhibition which opens at Olympia April of next year, and we put forward the suggestion the consideration of the promoters and of the exhibit

"The Fortune" Theatre

It was an inspiration to call the new theatre which now nearing completion next door to Drury Lane, "T Fortune." The name pleasantly revives memories of historic "Fortune" theatre of Alleyne and Henslowe t stood in Golden Lane, and was, in its time, the m powerful rival of Shakespeare's "Globe" on Banksi also it is a name that has in it a pleasant sound of prosperi Mr. Lawrence Cowen surely deserves to flourish for courage in building London's first post-war theatre. verting to the subject of nomenclature, it is odd that many of the names of famous early theatres should h been allowed to die out. The "Globe" is certainly p petuated in Shaftesbury Avenue, but where is the mod namesake of the "Rose," the "Hope," or the "Swa famous Bankside playhouses in their day? And what the earlier and equally famous Shoreditch houses of Ja Burbage—"The Theatre" and the "Curtain"? The la name is singularly apt and might well be revived, tho the former might conceivably lead to complications, be rather too aggressively exclusive to be popular with managers of rival playhouses. We look in vain, also, f modern representative of the "Phœnix," an early sev teenth-century house that, by an odd coincidence, st upon the very site of the new "Fortune." Obviously th is no lack of good historical names for those new playho that ought soon to be a'building if London is to keep p with the increasing popular demand for dramatic entert ment. The architect of the new "Fortune," by the w is Mr. E. Shaufelberg.

A Forgotten Theatre

Speaking of theatres, we wonder how many Londo outside the theatrical profession know of the old "P cesses" theatre that still stands in Oxford Street. To- it is used as a furniture store by Messrs. Warings. Strip of its seats and furnishings it is a mere shell, and the visi climbing gingerly its mildewed staircases, and stepping c fully across the mouldering floors of its empty circle gallery, has difficulty in realizing that the house was o a place of light and laughter and echoed to the voic many a noted player strutting and fretting his hour u the stage. The place is pathetic in its desolation. A remnants of furnishings remain—a little moth-eaten p on the balcony of the royal box, a few tattered fragment the flies. In the corridor dusty placards ironically en "Silence," where silence has prevailed near upon a qua of a century. Upon the walls hang torn playbills adverti plays long forgotten and actors long since dead. dressing-rooms are empty, their floors covered with plaster that has fallen from walls and ceilings. Here is dust of ages and the silence of death. To walk around place is like going into a tomb. The noise and bustl Oxford Street as you come out are a welcome relief.

ONTHLY CAUSERIE

Joking Apart

A Punch at the Punchers

POSTERS are so generally regarded as unnecessary,
ugly, tiresome, vulgar and assertive, inimical to
architecture, offensive to the eye, vexing to the
mind and depressing to the spirit—as things in
flict with our best hopes for civilization, and as mon-
us intrusions of the individual upon rights and privileges
mon to the community, that it is a refreshment to hear
r merits extolled and expounded by those master minds
ch decree the shape, size, design, and position of the things.
ıas recently been my portion to be thus refreshed—or,
me say, galvanized—when certain eminent exponents
he trade, profession, or art (whichever it is) of bill
ing, placarding, fly-posting, sea-shore disfigurement,
dirtying, deformation of architecture, eye-sore inven-
, railway defacement, violation of night, and landscape
ruction stood up and, with the easy assurance and
llectual calm of the richly-informed instructing the
rant, bestowed upon us the garnered wealth of their
wledge and experience in this comprehensive message :
sters must have punch." A poster, we are told, need
be veracious nor beautiful nor stationed with deference
ublic amenities, nor need it convey any useful informa-
; it may with equal fitness be untruthful, ugly, annoy-
intrusive, and designed to victimize ; the one essential
at it should have punch. A poster with the right sort
ınch is justified as a contrivance that unloads the goods ;
without punch is negligible.

will not develop my theory that the advertisement
nate is the last state of the street boy who chalks
ngs and advances to poetical and pictorial pencillings
he walls of public places, nor will I waste printers' ink
busing poster advertisements, for each of us can do it
oughly well and to his own liking, I fancy. It is more
table to explore behind the scenes, but before doing so
ıay well take a view of the stage from the front. We
rchitecture disfigured by gigantic lettering and sky
, as lately travestied by Mr. George Morrow in the
s of "Punch"; walls, hoardings, railways, piers, and
es, are placarded far and wide; when we travel we
unched by advertisements on the risers of steps and on
loors of the carriages where they defy all efforts at
uction, and it is only the menace of handcuffs and prison
that protects us from being punched whenever we get
a taxi. At the hotel where we dine we are punched by
nustard pot, we are punched by the ash tray, we are
hed by the saucer upon which our glass of beer is
d. In the writing room we shall probably be punched
ne paper knife, the blotting pad, the inkpot and the
s pictures on the walls. When we go out into the
ts and our wearied and disgusted eyes shrink from the
tonous imbecilities that infest the night like a legion
pping dogs, and seek comfort in the honest pavement
the same bragging drivel, reflected there by concealed
rns in the shop windows, accosts them, and the un-
ing windows flash repetitions of their jaded boasts full
us as we pass. On a fine day we may at any moment
e a punch from the sky, and we are promised that our
l immunity from this assault will shortly be corrected
writing is to be put on a "sound commercial footing."
go abroad we find the British cad commercial giving
ad to his continental rival by bedaubing the towns
ountryside of France and Belgium and, no doubt,
lestine and the Congo as well. It can be said that the
of England's commercial stunts—the feeding-bottle
hat prevents infantile paralysis, the saucepan scraper
nsures a happy married life, those registered precious-
, "Dirto," "Muckite," "Coughite," and "Sneezo,"
ll the rest of the superfluous, trivial rubbish, which
the advertising adept plagues the public into snapping at as a dog snaps at a teasing fly—extends far beyond her natural boundaries.

"Bird Lard"—has anyone heard of the wonderful discovery ? I first heard of it at this instant, when I wrote the words. For the occasion I am going to fill the part of the rogue who invents and markets such things. "Bird Lard"! There is money in it! The words envisage the light, luscious, nourishing, rich and delicate fat of birds. It will not occur to you to ask what "Bird Lard" is to be made of, for the name itself satisfies you completely, and you are aware that such questions are neither asked nor answered. In point of fact it is of no consequence what "Bird Lard" is to be made of, whether reduced from glycerine derived from obsolete explosives or expressed from the livers of sharks, or obtained from any promiscuous offal that may be available. The one important thing is that it should be introduced to the notice of the public by posters with lots of punch, to which end the advertising adept would be asked to lend a hand were I not convinced that I—or any dullard for that matter—could do the job as well as he can. "Bird Lard's" self-recommendation might take the form of a poster depicting a central packet of the fraud emitting rays suggesting radio-active merits, and framed in an immense cloud of gaily-feathered ducks and geese in full flight. "Bird Lard," I might bellow from the sheet, "is superior to hog's grease (common lard) as is the glory of the open sky to a pig-sty. A godsend to humanity." I might also use the intimate domestic punch and show a beautifully-dressed young woman rolling pastry in the presence of chubby, laughing children—"Hurrah! No tummyache to-day. It's 'Bird Lard'!"; and append a sample of the godly admonition punch we are all familiar with : "Think of the delicate organs of your little kiddies! You would not embitter their young lives with the demon dyspepsia! Then use 'Bird Lard'"—and so on. It is all as easy as lying. The one essential qualification is a moribund conscience and an atrophied sense of humour. Please observe that truth is here—commercially—satisfied. It is nowhere said that "Bird Lard" is in any way derived from birds; an analogy only is presented, and if you imagine you are regaling on goose fat, that is your look out. "Bird Lard" will do you no harm, any way. It is honest grease.

It will be objected, no doubt, that all posters are not fraudulent—I agree—and that some are honest recommendations of veritable commodities. I again agree. I wish only to call attention to the prevailing complexion of posters as a whole—the spirit of sly deceit and hypocrisy in which they are conceived and presented; and as for honesty—honesty depends upon what we happen to regard as dishonest. Our civilization is built upon a presumption of a code of honour which is also instinctive in human nature. The common exploitations of commercial enterprise traffic on this code, just as the success of a player who cheats the rules of a game depends upon others observing the rules. The inventors and marketers of commercial stunts, bolstered up by the disingenuous devices of the advertising puncher are, for this reason, parasites on the public; for if the principle of the individual preying on the community ruled, civilization would be impossible and mankind would finally climb back into the trees, where, according to the best authorities, he once sat and scratched himself. Under the communal code "Bird Lard" is a disgraceful fraud; the commercial code regards it as a stunt not more tricky than the majority and not to be sniffed at on the score of dishonesty. There are, however, hundreds of acres of posters advertising commercial stunts beside which "Bird Lard" is decidedly maculate. For instance, any dentist will tell you that common salt is the best thing to use with the tooth brush. If I make up such salt into a paste, and colour it pink, and spice it up with cloves and put it in tubes, and call it "Karsho: a Godsend for the Gums—the Newest and the Best," and employ a professor of commercial bunkum to punch it home upon the public by using pyorrhœa and other dental horrors as one might a stick to scare sheep, and sell it at an extortionate price, I shall be quite justified according to commercial ethics. "Karsho" is as good as anything of its kind; I make no claim for it that the best authorities would toggle at; I am, in a definite degree, benefiting my fellow men, and there is in commerce no conception which discredits a man for selling a thing at a price the public is willing to pay for it. "Karsho" is in quite another court of honour th "Bird Lard"; but is the proceeding honest?

It is evident that a man who exercises himself to g money out of the public by such a device is subverted a sophisticated from the natural impulses with which he w originally endowed. Commercial sharks and bunku punchers were once children like the rest of us, doting shells, and pebbles, and feathers, and flowers—str emblems of God's workshop; they imagined themselv bounteous princes; policemen and soldiers who did her things; they grew to be wholesome boys, ambitious to pl the game among their schoolfellows, or "scouts," proud remember the things a scout does not do. When, then, a by whom, were they seduced to claptrap exploitation of t foibles and necessities of their fellow men? KARSHISH.

No. 223 Regent Street, London

A New Departure in Shop-Front Design

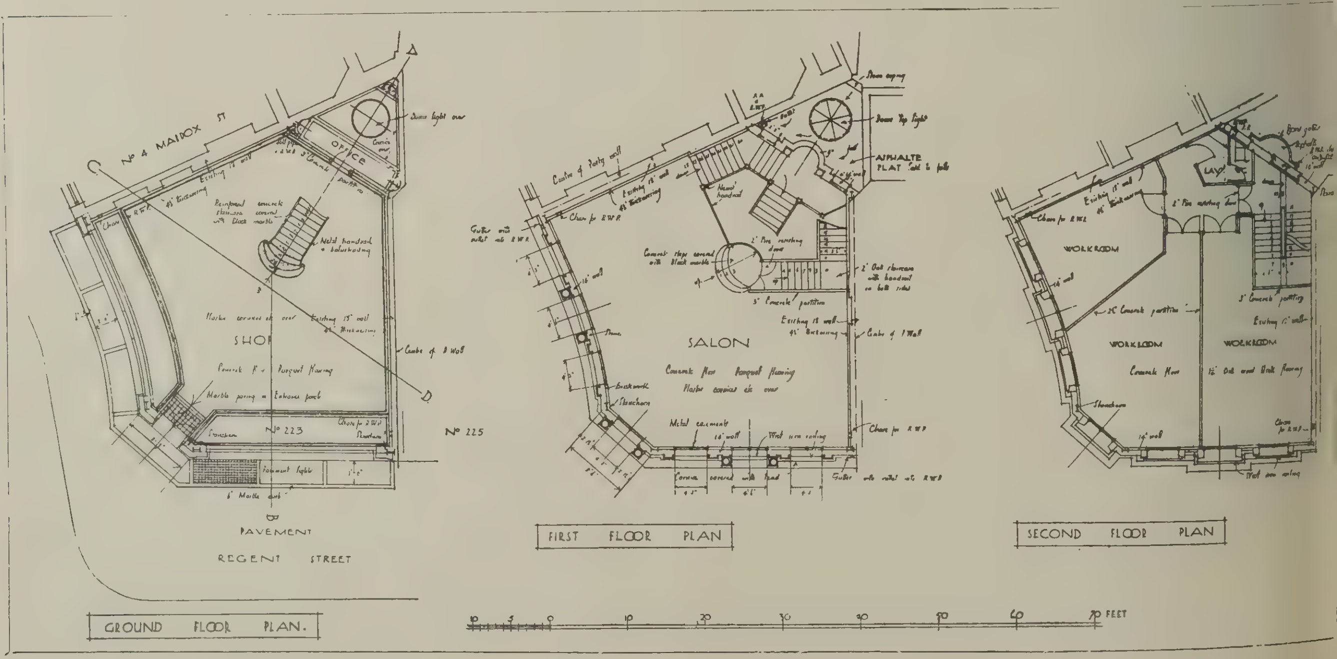
YATES, COOK, and DARBYSHIRE, Architects

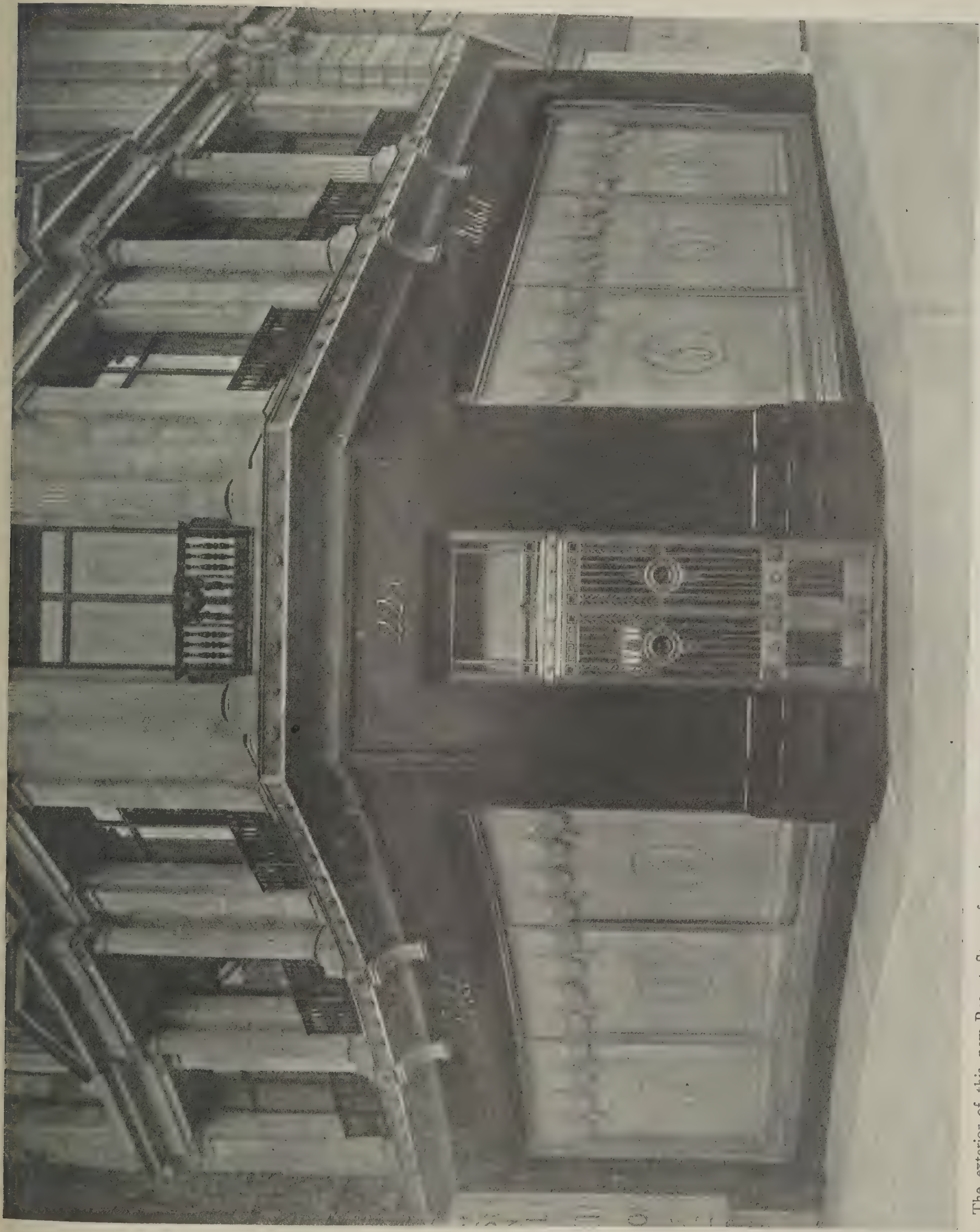
ONE redeeming feature of the reconstruction of Regent Street is the opportunity it has provided for the introduction of some fine new shop fronts. One of the best so far erected is that for "Isobel," the well-known dressmaker, by whose courtesy and that of the architects, Messrs. Yates, Cook, and Darbyshire, we are able to reproduce the accompanying illustrations. This front strikes quite a new note in shop-front design. It is very simple, yet extremely effective. Its most arresting and valuable feature is a black marble surround, which makes a very pleasing contrast with the silver-bronze shop frames and entrance gates, as well as with the Portland stone superstructure. The value of a black surround has never been more effectively demonstrated. The front, in the taste which it shows, not only in the choice of its materials but in the design and general handling of its detail, is one that sets a new standard for Regent Street—a very high standard. It will probably exercise considerable influence over the treatment of those portions of the street that yet remain to be dealt with.

The interior decorative scheme is of a refined and restrained character, and makes an excellent setting for the gowns displayed therein. Black marble and silver bronze have been extensively used inside, and the staircase of black marble is a striking feature of the ground floor sal The flooring in the salons is of grey parquet.

The heating is a low pressure accelerated system, b special arrangements were made in dealing with the sal and shop floors. On the salon floor the radiation w arranged in such a way as to conform with the scheme decoration, the radiating surfaces being unobtrusive, maintaining a high efficiency. On the shop floor a simi arrangement is supplemented by the recirculation of through a specially designed battery in the basement, th ensuring, in addition to heat, a constant movement of ai

The general contractors were Somerville & Co., Ltd., a the following firms were sub-contractors: The Somervil Barnard Construction Co. (steelwork); F. J. Barnes, L (Portland stone); W. James & Co. (metal casement Wm. Morris & Co., Ltd. (silver-bronze gates, balustradi and grilles, and nickel glazing to window at top of sta way); Jenkins and Sons, Torquay (black marbl Martyn & Co., Cheltenham (decorative plaster wor Hollis Bros. (parquet and wood-block floors); F. Sage & C Ltd. (shop fronts); P. Turpin (fitting rooms and enclosur Mumford, Bailey and Preston (heating); Mann, Egerton Co., Ltd. (electric light); Maple & Co., Ltd. (furniture a hangings).



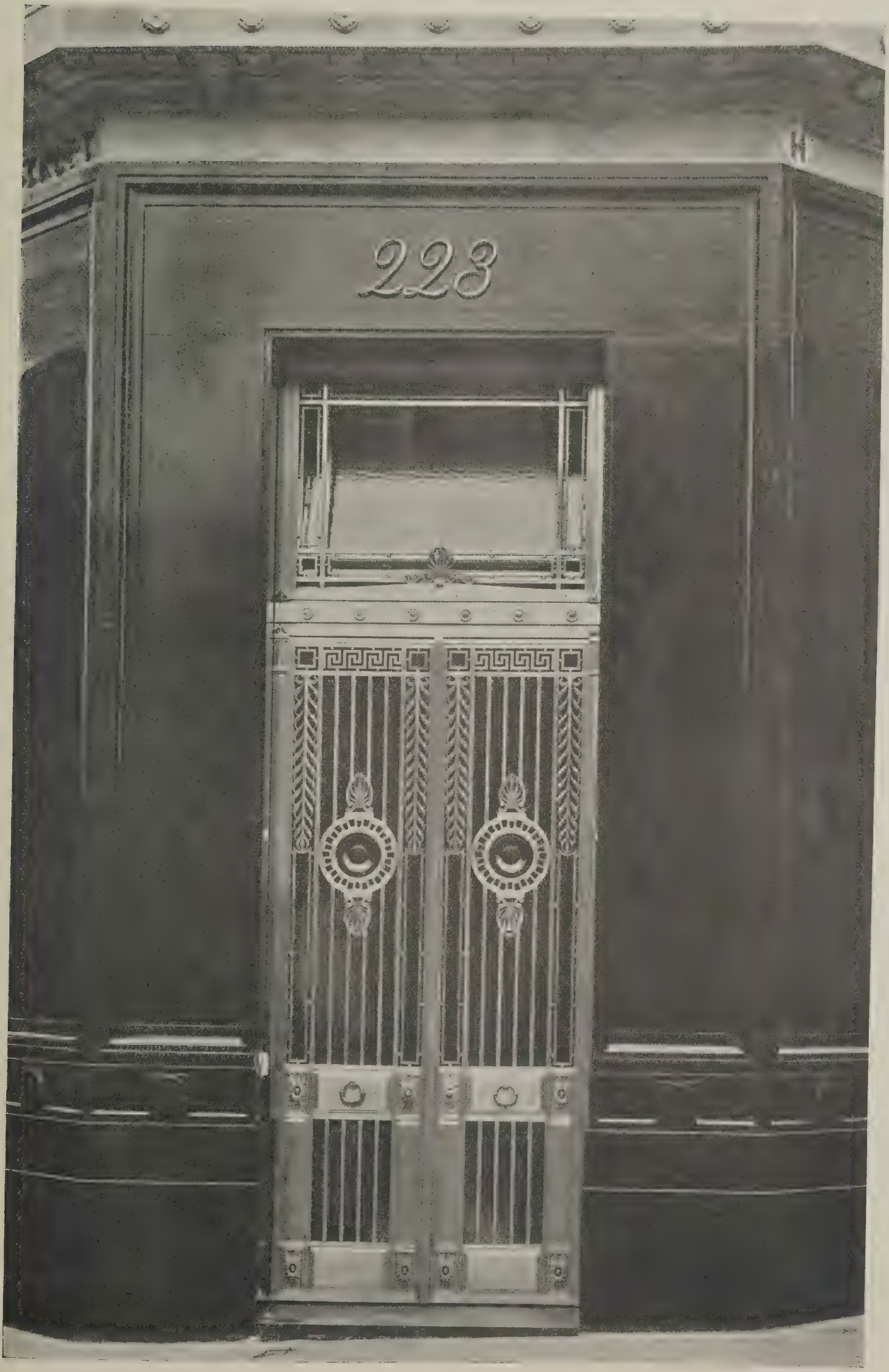


The exterior of this new Regent Street front is most impressive. It vies with the interior in elegance of design, and is completely up-to-date in modern requirements. Much of its success is due to the introduction of a black marble surround embracing the fronts and the corner entrance.

THE LIBRARY
OF THE
UNIVERSITY OF ILLINOIS

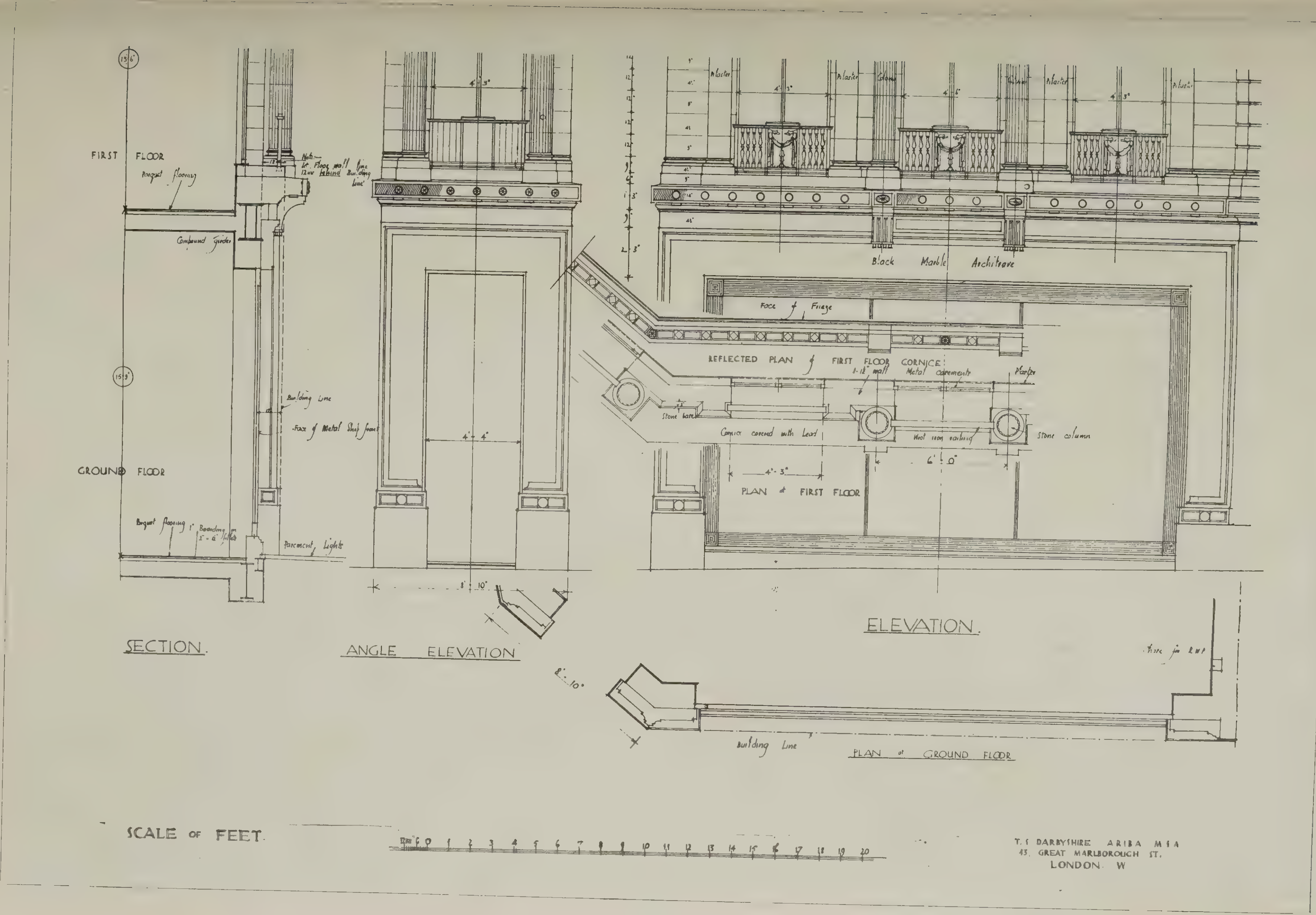
Shop Fronts. 16.—No. 223 Regent Street, London

Yates, Cook, and Darbyshire, Architects

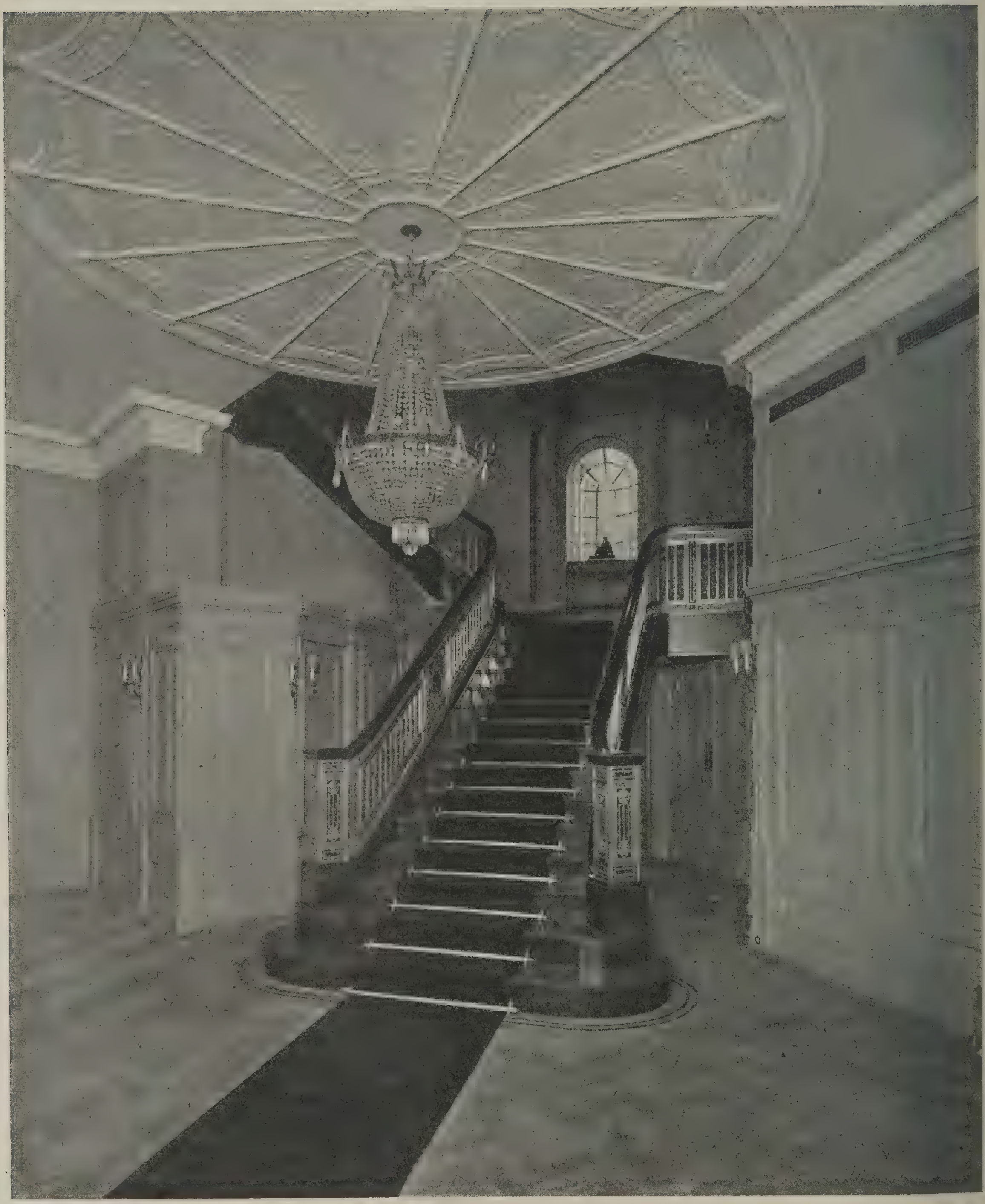


This gateway, of silver-bronze, has been made the central feature of the design. The front is one of the most successful in the new Regent Street, the use of a black marble surround giving it an air of great distinction.

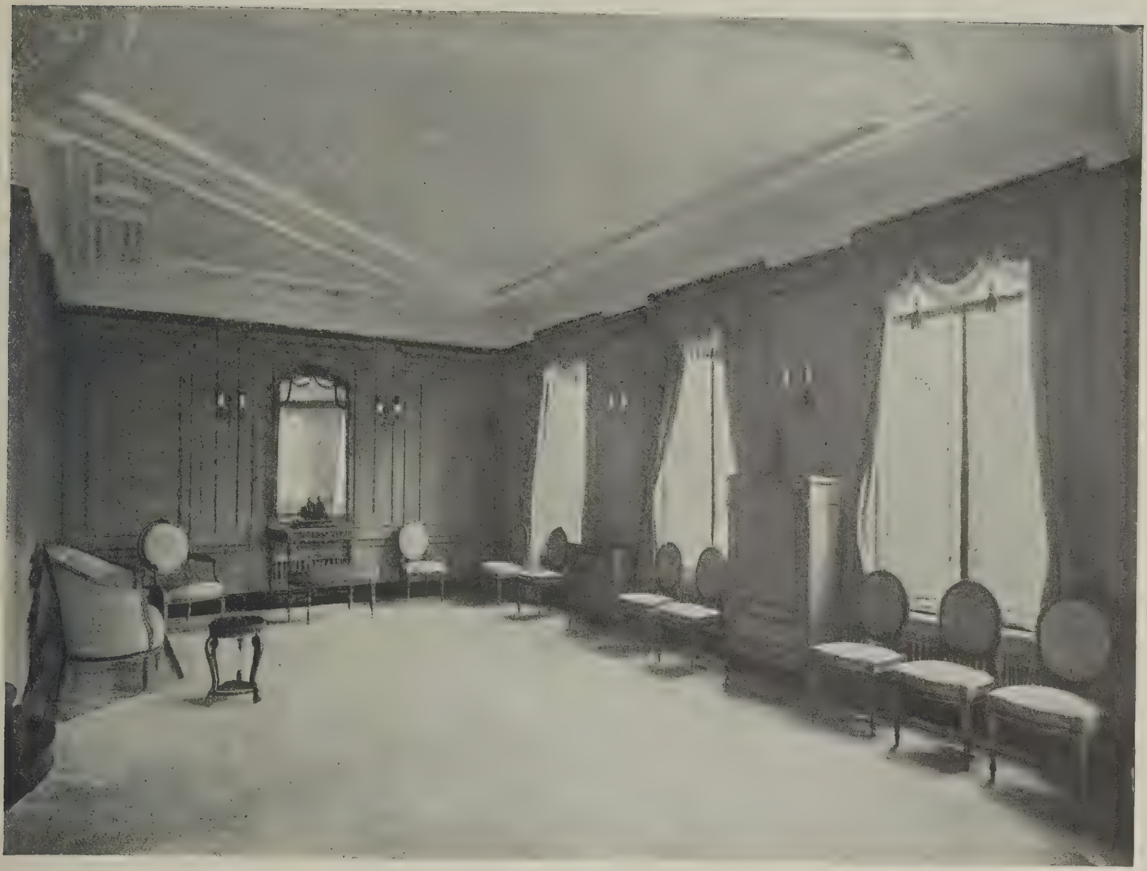
THE LIBRARY
OF THE
UNIVERSITY OF ILLINOIS

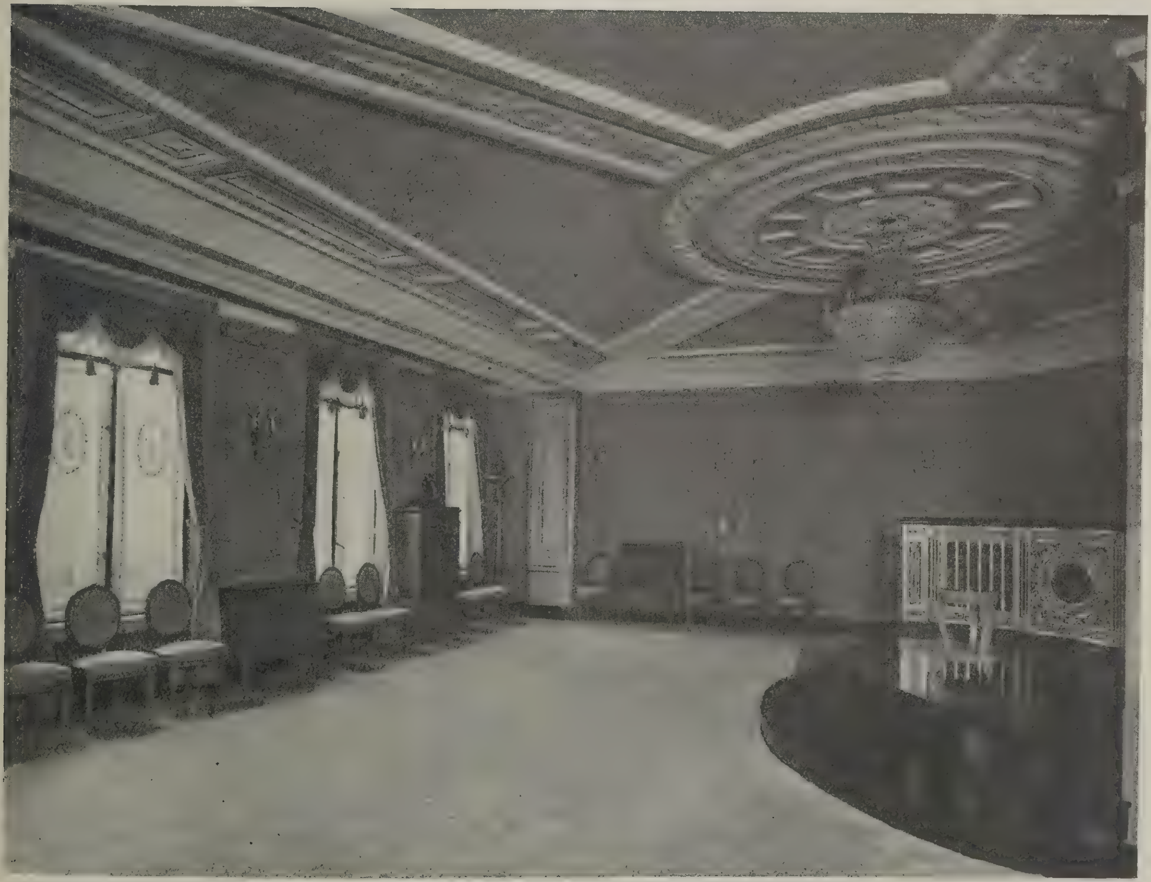


NO. 223 REGENT STREET, LONDON: A DETAIL OF THE FRONT. YATES, COOK' AND DARBYSHIRE, ARCHITECTS.

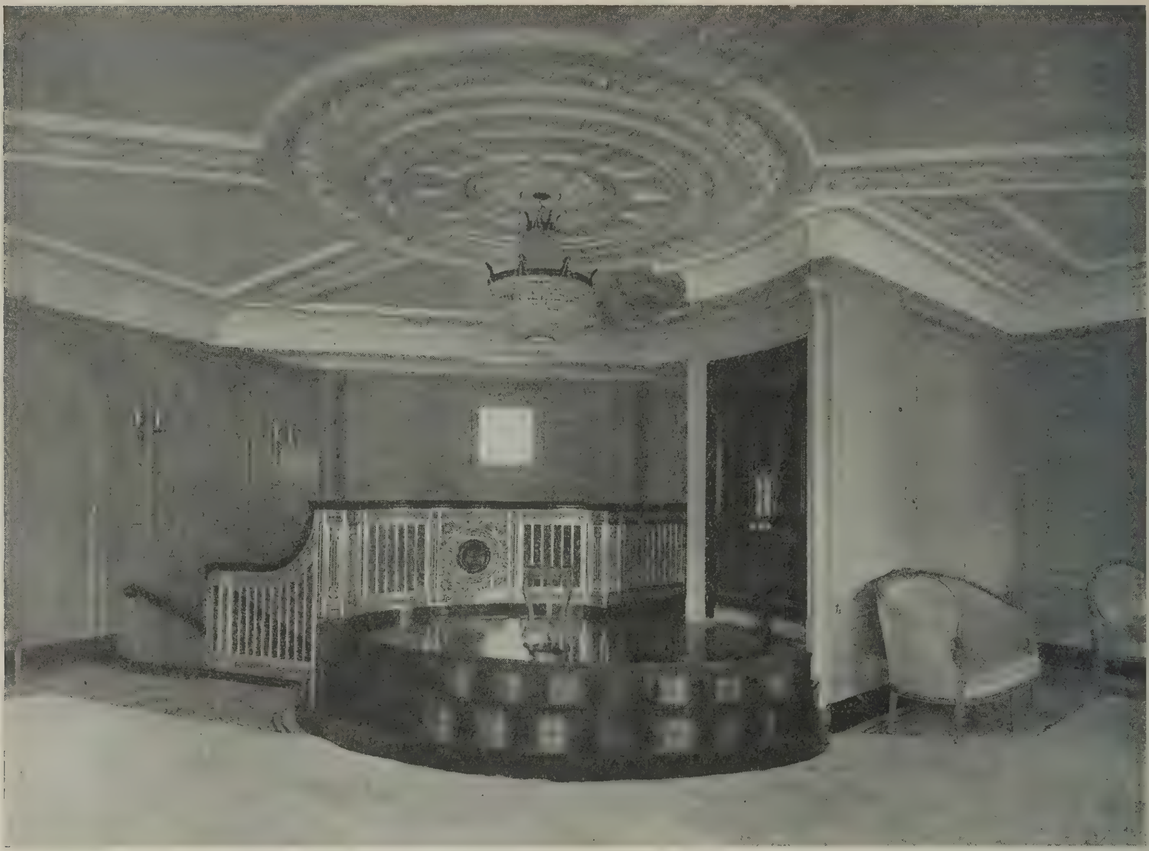


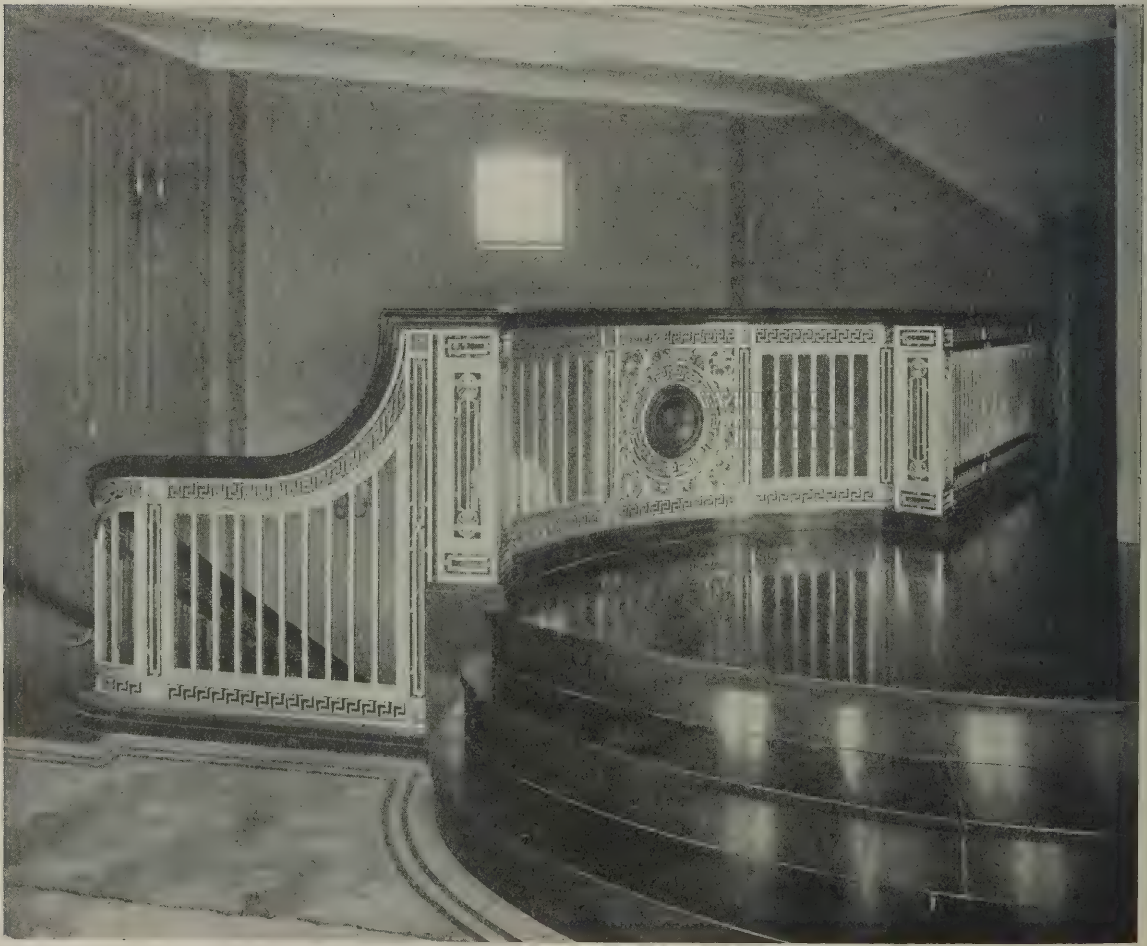
NO. 223 REGENT STREET, LONDON: THE STAIRCASE
YATES, COOK, AND DARBYSHIRE, ARCHITECTS.





NO. 223 REGENT STREET, LONDON: THE SALON.
YATES, COOK, AND DARBYSHIRE, ARCHITECTS.

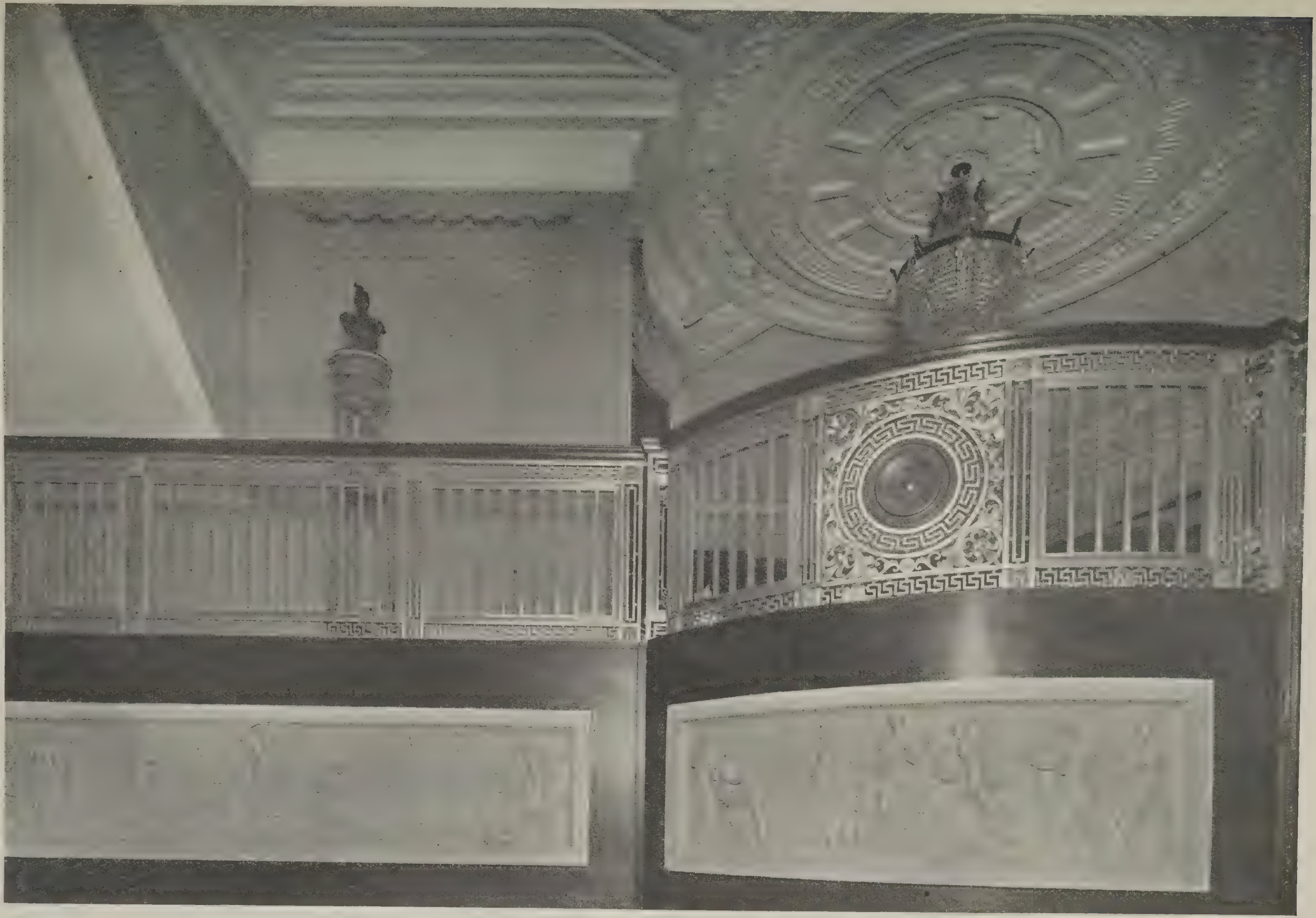




NO. 223 REGENT STREET, LONDON : THE DAÏS.
YATES, COOK, AND DARBYSHIRE, ARCHITECTS.

Details of Craftsmanship. 24.—No. 223 Regent Street, London : The Surround to the Daïs

Yates, Cook, and Darbyshire, Architects



Great effect has been obtained by the use of black marble and silver bronze for the staircase and daïs in the salon, whilst the panels on the external face of the daïs have a classical motif in keeping with the general scheme.

THE LIBRARY
OF THE
UNIVERSITY OF ILLINOIS

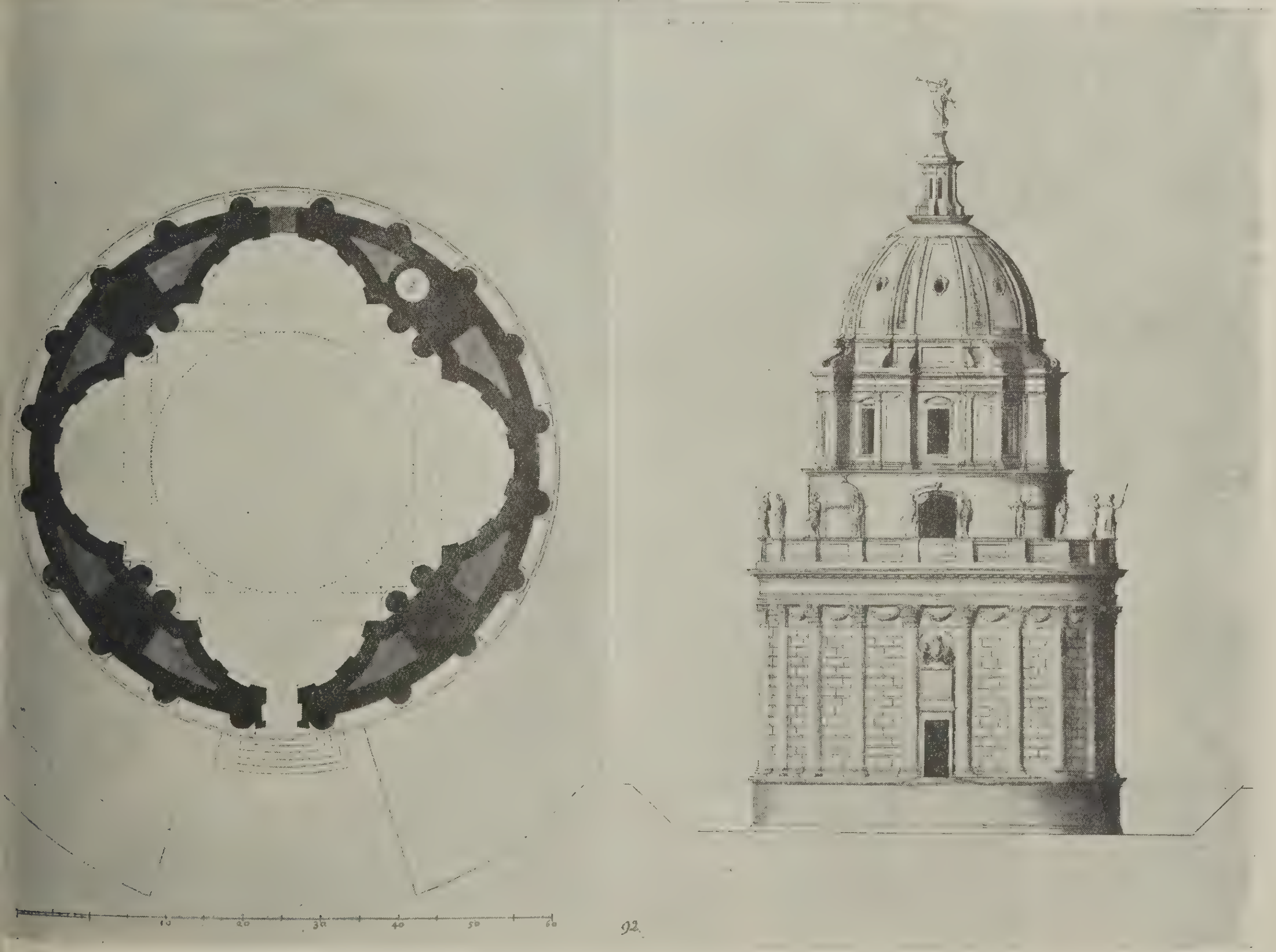
Sir Christopher Wren

The Bi-Centenary Memorial Volume

THE particular advantage which accrues to posterity when viewing the works of a great man is the ability, not so much of assessment, as of seeing their position in the endless unfolding time. And with an outstanding figure it is both in-resting, and sometimes instructive, to speculate as to ow development would have taken place if that particular e had never existed. What of literature without ante? What of music without Bach? And what of nglish architecture without Wren? It is by means of ch speculation that it becomes possible to obtain some ea as to the part played in the general evolution, not only a particular art or science, but of civilization itself, by e life and works of a great man. It is not in the fact that . Paul's Cathedral, as we know it and love it, would never ve been; that the sky-line of London might not have been tted and pierced so beautifully by the towers and spires the City churches; that Oxford would have been a less chanting city if Wren had not lived, that interest lies, t rather in trying to determine along what course English chitecture would have developed.

What was it that Wren's particular genius did? Is it t that living at a crucial moment when new thoughts and w ideas were surging up through France, and had, indeed, eady just touched the shores of England, he seized them, nsmuting them into something that was soon to become almost native? And doing it, too, not tentatively or timidly, but with surpassing decision and boldness, so that by the time he died English architecture was no imported product, having about it the air of a wilting transplantation brought from the warmth and sunshine of the south to the rigorous north, there to survive only as a curiosity carefully nurtured by the affluent, but a virile stocky growth having already assumed a native friendliness and sturdiness.

In a volume of this kind * we should like to have seen some critical essay of Wren's place in that great movement in which he was such an outstanding figure. The fact that there is none is, perhaps, of deeper significance than at first appears. It means, in fact, what we are all at last beginning to realize, that there is no informed criticism of architecture among laymen. If such an anthology were contemplated, having as its subject the life of a great painter, there would be no difficulty in obtaining interesting and enlightening critical matter, not from the pens of painters, but from others who had studied the art without practising it, and would be, therefore, better equipped for judgment and assessment. And being men of literary ability their very criticism becomes in itself a work of art. In Wren's day there was no lack of informed architectural criticism;



PLAN. ELEVATION.

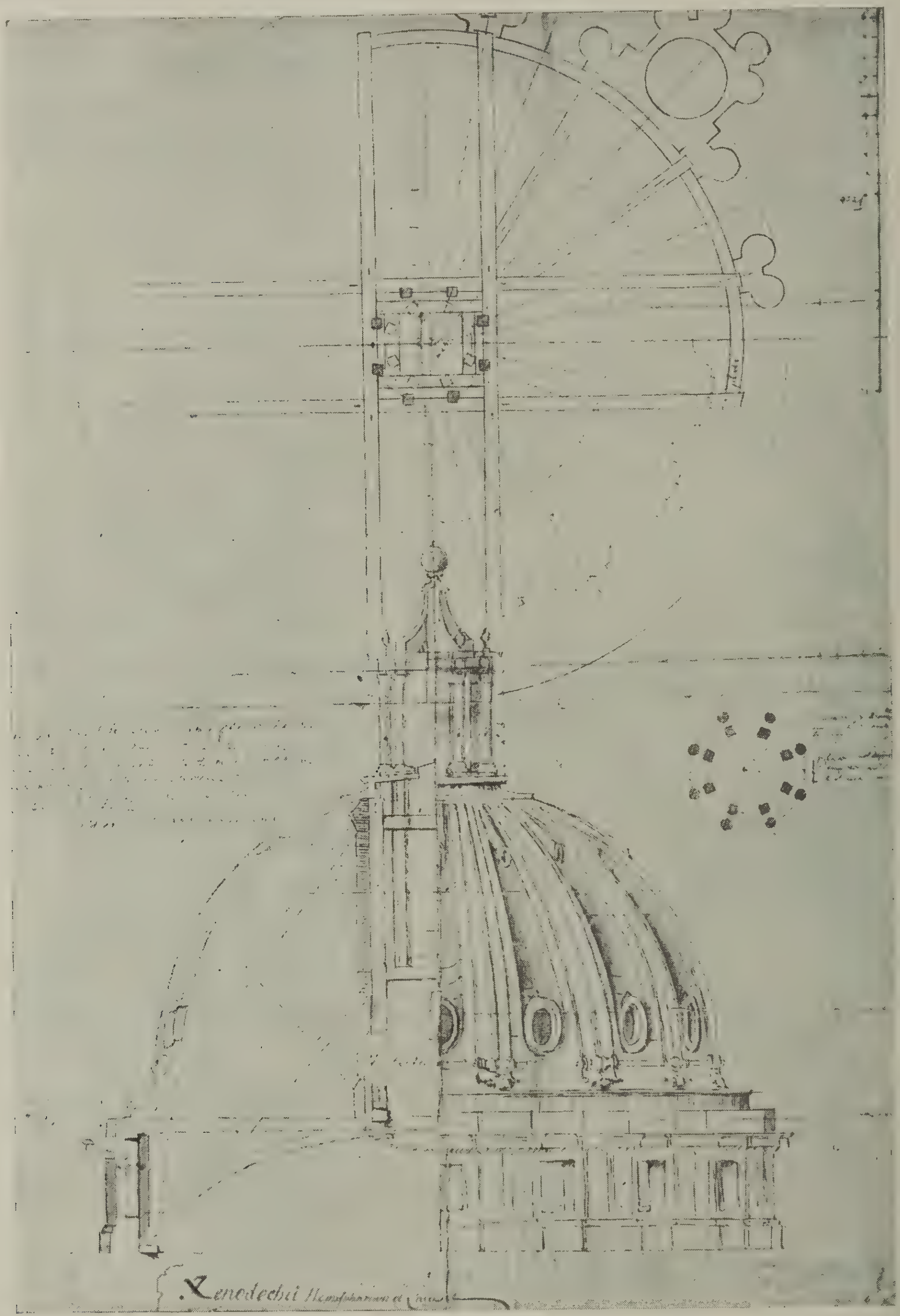
DESIGN FOR CHARLES I.'S MAUSOLEUM AT WINDSOR (ALL SOULS' COLLECTION.

(*From "Sir Christopher Wren: Memorial Volume."*)

---

* Sir Christopher Wren. Bicentenary Memorial Volume. Published under the auspices of the Royal Institute of British Architects. London: Messrs. Hodder and Stoughton, Ltd. Price £5 5s. net and upwards.

indeed, every gentleman regarded it as part of his training to have more than a casual knowledge of the art. And all through the eighteenth century this interest in architecture continued, but in the nineteenth it steadily declined, and literary figures, for the most part, dominated the Victorian stage. To-day, however, there are signs of a reviving interest in architecture among all classes, and it would, we think, have added to the interest of a volume such as this had it contained some indication of this revival. And what, indeed, could have been fitter than to have alluded to so pleasant a coincidence, that two hundred years after the death of England's greatest architect the people awaken once more to the value and significance of good and beautiful building, their interest finding, as it were, a rallying point about this great figure ?



DRAWING OF GREENWICH HOSPITAL DOME: HALF-SECTION ELEVATION AND PLAN

The writing on left side of the drawing is by Professor P. L. Donaldson. "This," he writes, "appears to be an original drawing of Sir Christopher Wren, a rough draft by his own master hand. The Latin title is characteristic." (R.I.B.A. Collection.)

(*From "Sir Christopher Wren: Memorial Volume."*)

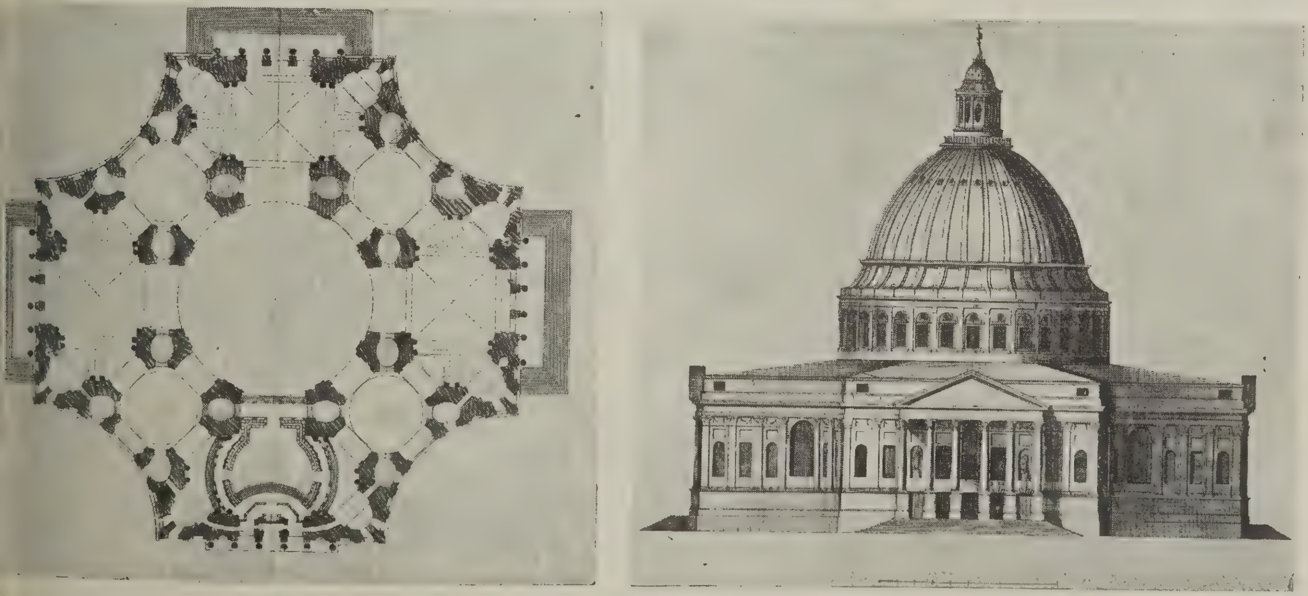
As it is the contributors to this volume are withc exception specialists, and although the matter is invarial interesting, it is, for the most part, of an historical natu whereas we think at this juncture an attempt to discov how mankind to-day reacts to the work of Wren wou have been of more permanent value.

One of the most suggestive papers is that by Profes Beresford Pite—"The Design of St. Paul's Cathedra If we would study a great building it is not sufficient t we should know the details of its construction and traditions that influenced its design, we must know m more; we must study contemporary history in all manifold aspects both at home and abroad. Profes Pite indicates the effect of England's breach with Ro which stemmed continental influence; but the Stuarts, know, were playing constantly with the idea of a papal *pprochement*, and this had the effect of restoring cultured ercourse with the continent. St. Paul's was one of the t and finest fruits of renewed intimacy. Then, too, we rst remember that St. Paul's replaced the largest and, haps, most revered church in the kingdom. So revered s it, indeed, that seven years elapsed after the Great Fire, l £11,000 were spent in patching before the idea of re- lding the old church was finally abandoned. The uggle, as Professor Pite so suggestively points out, s between ecclesiastical and architectural ideals. "The ply-rooted conservatism of religious tradition, together h the new force of Puritanism, were face to face with the v irresistible classical task of the world; a new power t had dethroned the mediæval art of building, dissolved guilds, destroyed its crafts, and that despised its tradi- ns." He then shows how differently an analogous ation would be faced to-day. For then architecture ; full of self-confidence, a quality which it preserved right ough the succeeding century; and, indeed, well on into nineteenth, for it is only through self-confidence that we account for some of the terrible juxtapositions which n constitute that century's so unwelcome legacy. But ards the end of the nineteenth century self-consciousness an to replace self-confidence, and to-day the substitu- n is so complete that we are left groping darkly without architectural ideals to guide us.

his self-consciousness is the penalty which we pay for scientific advancement. Whereas Wren himself never velled farther afield than to France, and then only for a nparatively short visit, and had but scanty access to architecture of other countries, and then, through the lications of such men as du Cerceau, the Marot and Le tre families, Serlio, and the like, only to work which in harmony with the aspirations of the day, now we e details of almost every building of note that the world known on our book shelves, and illustrations of every temporary architectural activity of note in our architec- l journals. Moreover, we ourselves can visit almost any ntry conveniently and expeditiously. It is inevitable such great changes must alter our entire architectural ook. And so we cease to become certain of what is t, and without certainty no great work is ever produced. n was certain of what he wanted, and, although like ost every other architect, he was forced to make slight promises, his work, for the most part, reflects this ity.

s has been mentioned, Wren's great work lay in the domesticating of an alien architectural form just as Milton's lay in domesticating an alien literary form. But neither Wren nor Milton acted consciously as we should be obliged to do to-day to effect a similar result. They were born amidst new ideas, which, as it were, condensed or crystallized upon them. But, nevertheless, every great artist must have some derivation for his forms, even though they may be transmuted into something new in the process of expression. The forms which Wren adopted were not then indigenous to England. From whence then did they come to him? For the most part they came from France, which he visited, and the Netherlands, which he did not visit. If a sweeping generalization is permissible, it might be said that his monumental work is the result of French influence, and his domestic work of Dutch influence. And these two aspects are delightfully dealt with in essays by Mr. Henry Ward and by Mr. Arthur Stratton. Just now there is a reviving interest in Dutch architecture, so that we are beginning to realize once more how our so-called Queen Anne style, which seems to-day in its dignity and placidity to be absolutely indigenous and redolent of English sentiment, is a Dutch importation. Dutch influence is, indeed, older than is generally appreciated; it existed already in the reign of Elizabeth. Curiously enough it was an influence founded not so much on friendly admiration as on trade rivalry. The Dutch were at the beginning of the seventeenth century at the height of their successes, and, despite their jealousy, the English found themselves adopting and emulating things Dutch, seeing that they appeared to yield invariable success. One of the most far-reaching results of this was the extensive development of brickwork. The brick, for natural reasons, has always been the prevailing building material in the Netherlands, and it may here, with interest, be noted how this national material is being adopted to startling, but by no means unpleasant, new forms by the school of modern Dutch architects.

The Renaissance produced many great figures whose outstanding characteristic was their immense versatility. They viewed the world from a lofty eminence, as it were, from which they were able to correlate man's various activities. Of such calibre were de Vinci, Michael Angelo, and Christopher Wren. Wren, indeed, stood midway between the scientific and the artistic developm~~ent of his age~~, epitomizing in that respect the ideal qualities of a great architect. And the step from mathematics and astronomy to architecture is not so great as it may superficially appear. Apart from the practical value of mathematics in building construction, in the study of it, as an abstract pursuit, is

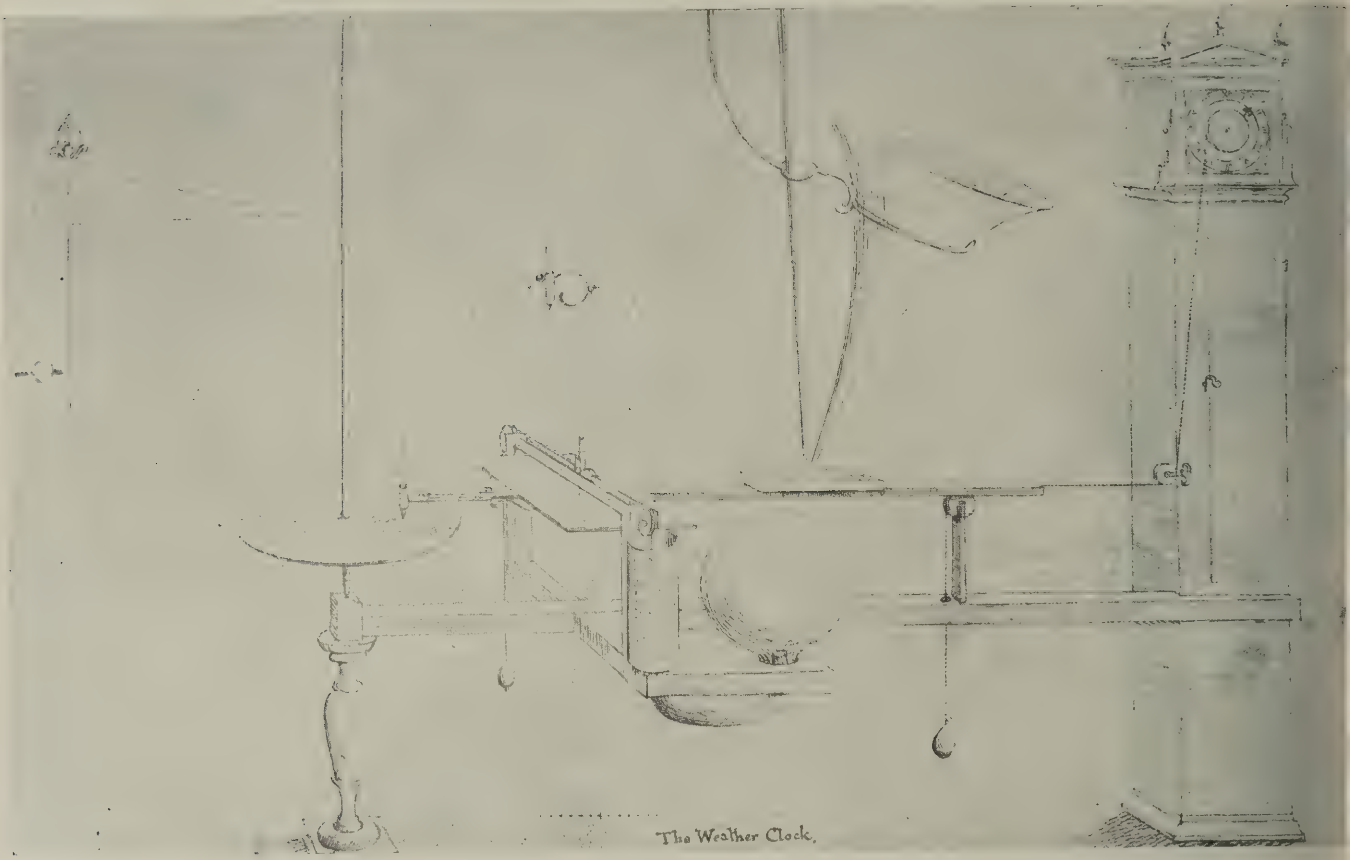


PLAN.

ELEVATION.

THE "FAVORITE" DESIGN FOR ST. PAUL'S: FIRST VERSION. (ALL SOULS' COLLECTION.)

(*From "Sir Christopher Wren: Memorial Volume."*)



DESIGN FOR WEATHER CLOCK BY SIR CHRISTOPHER WREN.

From original MS. in the Heirloom Copy of "Parentalia." (R.I.B.A. Collection.)

(*From "Sir Christopher Wren: Memorial Volume."*)

perhaps to be found the purest of æsthetic delights. In these early days we see Wren's pre-occupation with *machines* and inventions, which ever afforded such intense delight to the great minds of that epoch. He was prolific in small inventions and ingenuities of all kinds, and this capacity it was which, when developed, enabled him to design the City churches. We are amazed to-day at the immense fertility of mind which they display. Part of their wonder and charm is that they appear to be effortless, and it is only as we study them that we realize the immensity of the task which their design and supervision entailed.

There is one aspect of Wren's work that we are particularly able to appreciate to-day when so much energy is being expended in an attempt to produce order out of chaos in our towns. But opposition to Wren's vast rebuilding scheme was as strong in the seventeenth century as it would have been in the nineteenth. And so we are compelled to-day to mourn the loss of an immense opportunity. Had his plan materialized, London would have been the first of the big replanned cities, for the great town-planning movement, to which most of the cities of Europe owe what beauty they have—always excepting those few which still retain their mediæval character—did not begin until the eighteenth century. This aspect of Wren is most interestingly dealt with in a paper by Professor Adshead.

Despite the vast scope of his architectural activities, Wren found time for other matters. Of his connection with the Royal Society most readers will by now be familar. But his astuteness and his sound judgments made his presence invaluable in the council chamber, and so we find him acting for the Deputy Governor in the proceedings of the Hudson Bay Company, in which he was a shareholder. And this work entailed the supervision of a mass of minute detail, and he was concerned with all sorts of petty questions on dilapidations in connection with the company's various houses.

Thus the whole immense range of Wren's activities covered in the memorial volume, which is liberally ill trated, well printed, and altogether sumptuously fittingly produced. H. J. B

A Sussex Garden

Clough Williams-Ellis, Architect

Lieutenant-General Sir Ivor Maxse, K.C.B., C.V. D.S.O., earned renown as a soldier during the war, and since held the Northern Command, which he has lat handed over to Lieutenant-General Sir John Harringt of Constantinople fame.

In that it will set him free for yet more gardening, Ivor himself is probably the only person who will regret his retirement.

Having first met at Ypres, Mr. (then Major) Willia Ellis and Sir Ivor Maxse have since achieved, as archit and client, the happy results that we illustrate on following pages.

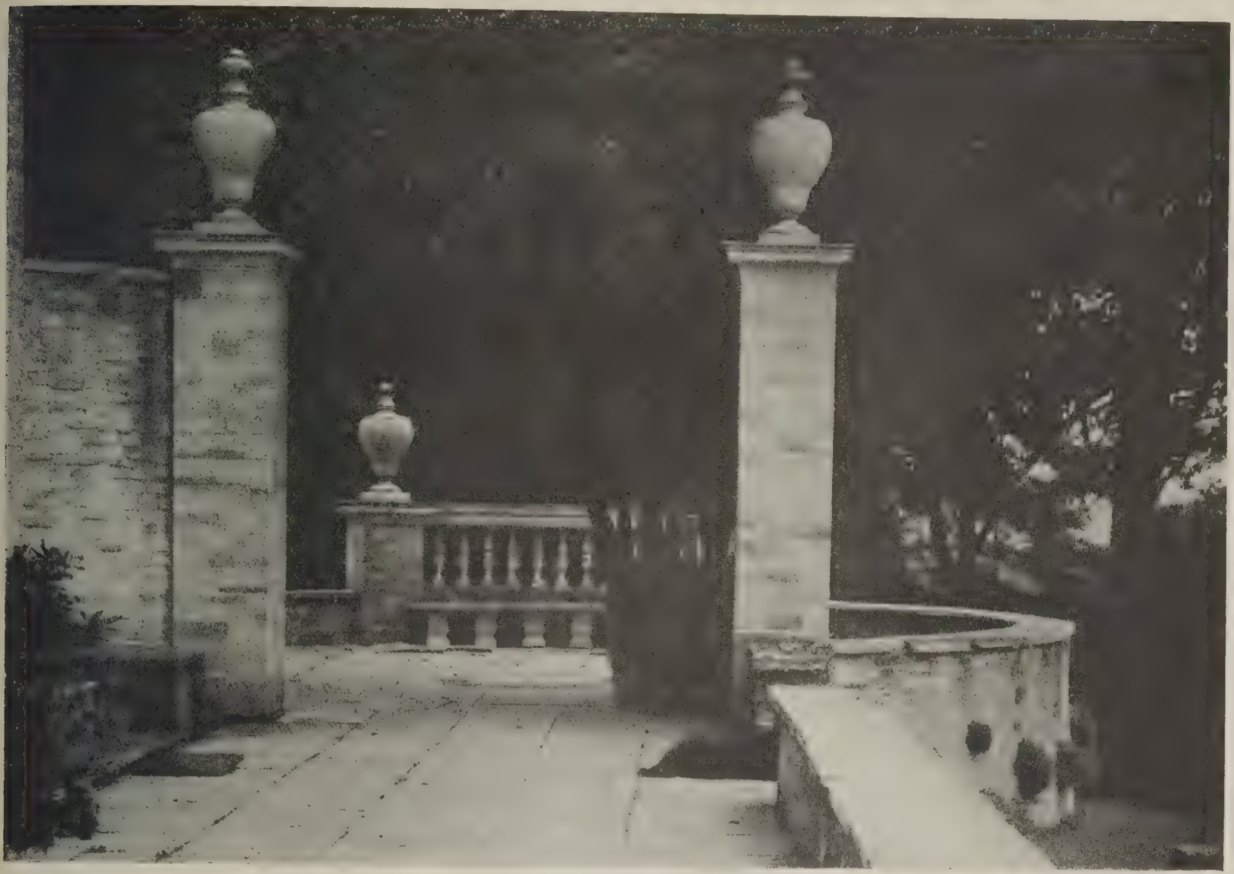
The beautiful gardens at Little Bognor, Sir Ivor a Lady Maxse's house near Petworth, are chiefly of the w and wooded sort, but it was felt that the house, being its of a somewhat discursive character, needed something the way of a formal setting to tie it together and relat coherently to its surroundings.

Convenience and the lie of the land both seemed dictate a wide terrace with a low retaining wall havin little loggia and alcove at one end and a bastion belved at the other—a rough balance of masses being comple by the use of urn-bearing piers on either hand.

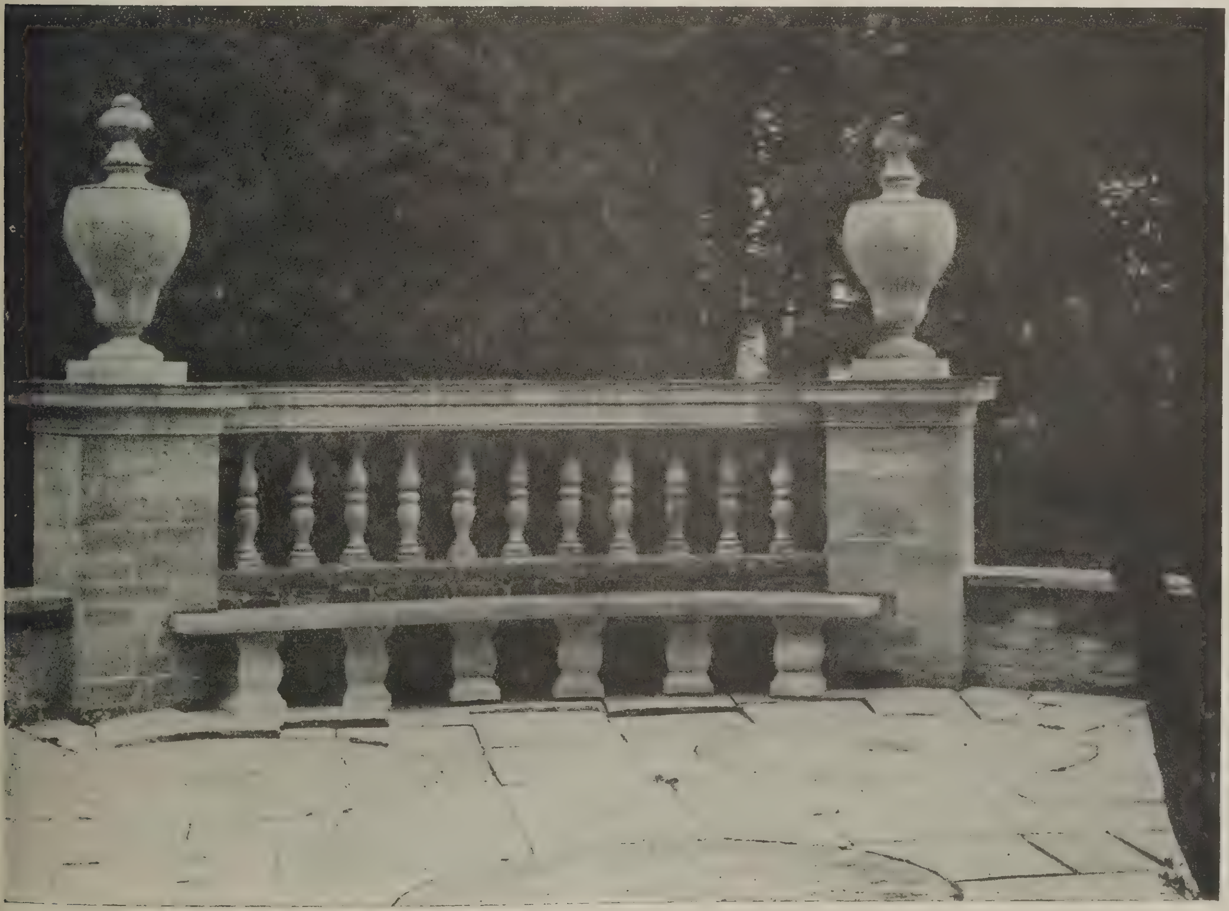
The materials are local stone and tiles, the grey ter cotta seats, balusters, urns, and copings having been m by Mrs. G. F. Watts's Compton potteries to Mr. Willia Ellis's designs.

Garden Architecture. 3.—A Garden at Little Bognor, Sussex

Clough Williams-Ellis, Architect



THE BASTION BELVEDERE.

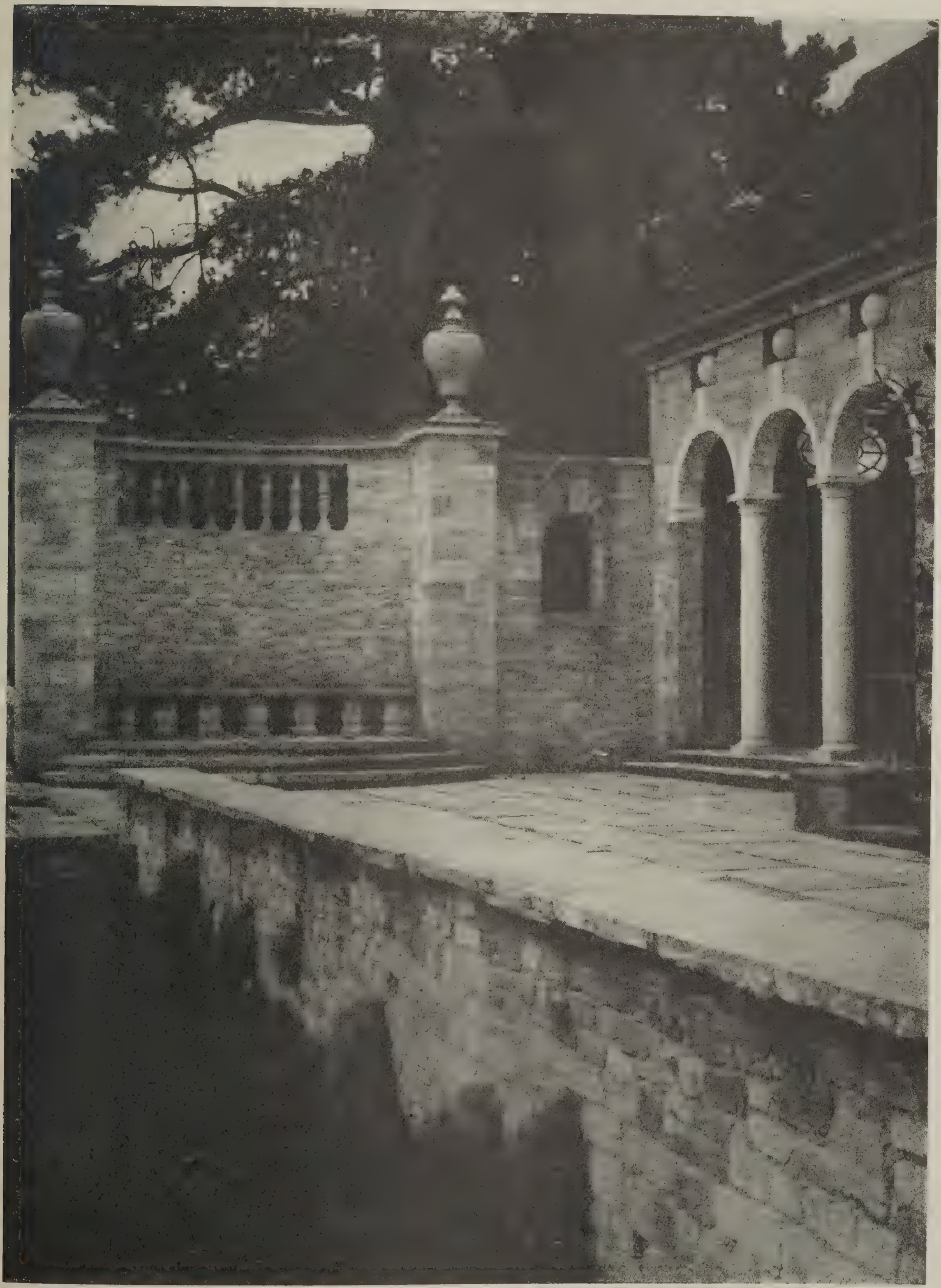


A TERMINAL SEAT.

THE LIBRARY
OF THE
UNIVERSITY OF ILLINOIS

Garden Architecture. 4.—A Garden at Little Bognor, Sussex

Clough Williams-Ellis, Architect



THE LOGGIA AND ALCOVE.

Convenience and the lie of the land dictated a wide terrace with a low retaining wall having a little loggia and alcove at one end of the garden and a bastion belvedere at the other.

THE LIBRARY
OF THE
UNIVERSITY OF ILLINOIS

The Business of an Architect

10—Specification Writing (*continued*)

By C. MURRAY HENNELL, F.S.I.

A SPECIFICATION should not be regarded as a literary effort, full of words and beautifully turned phrases. Some of the specifications that have been issued from public offices are gnificent in their completeness and language, but in vate practice there is seldom time to write so much, l there are not many builders' foremen who thoroughly est them. The fewer words the better, but those few rds must be perfectly clear in their meaning. It is unnecessary to encumber a specification by describing v certain things should be done when there is only proper way of doing them. For example, a long course, possibly copied from a book on building conuction, on how the joints of lead pipes are to be made sheer waste of time, for the plumber knows far better n the architect how to make a wiped joint. This is, course, an extreme case, but I have seen it, and various erfluous descriptions of this nature constantly creep specifications. On the other hand there are many things ch one would expect to be done as a matter of course a skilled tradesman, but which more often than not neglects; for instance—well flushing up the mortar brickwork and filling in the cross joints solidly; and n—well rubbing down the work before each coat of nt is applied. The architect who is constantly superng the actual work will soon learn how many of these nental desirabilities are frequently scamped, and he always see that they are mentioned in his specifications, that no possible excuse can be made by the builder not having them attended to.

ractice should be made of trying to make every specition not only more specific, but more concise than last. It is astonishing how many unnecessary words finds in a specification that one regarded but recently veritable "Multum in parvo."

he following are a few examples of (A) clauses as they frequently, if not generally, written, and (B) how they be worded briefly and with equal definiteness.

nal nce in lases.	A.	B.
ete in hes.	The concrete is to be composed of one part by measure of Portland cement to five parts by measure of the aggregate, and is to be laid in the trenches and carefully levelled to receive the brickwork.	Lay in trenches concrete (cement—1, aggregate—5), and level to receive brickwork.
	The whole of the sloping roofs are to be covered with hand-made, sand-faced, nibbed tiles to be obtained from Messrs. This, That & Co., or other approved manufacturer, p.c. so much per thousand delivered on site, laid to a 3 in. lap on battens (elsewhere described) and nailed every fourth course with stout composition nails two to each tile, care to be taken that the tiles are laid in straight lines and that the courses are even.	Cover sloping roofs with approved hand-made, sand-faced, nibbed tiles, p.c. so much per M. delivered, laid to a 3 in. lap, nailed every fourth course with two stout composition nails to each tile.
Architraves.	Plant round all door frames of dining-room, drawing-room, hall, study, and first floor landing, 3 in. by 1 in. moulded architraves to detail, and round door frames of bedrooms Nos. 1, 2, 3, 4, and 5, 2½ in. by 1 in. ditto. Architraves to other internal door frames and linings, including inside of cupboards, to be 1½ in. by ⅝ in. splayed. All angles to be properly mitred.	Round all internal door frames and linings mitre the following:— Dining and drawing rooms, study, hall, and first-floor landing. — 3 × 1 in. moulded Bedrooms 1, 2, 3, 4, and 5. — 2½ × 1 in. moulded Elsewhere (including inside cupboards). — 1½ × ⅝ in. splayed

I will leave further examples to my readers, who will undoubtedly find that they can easily abbreviate almost every specification that they handle without detriment to its meaning or intent, but on the contrary with more definiteness and clarity in the result.

One often finds in nearly every trade of a specification something about attending upon and making good after other tradesmen. Surely these instructions can all be summarized in one item in the "Preliminaries," viz:—"Attend upon, cut away for and make good after all trades in all trades." The "Preliminaries" should not consist of a lot of padding, repeating many of the items which are fully described in the Conditions of Contract. These sometimes appear in the specification abbreviated or differently worded, a course which makes for discrepancies and subsequent disputes. If the contract is in the form issued by the Royal Institute of British Architects, the attached conditions cover, and adequately describe, a multitude of "Preliminaries" which it is unnecessary to repeat, and one need only specify under this heading a few additional items, such as requiring the contractor to inspect the site before tendering, to provide water for the works, latrine accommodation for the workmen, office for the clerk of works, watching and lighting, and to attend upon other trades, as already mentioned, also the provisional sum for contingencies.

Some architects have a fondness for the use of such words as "or similar," "or equal." This practice grew considerably during and directly after the war when it was difficult to obtain certain kinds of materials, but now that things are more normal it is time a stand was made against the licence that these easy-going phrases permit to the builder. I cannot help once more quoting an American—Mr. Franklin J. Ward, specification writer with Carrère and Hastings, who says "'Or equal' is the bugbear of specification writers. Practically it means that I have examined Smith's and Jones's articles and am satisfied with them, but you may know of another that is as good and I don't want to unfairly shut it out, but you'll have to prove it. What else can I do? If I had unlimited time, I might write up all the requirements and not mention any names. Or I might mention all the names I would accept if I could know them all."

It is for the architect to know what he wants, and if he specifies Gimcrack partition slabs, it means that the builder is to estimate for and provide these and not something else "quite as good" that he may have up his sleeve, probably at a lower cost to himself. However, just because the architect has specified Gimcrack slabs it does not mean that he is immovable on the subject or must not change his mind and issue a variation order in respect of them, but he should do this before the builder actually orders the goods. I would on no account recommend more variations than can possibly be helped, but it is better for the architect to make them than for the builder to have an elastic specification which he can stretch at will to his own ideas.

If the architect cannot make up his mind about an article in the short time available for the writing of the specification, or if he feels that, although he knows all about that article, he would like to explore the possibility of others before the work is actually carried out, it is best for him to insert the "prime cost" of that which he knows, and find about the advantages and prices of others later on. This makes it easier for the builder to price his estimate, and proper adjustment of the actual cost can be made in the final account.

Provisional sums and P.C. items are extremely useful, especially when the work has to be rushed out to tender before details have been prepared, but care must be taken not to overdo them. The architect must remember that when he inserts a provisional sum for something which he has not yet designed he has not thereby disposed of the matter. He is only putting off the evil day when instead of having the item priced competitively by many builders he is more or less in the hands of the one who has obtained the contract, and for this and for other unforeseen reasons he may have considerable difficulty in making the detail fit into the provisional sum specified.

It is not always realized that there is a great difference between a "provisional sum" and an "allowance." The former is entirely in the architect's hands, and can be deducted wholly or in part, according to the uses he decides to make in the building of the sum provided, but the latter is an item "at the risk of the contractor." "The zealous architect, or surveyor (I am quoting Leaning), in settling variations, will occasionally find in an original estimate an item of this character (*an allowance*), with a sum attached, for which probably no expenditure time or material has been incurred, and burns to deduct intact. He is usually met by argument: 'If this it had involved an expenditure of twice the amount includ in contract, I should have been forced to do it with extra charge; consequently, the item should not be int fered with.'"

To save any possible confusion the word "Allo should never be used in connection with a provisio sum. One should say "*Allow* for reinstatement of roadw to the satisfaction of the local authority or pay their char for same," thus leaving it for the contractor to find the cost or take the risk of whatever the charges may but if one decides to make a provisional item of th to be adjusted in accordance with its actual cost, one wri "*Provide* the sum of £—— for the reinstatement of roadw to the satisfaction of the local authority."

It is most desirable that every clause in the specificati should have a marginal reference, and there seems to no reason why, in the majority of cases, this referen should not form part of the clause. Usually a cla and its reference are written thus:—

(186) Timber for Joinery. The timber used
joinery is to be sou
etc., etc.

This can be equally clear if written in the followi way:—

(186) TIMBER FOR JOINERY—To be sound, etc., e

The marginal references should be put in capitals so th they stand out clearly.

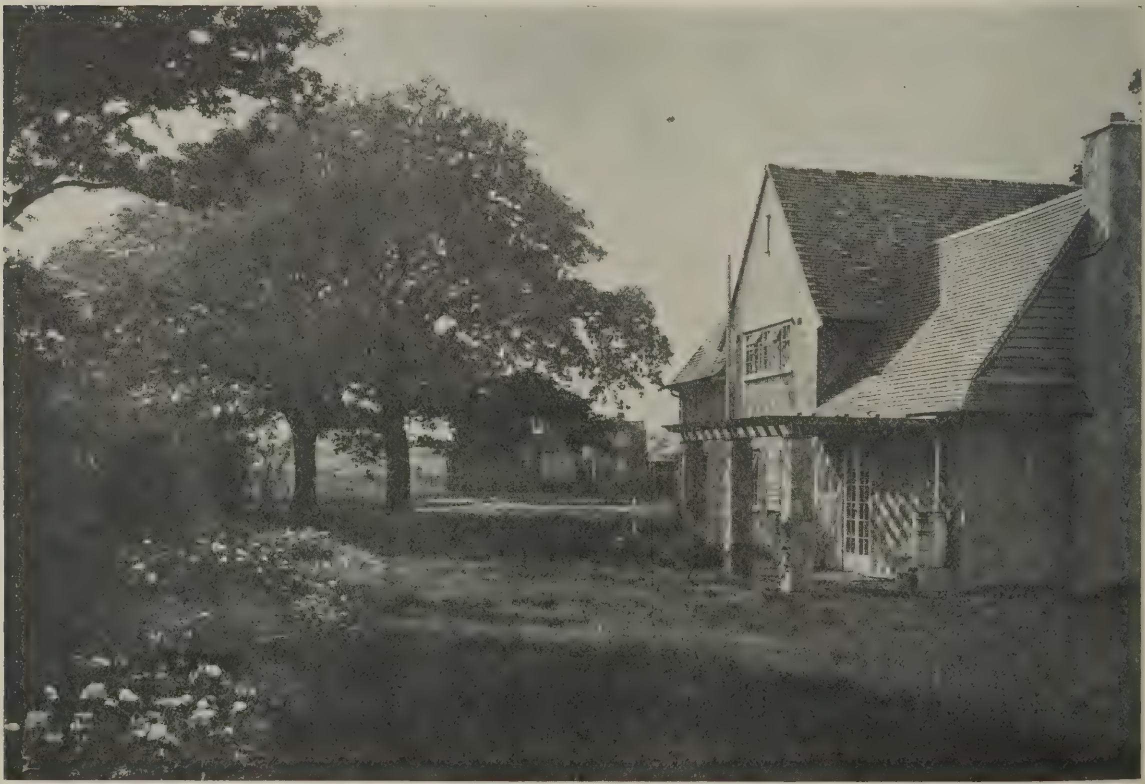
For obvious reasons it is an advantage to have t clauses of each specification numbered from beginni to end.

(*To be continued.*)

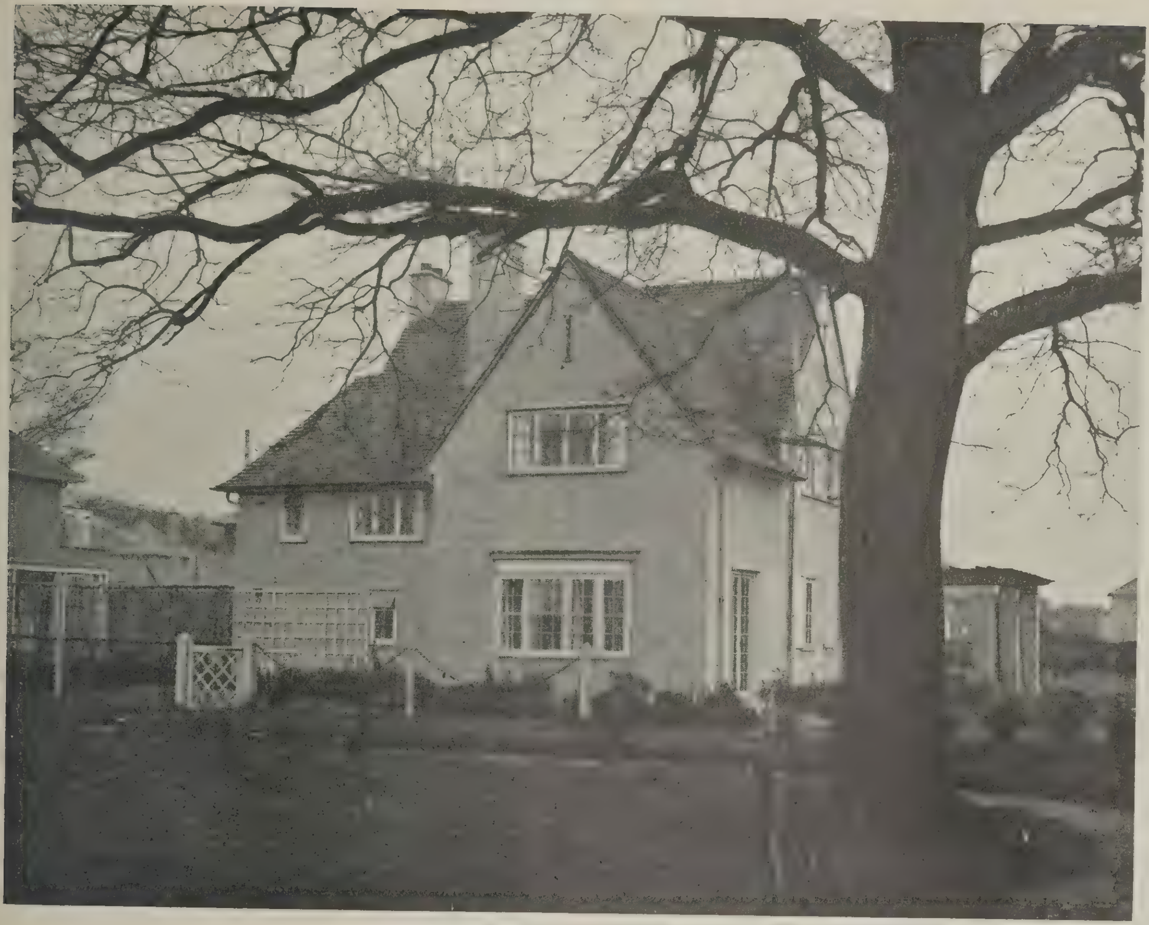
[The previous articles in this series appeared in c issues for April 4, 11, 25, May 9 and 30, June 27, July August 1 and November 7.]

A House at Welwyn Garden City

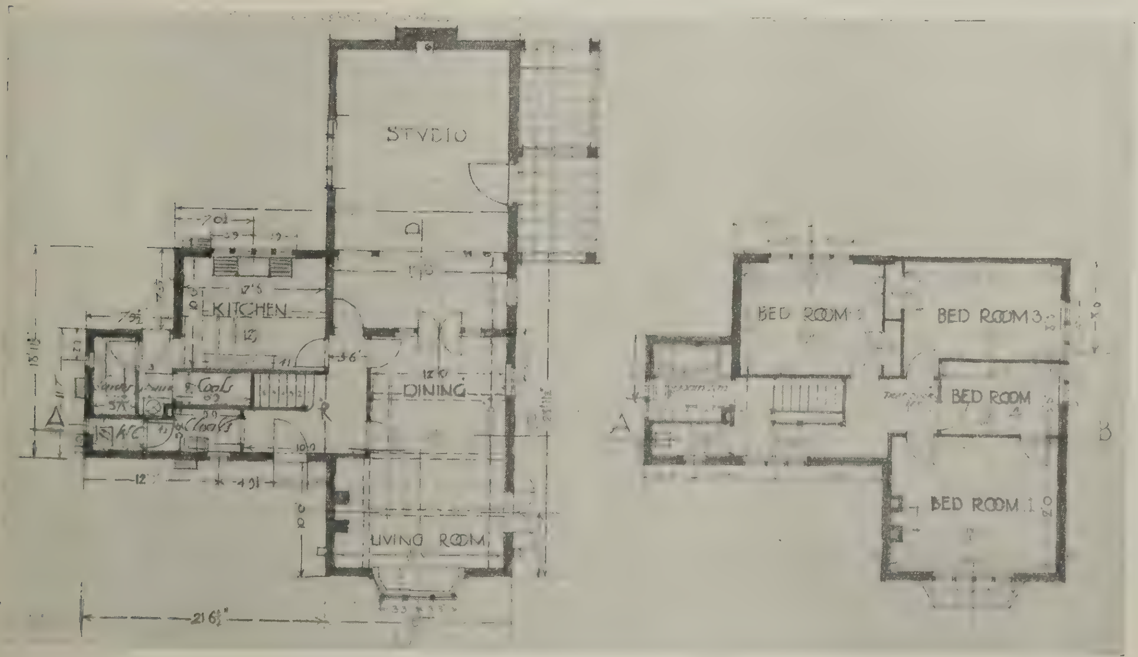
Louis de Soissons, A.R.I.B.A., S.A.D.G., Architect



A VIEW FROM THE GARDEN.



VIEW FROM HANDSIDE GREEN.



GROUND AND FIRST-FLOOR PLANS.

A HOUSE IN WELWYN GARDEN CITY. LOUIS DE SOISSONS, A.R.I.B.A., S.A.D.G., ARCHITECT.

(See note on page 779.)

Parliamentary Notes

[BY OUR SPECIAL REPRESENTATIVE.]

Parliament reassembled on Tuesday, November 13, and the dissolution took place on Friday, November 16.

House of Lords.

The Marquis of Bath moved the second reading of the Workmen's Compensation (No. 2) Bill, to which a third reading was given in the House of Commons on Wednesday.

Lord Buckmaster complained that sufficient time had not been given for detailed examination of the provisions of the Bill. He said that all difficulties in connection with compensation at present before the Courts were left absolutely untouched; but as the only alternatives were to accept or reject the measure, he unhesitatingly accepted it.

The Lord Chancellor said he sympathized with Lord Buckmaster's complaint about the inadequacy of time given for the consideration of the Bill, but the reasons were well known.

The Bill was read a second time, went through its remaining stages without amendment, and was passed.

House of Commons.

Sir Wm. Joynson-Hicks, Minister of Health, informed Sir K. Wood that 57,830 houses were provided for in schemes approved under the Housing, etc., Act, 1923, so far as returns had been furnished by local authorities, 1,849 houses had been completed ready for occupation, and 10,8 were in course of erection on the 1st instant.

Answering a further question, Sir Wm. Joynson-Hic said that by November 1 10,854 houses had been co menced and 1,849 houses completed under the Housing, et Act, 1923. In addition, 1,366 houses were commenced a 2,523 houses completed since August 1 last in connecti with uncompleted schemes under the Housing, To Planning, etc., Act, 1919. Statistics were not available to the number of working-class houses erected witho State assistance during the period, but from returns whi he had recently obtained approximately 20,000 new hous of a rateable value not exceeding £26 had been complet during the six months ending September 30 last, and ov 22,000 containing five rooms or less were in course of co struction at that date.

Sir Wm. Joynson-Hicks informed Sir Walter de Frece th schemes had been approved under the Housing, etc., A 1923, providing for the erection of 26,705 houses by lo authorities, 3,040 houses by societies, trustees, and compani acting under section 3 of the Act, and 28,085 houses other forms of private enterprise. Those schemes cover practically the whole country and embraced the areas nearly 600 local authorities.

Law Reports

The Powers of Justices under the Private Street Works Act, 1892

Mayor and Corporation of Chester v. *Briggs and others.*

November 1. King's Bench Divisional Court. Before the Lord Chief Justice and Justices Sankey and Salter.

This appeal by the Chester Corporation against a decision of the Chester justices, raised an important point in connection with the powers of justices under the Private Street Works Act 1892. The Corporation had ordered certain road work to be done by frontagers, and the justices decided that as the road would have to be made stronger than an ordinary side road, because it was likely to bear some heavy traffic, the Corporation should bear 15 per cent. of the cost of the work. The Corporation challenged the right of the justices to make such an order.

The Lord Chief Justice, in giving the decision of the Court allowing the appeal, said the real question was whether the justices engaged in the trial or hearing and determining objections as provided by Section 8, could amend any order of the urban authority before them. In the opinion of the Court Section 15 gave the urban authority, and them alone, the right of saying whether there should be a contribution from the urban authority to the expense of the work done, and the justices had only to consider questions raised by objectors with the knowledge that, whatever else they might lawfully do, they could not if a resolution had been passed by the urban authority on the question of who should pay. The case would be remitted back to the justices with that direction.

Justices Sankey and Salter agreed.

A Light and Air Dispute—Judge and London Buildings

Townsend v. *Osborne Garrett & Co., Ltd.*

November 3. Chancery Division. Before Mr. Justice Lawrence.

This was an action which raised an important issue as to the amount of light and air that buildings to-day in London are entitled to, and the judgment is of far-reaching consequence, as it was given after a visit of his lordship to the house in question.

The plaintiff was Mr. P. L. Townsend, and he soug damages from the defendants, Messrs. Osborne Garrett Co., of 34 Dean Street, Soho, W.C., on the ground of alleg diminution of light and air to the rooms in the rear of premises, 33a Dean Street, on the ground, first, and seco floors. Plaintiff said that the diminution of light and was caused by the increased height of defendants' buildi The case resolved itself into one of damages, plaintiff havi abandoned his claim to a mandatory injunction.

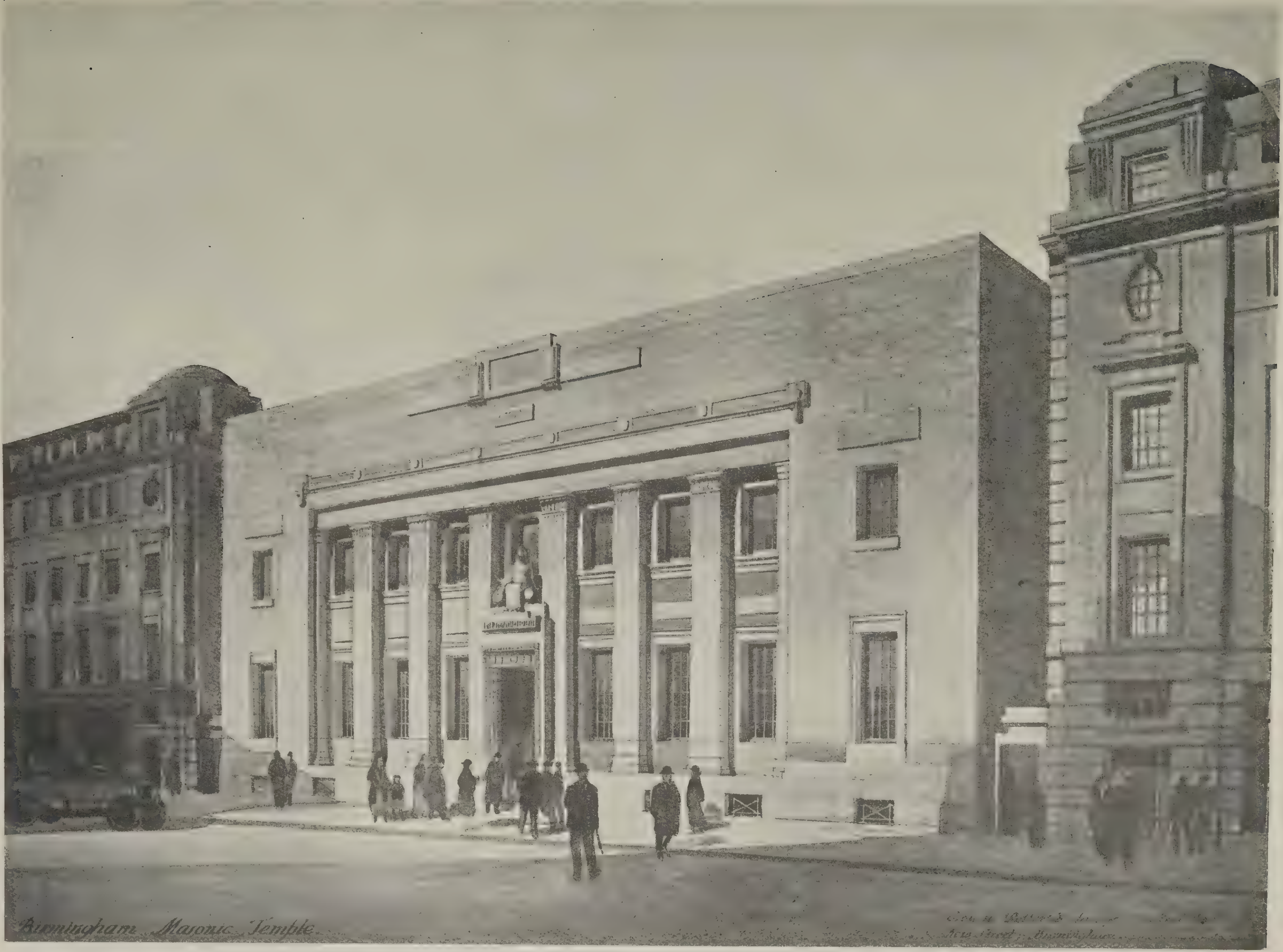
The point at issue between the parties was whether t light which the plaintiff's tenants now enjoyed was such to render the rooms lighted by the windows in questi uncomfortable and unsuitable for the ordinary purposes living or business having regard to the ordinary notions mankind and the locality in which the property was situate

Expert evidence for the plaintiff was given by Mr. R. Kerr, of Messrs. Kerr and Son, architects, of Golden Squa Mr. C. Nicholas, F.R.I.B.A., of Messrs. Nicholas and Dixo Spain, Hanover Square, and Mr. H. Martin, of Mess Thurgood and Martin, Chancery Lane, W.C.

On behalf of the defendants the following were calle Mr. G. G. Stanham, architect, of Bush Lane, Cannon Stre Sir Banister Fletcher, F.R.I.B.A., of Woburn Square, a Mr. W. S. Mercer.

His lordship dismissed the action with costs, holding th the ground-floor back room was merely a dark cupboard wi respect to which it would be impossible to support a clai for diminution of light. As to the first and second floo the windows were exceptionally large for such small roo which, in his opinion, still had all the light that could expected in London in these days for rooms in such locality. It was amply sufficient for occupancy and bu ness in that district. Part of the light was due to the whi glazed bricks used by the defendants, but it was impossi for him to say what deterioration, if any, might happen the future. Even if he was wrong in holding that the roo were sufficiently well lighted, he was convinced on t evidence that there was no damage at all to the site val The building was old, unsuitable, and practically worn o and was not a building that would be allowed to be built the present time.

Rupert Savage, F.R.I.B.A. (of Crouch, Butler and Savage, FF.R.I.B.A.), Architect



Above is a perspective view of the design placed first in the competition, promoted by the Provincial Grand Lodge of Warwickshire, for a new Masonic building to replace the present premises in New Street. Sir Banister Fletcher, F.R.I.B.A., was the assessor. Plans of the winning design were illustrated in our issue for October 3.

Landscape Architecture and its Relation t Town Planning

By THOMAS H. MAWSON

OUR age, which is struggling after the conscious expression of civility and elegance, cannot any longer afford to regard the landscape architect as a mere contributor to the ease and luxuries of the rich. We must recognize that his first moral obligation is to the masses of our fellows who need that refreshment of body and spirits which contact with Nature always engenders, and for the young healthy exercise with leisured ease for their elders. Herein we have the greatest instrument for the development of the body and expansion of the mind, the creation of that "healthy mind in a healthy body," which gives the assurance that he who deserves it most may occasionally have a "green thought in a green shade." The expert engineer may join forces with the expert horticulturist, but this combination will not give us the desired results, for the art is not primarily engineering and it is not horticulture. We must have the trained designer with the soul of an artist, expert in constructional details and possessing at the same time an intimate knowledge of those materials, particularly of all growing things, by which he clothes and expresses his ideals. For reasons which baffle my understanding, we have never thought it essential to train up such a body of experts, capable of giving expression to these idealistic principles, and I am getting very anxious for the future.

Compare for one moment our country with America, where at least 250 students are under training in seventeen universities, seven of which provide four-year courses to post-graduates. The training in these seven universities is not only thorough on the designing side, but is supplemented by technical instruction which keeps pace with it, and also by regular practical study in the university botanic gardens and arboretums. The only approach to academic recognition of the art of landscape architecture in this country is the course of six lectures which I give each year to the students in civic design at the Liverpool University. I am convinced that the price we shall eventually pay for this terrible neglect of a noble art will be the loss of the prestige which a mere handful of strenuous enthusiasts have sought to maintain. I draw attention to this unfortunate position in the earnest hope that the Town Planning Institute will do its utmost to revive interest in an art which contributes so much to the amenities of life in our towns and cities.

"Landscape architecture is primarily a fine art, and as such its most important function is to create beauty in the surroundings of human habitations and in the broader natural scenery of the country; but it is also concerned with promoting the comfort, convenience and health of urban populations, which have scanty access to natural scenery, and urgently need to have their hurrying work-a-day lives refreshed and calmed by the beautiful and reposeful sights and sounds which Nature, aided by the landscape art, can abundantly provide." This is the best definition of landscape art I know. It is from a letter of Principal Eliot, of Harvard, to the editors of "Landscape Architecture," in October, 1910. It will bear sincere and earnest analysis. It may be thought at first sight that the definition does not give sufficient place to what we call unspoiled natural scenery, but this is the note which runs through it all like the red strand in the ropes of the British Navy.

In its more restricted application I have elsewhere described the functions of the art as topographical architecture or as "the art which attempts to secure the agreeable relationship of parts to the whole." This is its main differentiation from architecture as ordinarily understood, whic concerns itself mainly with the design of the unit. Th does not, however, complete a definition for landscap architecture, it is also the art which seeks to harmoni art and Nature, and in Bagehot's phraseology "to determi which shall be conductor and which first fiddle." It also the art which seeks to design and adjust the ameniti of a town to the needs of its population and to realize th æsthetic possibilities of the site in consonance with physic conditions and residential needs. If you urge that I a merely confusing issues and applying labels, and callin city planning landscape architecture, I would add tha finally it is the art which seeks to understand and interpre Nature and to apply its lessons under varying condition of site and climate. To accept this broader definition doe not lessen our dependence on the sister arts or contributin sciences in the evolution of our town plan, but it doe suggest a new attitude of mind towards creative beauty and especially the beauty of Nature as a definite mora factor making for civic betterment.

If you accept the foregoing, the first question which arise is what is the scope within which the art which may legiti mately and practically be exercised, and under what con ditions, applying Bagehot's simile again, may the landscap architect be conductor and the rest be members of th orchestra. You see from this that I wish to be frankly fai and to admit the possibility that all town-planning prob lems may not ultimately "be judged problems of landscap architecture." We may, for instance, eliminate from hi particular sphere of operation the scientific development o a factory area or the planning and construction of grea docks, the planning of railway goods yards and abattoirs but I think I may reasonably add that it would be difficul to plan a really beautiful civic centre without some referenc to this art.

For the purpose of our inquiry we may divide town and cities under six headings: (1) Manufacturing cities lik Bolton; (2) Commercial and distributing cities like Man chester and Liverpool; (3) pleasure cities like Blackpool an Scarborough; (4) university cities and cathedral cities lik Oxford and Cambridge, Canterbury and York; (5) govern mental centres, such as Washington; (6) composite citie like Salonika in Macedonia, and Regina in Western Canada

Five of these six types have each a dominating moti for its existence, requiring the controlling influence o specialized professions, but all in due proportion needing the skill of the landscape architect.

The manufacturing city in the ample provision and proper location of its recreational facilities for adults and playgrounds for its children. The commercial city in the provision of its parks and recreational facilities, and also in the provision of those stately town squares, radiating boulevards, and open spaces, which always seem to be the natural way of expressing commercial opulence. The university city requires the planning and arrangement of the colleges in relation to each other, and the provision of quiet courts suggesting intellectual oases, along with those ample playing fields in which so much of the character of young England is developed. Also there is the provision of those beautiful botanic gardens, so delightful in Oxford and Cambridge, where love of beauty is so greatly promoted.

In the cathedral city where does the landscape architect come in? Well, if you will compare the ample, restful, unbroken grass lawns which form such a splendid setting to Salisbury Cathedral with the ragged surroundings of, say, you will even here see the opportunities for the land- e architect. The capital city calls most of all for a ified use of Nature's beautifying touch; here, round the t parliament and departmental buildings, we have to te the greatest of all centres, the national centre which epitomize all the attainments and hopes of the on.

the lay-out of the pleasure city, it may with some force ated that the dominant problems are those of landscape itecture. Here beauty is utility, and ugliness intolerable. The plan of a pleasure city should be dominated by its promenades, its groves and gardens, its parks and recreation grounds, woven together into a coherent park system, and that the traffic circulation in such a city should be made to contribute to the all-pervading note of the city adorned by art and Nature. Everything should be subservient to one controlling factor, namely, the commercial value of sylvan beauty.

[The foregoing extracts are from Mr. Mawson's presidential address to the Town Planning Institute.]

Correspondence

The Cambridge Collegiate Buildings Competition

To the Editor of THE ARCHITECTS' JOURNAL.

R,—The assessing of competitions has always been ght with danger to assessor and competitors alike, and n readily be understood that for competitors to ques- or argue the potency of the assessor's findings is to take urse perilous to themselves, and one not justified unless convictions actuating it are so deep and public-spirited overrule the risk of adverse criticism. This criticism lly fastens around the unsportsmanlike attitude oted by disgruntled competitors, and that it is often a one is not to be ignored. Nevertheless, occasions at s do arise when sheer conviction will sweep aside all risks for the sake of defending a principle or re-estab- ng its strength, and you may be assured that nothing t of this kind of conviction would have caused us to ilate in your columns the following reflections.

ey do not in the least aim at undermining the legiti- y of the competitive system—in our eyes a very desirable But they do urge, by pointing out the faltering, only human, of single-handed assessing, the advisability of ging its character.

e award, recently given out, in the above limited petition, to which the undersigned architects had the our of being invited, raises once more the fractious tion of the assessing of competitions in this country.

this case, the result is thrice unfortunate since it ws an unfair burden of responsibility, not yet removed, he King's College authorities, the assessor, and the petitors.

iefly put, the gist of this particular competition is, we ve, as follows: For quite a time King's College has been eed of more chambers for its undergraduates, and of a library. It decided to put the entire question in the ls of a building committee of its own, under the chair- ship of one of its most distinguished Fellows, Mr. nard Keynes. The members of this committee came e conclusion that they might well secure results more cordance with the spirit of the times if they addressed nselves to young architects.

assessor of unquestionable probity was called in, who, understand, was specifically called to report upon the ning and the technical character of the designs sub- ed, the building committee, placing confidence in its ty to judge the artistic merits of the elevations, re- ng to itself the right of ultimate choice. The proposed buildings are to stand on one of the most important of Cambridge, namely, on one of the sides of the lawn ed by Clare College, King's College Chapel, and Gibbs's lows."

e designs were sent in, the assessor reported on their ning, and the award was then made. Now, after ining all the designs, it seems clear that something amiss. With regard to the design placed first, the plan ertainly the advantage of having but two staircases h, on the face of it, are fairly well lit, but the winners able to place them as they did at the cost of violating dition thought to be highly desirable, i.e., that six f chambers should be provided on all upper floors, and as many as possible on the ground floor. The winners provided twenty as against a possible twenty-two, a regrettable weakness far outweighing the gain of light to each staircase. It should not be overlooked that other designs had all their stairs equally well lighted, so we fail to understand the recommendation of the assessor being chiefly based upon this adequateness of the winners.

The design placed second has the demerit of having two staircases facing Bodley Quad, and a third facing the lawn, though to be just, the entrance to the third is in the passage leading from the lawn to quad. The lighting to this entrance is exceedingly precarious, and its approaches inconvenient.

As we understood it, the committee took the responsibility to endorse the assessor's judgment, but seemingly it did so without probing at all deeply into the difficult question of artistic merit of all the designs, and the result is that a façade indeed unfortunate may soon face Clare and rob Gibbs's "Fellows" of its legitimate prominence. The treatment favoured by the winners carries the scale and fenestration of Gibbs on the new side, but the bulk of the proposed new buildings is so great that such treatment will overwhelm Gibbs for ever. This façade, moreover, has the fatal weakness of being throughout insincere. Nowhere on its wings does it express its contents. Is it possible that the building committee of King's College, whom we do credit with the intention to secure a noble building, realized the character of a façade with windows of different sizes lighting rooms of identical dimensions; with the window of one "gyp" being a mere long narrow aperture whilst the one next to it assumes the very proportion of the largest windows of Gibbs itself; of substantial chimney breasts resting over voids? These discrepancies are due to the planning and treatment followed by the winners, and good modern planning will always turn its back to anything not straightforward or sincere. Such blemishes are not minimized, if we may say so, by the liberal sprinkling of "period" motifs made to punctuate both elevations. To reshuffle knowledge rarely increases its value, so to speak, and it is not likely the knowledge of motifs made available in this way will be appreciated in the future.

The building committee, by their well-meaning but confused action, has once more accentuated the plight of competing architects. No surer way of sapping their confidence could be found than the one which allows conditions laid down in the schedule to competition to be ignored by some of them with impunity, or overlooked by the assessor, who had a hand in drafting them. It is disappointing enough with the usual kind of buildings, is little short of heartbreaking when the problem to be solved is so pregnant with fine possibilities.

THOS. S. TAIT.
GORDON H. G. HOLT.
VERNER O. REES.

[The introductory sentences to the above letter disarm criticism of what is a rather unconventional, though obviously sincere and well-meant, course of action. We cannot but feel, however, that if public criticism of assessors' awards by unsuccessful competitors becomes a general practice the competition system must become unworkable if not entirely discredited in the eyes of the public. Some portions of our correspondents' letter have been omitted, including one in which they make, *inter alia*, the important point—which, we take it, is *the* point of their letter—that the present system of employing a single assessor is not best calculated to produce satisfactory results, and should be replaced by the jury system.—ED. A.J.]

An Army for Housing

A novel suggestion for solving the dual problem of house shortage and unemployment in the building trade is put forward by Manchester Liberals. This is, that a Ministry of Housing should be set up to enrol a voluntary housing army on military lines. This army would be divided into battalions and companies, special training being given by experts acting as officers. One company would thus be trained as bricklayers, another as plasterers, a third as plumbers, and so on. The men would be enrolled for three years (or, we presume, the duration of the housing shortage), and would receive the present rate of army pay, with separation allowances on the war-time basis. A battalion would be moved to any part of the country where reinforcements of labour were required. It is not yet known whether the men would be served out with active service cards with the list of formal messages ("cross out the sentences that do not apply") made so familiar during the war—"I am quite well"; "I have (not) received your card"; "I am on my way home"; and so forth. But, seriously, the idea of mobile building battalions, unconventional as it seems to-day, is worth consideration. It is really an old idea, for the great buildings of the mediæval period were erected in that way. A system that succeeded then ought not to fail now, with what, without boasting, we may claim to be our improved methods of transit. A difficulty would be the provision of housing accommodation for the army during operations, for to make the men sleep out in the open would be pushing the military parallel a little too far.

Obituary

Mr. Carl C. Krall.

Mr. Carl C. Krall, whose death was announced on Monday, was a craftsman well known to architects and ecclesiastical authorities both at home and abroad. Born in Heidelberg in 1844, he studied in Munich, Paris, and Berlin, and came to London when a young man. He was a foundation member of the Art Workers' Guild, and was responsible for art metal work in nearly every cathedral in the country, including important pieces of work in St. Paul's, Westminster Abbey, Liverpool Cathedral, and Canterbury. The silver altar of St. Mark's, Philadelphia, is comparable with the superb silver altar which, now exhibited in the museums of Florence Cathedral, was carried year by year to the Baptistery of the Cathedral to be used on the feast of St. John the Baptist, and was designed by Ant. Pallajuolo and his brother artists.

Coming Events

Wednesday, November 21.

L.C.C. Central School of Arts and Crafts, Southampton Row, W.C.1. Lecture VIII. "Origins and Evolutions of the Doric Order." By Sir Banister Fletcher, F.R.I.B.A.

Royal Society of Arts, John Street, Adelphi, W.C.2.—"Forgeries of Ancient Stained Glass." By Mr. J. A. Knowles. 8 p.m.

Reading Society of Architects (in the Hall of University College, Reading).—"The Mediæval Point of View." By Major H. C. Corlette, F.R.I.B.A. 8 p.m.

Thursday, November 22.

British Museum.—Lecture VIII. "Egypt: The Temple of the Sphinx, etc." 4.30 p.m.

Friday, November 23.

Chadwick Public Lecture, at the Royal Society of A John Street, Adelphi.—Lecture No. III. "Remedial Hygi —Health and the Hospital." By Major Harry Barr VP.R.I.B.A. 8 p.m.

Leeds and West Yorkshire Architectural Society, Powoln Rooms, Bond Street, Leeds.—Prize Distribution, Preside Address, and Smoking Concert.

Monday, November 26.

Architectural Association, Bedford Square, W.C.—" Value of the Study of Old Buildings." By Mr. J. Alf Gotch, P.R.I.B.A. 7 p.m.

Royal Sanitary Institute, 90 Buckingham Palace Ro S.W.1.—"Sanitary Relief Work in Russia." By Miss Mu A. Payne. 5 p.m.

Competition News

Hull Art Gallery.

Over sixty designs have been received for the new Art Gall which the Rt. Hon. T. R. Ferens is going to build, at a c of £60,000, exclusive of the site, in the City Square, Hull. plans have been arranged in the Guildhall, ready for inspect by the assessor, Mr. John W. Simpson, PP.R.I.B.A.

List of Competitions Open

Date of Delivery.	COMPETITION.
Nov. 30	Taunton School War Memorial. The Council of the Taunton Sc invite designs for a War Memorial, consisting of an Art and Sci Block, the cost of the building to be approximately £10,000. Assessor is Mr. Robert Atkinson, F.R.I.B.A., who will have power to nominate a second Assessor if desirable. Premi first, £100; second, £50. The first premium will merge in the ar tect's commission. Particulars, together with photograph of present buildings, may be obtained from the Secretary of School, Mr. H. J. Pollard, F.C.A., 3 Hammet Street, Taunton return for a cheque for £2 2s.
Dec. 10	Designs for a dining-room and bedroom furnished in the style of to form part of the applied art section of the Palace of Arts at British Empire Exhibition at Wembley next year. Prizes to value of £400 have been offered by "Country Life" for the designs submitted. The Palace of Arts will include among its o interesting features a series of six decorated rooms illustrating progress of decorative art since 1750. Two of these rooms wil designed and be furnished in the styles of the Georgian and Rege periods covering the years 1750 and 1815: two more will illust the standard of interior decorative art, attained respectivel 1851 and 1880. The modern rooms will demonstrate the remark advances made in this sphere of applied art since those da Competitors must be of British birth or of British parentage, all manufactured goods to be provided must have been ma factured within the British Empire. The designs are to be sidered by a special Jury of Award, consisting of: Sir Ed Lutyens, R.A., Miss Ellen G. Woolrich, Mr. P. Morley Horder, Mr. Norman Wilkinson. The Exhibition is to arrange for carrying out of the prize designs under the supervision of successful competitors.
Dec. 10	The War Memorial Committee of the Burgh of Coatbridge in designs for the erection of a War Memorial on a site in the End Park. The estimated cost of the work amounts to £3, and premiums of £75, £50, and £25 are offered for designs pla first, second, and third respectively. Assessor, Mr. James L head, F.R.I.B.A., Hamilton. Apply Town Clerk. Deposit £1
Jan 1	The Imperial War Graves Commission invite architects who ser during the war as members of the Military, Naval, or Air Fo raised in any part of the British Empire to send in their names admission to a competition for the designing of memorials to missing to be erected by the Imperial War Graves Commis at Bethune, Armentières, Cambrai, and Soissons. Applicati for particulars of premiums and other regulations from th desiring to compete are to be addressed to the Secretary (W Branch), Imperial War Graves Commission, 82 Baker Str London, W.1, and must be received there not later than Januar 1924, and must be accompanied by a statement giving particu of the war service and professional career of the applicant clearly stating which of the memorials it is desired to com for. Deposit, two guineas for each set of plans. The Assesso Sir Aston Webb, K.C.V.O., P.R.A.
Jan. 5	Memorial Building and Tower, Dudley. The Council of the Cou Borough of Dudley invite Competitive Designs from duly quali Architects for the "Brooke Robinson Memorial" Building War Memorial Tower comprising a public hall, coroner's co small museum, and a new sessions court. Premiums £300, £2 and £100. Mr. W. Curtis Green, A.R.A., F.R.I.B.A., Asses Conditions of competition, together with a copy of the site p can be obtained on application to Mr. E. W. Tame, Town Cl Town Clerk's Office, Dudley, with deposit of £2 2s.
Feb. 1	Proposed Concert Hall and Public Baths for Newcastle-upon-T Premiums £750, £250, and £100 respectively are offered, the premium to merge into the commission or other payment to made to the author of the successful design. Assessor, Mr. Al W. S. Cross, M.A. Apply, with deposit of £2 2s., to Mr. A. M. Oli Town Clerk, Town Hall, Newcastle-upon-Tyne.
No date *	The Eastleigh and Bishopstoke Urban District Council invite desi for the extension of their existing Council buildings, and erection of an assembly hall, on the site adjacent. Premiu 50, 30, and 20 guineas. Apply, with deposit of £1, to Mr Lawrence, Clerk to the Council, Council Offices, Eastleigh.

* Indicates Competitions whose conditions are not in accorda with those laid down by the R.I.B.A. and the Society Architects.

A New System of Floor Construction

HOLLOW floors have always been considered desirable for many classes of buildings—notably offices, hotels, schools, and the like—and although there have been everal systems of such construction in general use, objections f more or less importance have been raised against the ajority of them, one of the most serious being the comaratively heavy cost of a really satisfactory floor of this escription.

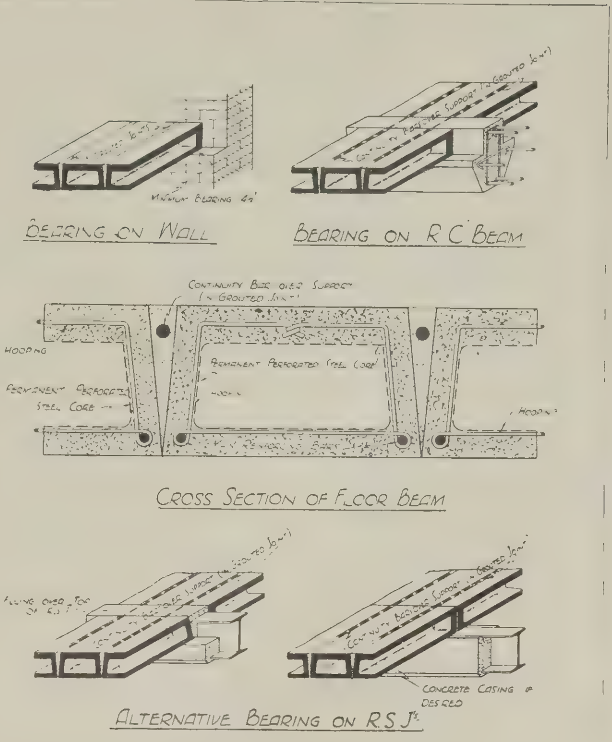
The difficulty of securing such a floor for the class of building nder consideration has, it is claimed, been overcome by the Hollocast" floor (Patent No. 168777), which has been esigned by the Indented Bar & Concrete Engineering Co., td., of Queen Anne's Chambers, Westminster. This floor onsists of a series of precast units in the form of hollow eams which are made of the length necessary to span between he floor supports. They are 12 in. wide and can be contructed of any depth necessary, the usual depth for ordinary ading for spans up to about 10 ft., being 5 in.

The "Hollocast" beams are constructed of reinforced oncrete with a permanent metal core. The volume of the avity is from 30 per cent. to 60 per cent. of that of the floor, nd the units are so constructed that these cavities can be sed to form ducts for gas tubing, electric wiring, ventilation, tc. The external sides of the units are sloped inwards towards e top of each beam, and after they have been placed in osition the narrow channels formed between the beams are routed up, and the final floor surface applied. In the case of uildings constructed over a series of bays, continuity bars can e inserted in the channels formed between the units, so that, hen the grouting has been applied, the floor is to all intents d purposes monolithic over the whole area.

The units can be made on the site of the building for which ey are intended, or, if this is impossible, on the nearest acant space, thus practically eliminating transport charges d the possibility of damage during transit. They should be lowed to mature for about 7 to 10 days, but after the piration of that period can be hoisted in position and it into use immediately. No particular care is necessary in ting the beams, unless their length is abnormal. Even in e case of buildings on restricted sites it is often possible cast the beams necessary for the first suspended floor on e ground in the basement, and the beams for the succeeding ors can then be cast on the floor immediately below as soon the latter has been placed in position and, if necessary, fore it is grouted, so that once the floor construction has en started the use of the "Hollocast" floor will expedite its mpletion.

One point which is greatly appreciated by all concerned is at no support of any kind is necessary during the erection the floor. This not only tends towards economy, but helps the speedy completion of the interior decoration.

If the floor is required to be cut after it has been completed, that is necessary is to remove the surface finish of the floor, t out the grouting and take out the necessary number of its, afterwards trimming the opening to the required size. e untouched portion of the floor remains as strong as before.


Grouted Joints
Minimum Bearing 4½"
Continuity Bars over Support (in Grouted Joint)
Continuity Bar over Support (in Grouted Joint)
Hooping
Permanent Perforated Steel Core
Permanent Perforated Steel Core
Hooping
Hooping
Main Reinforcing Bars
Filling over Top of R.S.J.
Continuity Bars over Support (in Grouted Joint)
Continuity Bars over Support (in Grouted Joint)
Concrete Casing if Desired

BEARING ON WALL

BEARING ON R C BEAM

CROSS SECTION OF FLOOR BEAM

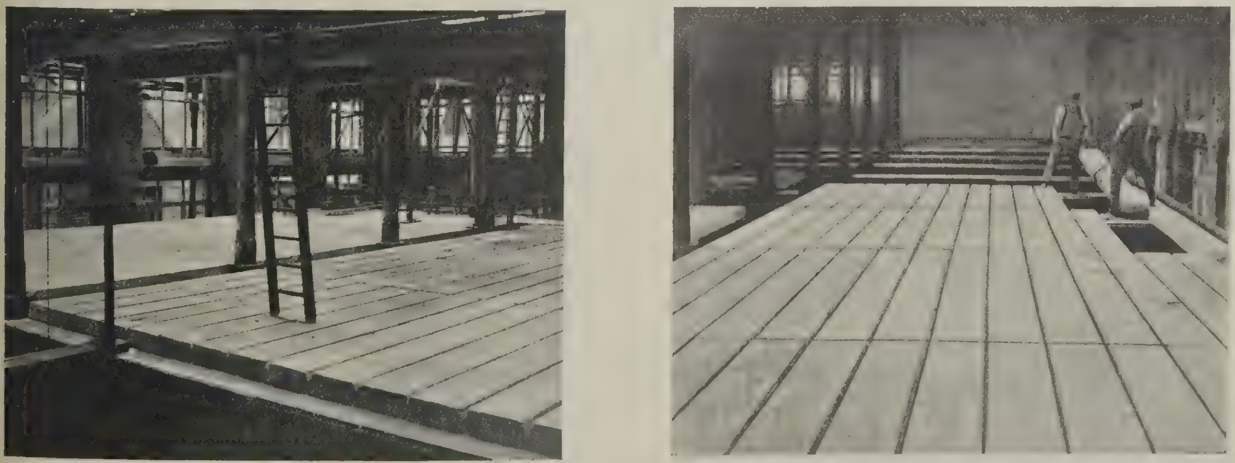
ALTERNATIVE BEARING ON R.S.J's.

A recently completed contract, illustrated below, is that of the floor at the Co-Operative Society's warehouse at Leicester. On the right a beam can be seen being swung into position, from which the ease of handling is apparent.

"Hollocast" beams can also be modified for use as wall beams, the only alteration being that the sides and ends of the beams are made parallel. By this means, it is stated an excellent cavity wall can then be quite easily and quickly constructed, and any desired facing applied.

The advantages claimed for the adoption of the "Hollocast" floor are, briefly, as follows :—

"Very low initial cost; the floor is sound-proof; the highest resistance to fire is obtained; the floors can be used immediately they are placed in position; no supports of any kind are required during erection; floors can be constructed to take any load over any span; the floor units can be combined with any class of structural frame work; the units can be made with a smooth soffit, needing only a coat of whitewash to form a presentable ceiling, or roughened for a plaster finish; the units are capable of forming a floor without any surfacing material or of taking any composition or other wearing surface; the units can, if desired, be constructed on the site, thus avoiding risks, cost and delay of transport."



A RECENTLY CONSTRUCTED FLOOR AT THE CO-OPERATIVE SOCIETY'S WAREHOUSE, LEICESTER.

The Week's News

Ramsgate Improvements.

Ramsgate's new sea wall is to cost £12,500.

Change of Address.

Mr. Cyril A. Farey, A.R.I.B.A., has moved to 19 Bedford Square, London, W.C.1. Telephone: Museum 2420.

Greenwich Housing Costs.

Greenwich Borough Council have spent £333,993 on housing since the war, apart from maintenance and upkeep.

Hemsworth Housing.

Plans are being prepared for fifty houses at Grimethorpe, where a site is already in possession of the Council.

Ayr Hospital Extension.

A new wing has been erected to Ayr County Hospital, at a cost of £14,000. Mr. J. K. Hunter, F.R.I.B.A., of Ayr, was the architect.

Hendon Improvements.

Hendon Urban District Council have received sanction to borrow £62,000 for improvement works, including £16,610 for flats at Mill Hill.

The Proposed New Promenade for South Shields.

The Tyne Improvement Commission have approved the proposal of the South Shields Corporation to make a promenade on the south side of the South Pier to Trow Rocks.

A New Forth Bridge.

Work for 5,000 men will be provided when a start is made on building the new bridge over the Forth. The total cost of the venture would be between £2,500,000 and £3,000,000, and the work would extend over a period of five years.

New Bridge for Venice.

Next month work will begin on the construction of a bridge to connect Venice with the mainland. It will cost £300,000, and be completed within three years. Artists and others from all parts of the world are opposing the proposal.

A Big Garage for London.

A garage, to accommodate 1,000 cars, is in course of erection on a site between Poland Street and Marshall Street, London. Mr. Walter Gibbings is the architect. At first the building will be three stories high, but ultimately it will be increased to six. The cost is estimated at £50,000.

Ellis Island to be Improved.

Ellis Island is to be thoroughly overhauled from a hygienic and humanitarian point of view. Its buildings are to be remodelled, so that immigrants may enjoy more privacy and improved sanitation, while cabin passengers are to have separate quarters.

Flats in Carlton House Terrace.

No. 8 Carlton House Terrace, London is to be converted into four flats. The architects, Messrs. F. W. Rees & Archer-Betham, of 44 Park Lane, Croydon, have also several other conversions in prospect, as well as a large amount of domestic work on estates at Caterham, Coulsdon, and Haywards Heath.

The British Empire Exhibition.

Mr. Frank Williams, a young Australian architect, is designing a "Temple of Beauty" for the British Empire Exhibition. The building, which will be in classical style, will cover 10,000 sq. ft. Mannequins and models will appear in it, representing famous beauties of the past.

New Bridge Over the Dee.

Flintshire County Council have decided to promote a Bill in Parliament in connection with the construction of a new bridge in place of the existing Queensferry bridge over the river Dee. The present bridge was erected as a jubilee memorial in 1887, and is a valuable means of communication between Cheshire and Flintshire. The new bridge will be of the bascule type, each half being hinged to its pier and capable of being raised to give a passage to vessels passing up or down the river. Mr. R. G. Whitley, M.Inst.C.E., and Mr. Mott, M.Inst.C.E., who have been employed by the County Council to collaborate in the work, are preparing the designs.

"Skyscraper" Cross in Chicago.

One of the highest crosses in the world, on the spire of the Methodist Temple, 556 ft. from the ground, has been erected in Chicago. The temple is a "skyscraper" church and offic building. The cross is visible for miles, and at night search lights will play continuously on it. The cross is 12 ft. in heigh and the cross bar is 6 ft. long.

Office of Woods War Memorial.

A memorial to the members of the staff of the Office of Wood and Forests who fell in the war, which has been erected in th hall at No. 1 Whitehall, was unveiled by Sir G. Granvill Leveson-Gower, a Commissioner of Woods. The memoria consists of a bronze tablet recording the names of the men, an was designed by Mr. C. E. Varndell, the staff architect.

Alterations to Lichfield Guildhall.

Lichfield City Council have approved of proposed alterations to the Guildhall and Municipal Offices. The proposals includ the provision of an entrance from the Guildhall to the Municipa Offices, the conversion of the existing laundry into a publi mortuary, the demolition of the old buildings in the rear, an the extension of the present hot-water heating apparatus.

Hampton Court Bridge.

Surrey County Council have decided, subject to the approva of the Middlesex County Council, to instruct the surveyors o the two counties to make a joint report as to the possibility and the cost of adapting Hampton Court Bridge to meet the requirements of modern traffic, and also as to the desirability and the cost of erecting a new bridge and constructing the necessary approaches.

Hornsea Cottage Hospital.

The erection of the Hornsea Cottage Hospital is now complete, and the institution will be dedicated as a war memorial on December 8. The hospital occupies a site in Eastgate, and the accommodation consists of two public and two private wards, with modern equipment. The total cost is between £5,000 and £6,000. The architects are Messrs. Walker and Son, of Hull.

Friern Barnet and Town Planning.

On the recommendation of the town-planning committee the Urban District Council have decided that the principle of town planning for Friern Barnet should be approved, and that the committee should be authorized to take the necessary preliminary steps in the matter. The Ministry of Health have given the Council permission to borrow £5,500 for the reconstruction of footways in Sydney Road and Cromwell Road.

The late Mr. E. R. Frampton.

We regret to record the death of Mr. Edward Reginald Frampton, the artist and member of the staff of the London County Council Higher Education Art Section. Mr. Frampton was educated at Brighton and Westminster School, and studied art in France and Italy. He exhibited at the Royal Academy and at many of the principal galleries in the provinces. He was a member of the Royal Institute of Oil Painters, the Tempera Society, the Art Workers' Guild, and formerly of the Royal Society of British Artists.

Peterborough Cathedral.]

Peterborough Cathedral Restoration Fund has received a bequest of £2,000 under the will of the late Rev. A. J. Abbey, a former vicar of Cotterstock. The Dean has received from an anonymous donor a sum of £93 16s. 11d., to make the net proceeds of the Cathedral bazaar to the round figures of £5,000. Further work will now be taken in hand, and plans for dealing with the space behind the Baldacchino will be proceeded with shortly as well as work which is urgently needed in the flooring of the south transept above the Saxon church. Owing to the possible effect upon the fabric of the ringing of the bells, and following a request for further advice in the matter, the provision of the new bells is not being proceeded with at present. A special committee is to consider the electric lighting of the Minster.

New Housing Site for Wolverhampton.

The Wolverhampton Corporation intend shortly to develop the Beckminster estate, covering about 30 acres on the Penn side of the town, as a housing site. Approval has been received for the making of roads, laying of sewers, etc. A main road

(*Continued on page 779.*)

ednesday, November 28, 1923.

Vol. LVIII. No. 1508.

THE ARCHITECTS' JOURNAL & Architectural Engineer

With which is incorporated "The Builders' Journal."

YPRES: A VIEW IN THE GRANDE PLACE IN MARCH 1923.

(*See also page* 785.)

27-29 Tothill Street, Westminster, S.W.1.

The Town Hall, Enkhuizen, Holland

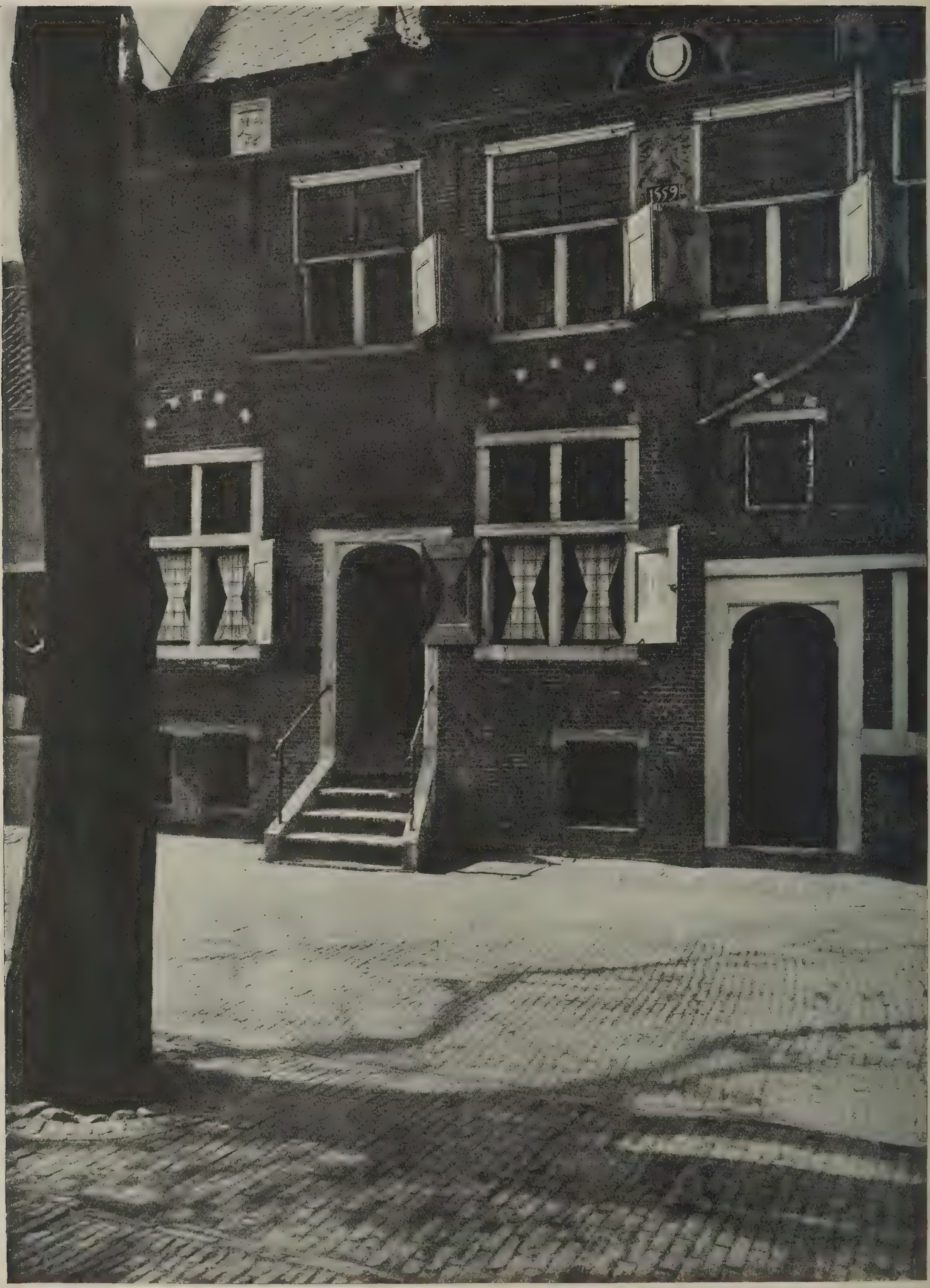


Photo: F. R. Yerbury.

The Town Hall at Enkhuizen bears the date 1559, and such ancient gems of municipal life are not readily found either at home or abroad. The unusual folding of the shutters is a feature that will be noted, whilst the patterning of the whole presents a singularly original and pleasing front.

THE

ARCHITECTS' JOURNAL

27-29 Tothill Street, Westminster, S.W.1.

nesday, November 28, 1923

Volume LVIII. No. 1508

The Architectural Shilling

THE future of the architectural profession and, indeed, of England's architecture, must depend to a great extent upon whether or no the architect can keep for himself the position he has tly secured in small house design. Although we must to work of a larger scale, and possibly of a more act nature, than housing for the architectural master- , yet we make the greatest mistake if we undervalue illing in our anxiety about the pound, or if we imagine the pound is independent of the shilling. To carry the phor further : even the coppers—the signal box, the e, and the outhouse—help to determine the value of rchitectural exchange.

vate enterprise in house building is slowly and pain- reviving; so slowly that we are not yet able to see ier it is likely to be the rule to consult an architect a new scheme is to be put in hand, or whether the ect is to fade away as an apparently useless appendage g more money than he is worth. It seems probable on the whole local authorities will continue to employ ects on their own housing work. There is safety in iere multitude of the councillors, some of whom are o press that nothing be left to chance. But even here important that all local authorities should grow to e that the employment of an architect is a necessity n economy.

must remember that under the new Housing Act Government control has been removed, and that it longer almost a *sine qua non* for the approval of plans n architect should have been consulted. The archi- ust now stand entirely on his own feet, and he can is position only if his advice is obviously worth the it costs. The architect's best friend on a local autho- n only persuade his council that it is really necessary ploy an architect if he can show that the fees charged ainly commensurate with the work done. Last June .I.B.A. published a special scale of fees, applicable rivate enterprise housing work," and it would be l to the profession if it could be made known to local rities that this scale of charges would be applicable entirety to schemes carried out under the local ities free of Government supervision. In other , that a freely acting local authority would be treated same terms as a private individual. That such would case is logical, and probably goes without saying, might be an advantage for local authorities to know hey would be so treated.

scale is a low one—low enough one hopes to bring chitect his chance of working on the most prolific of architecture in the world. Such a scale would ly not recompense anyone for the labour involved e time taken in complying with Government require- that vary from week to week, and where the standard ded fluctuates like a central European currency. ork undertaken in what is really a consultative ty, where the architect's responsibility begins and ends with the preparation of drawings, is a very different matter, and it is hard to see how any local authority could be frightened off employing an architect under this scale by the bogey of unnecessary expenditure. Where the authority wished to employ an architect to perform his full functions of preparing specifications and of supervising the erection of the buildings, the system adopted under the Government housing scheme, or some agreed modification of this would, of course, continue in force. But in the ordinary way there can be no reason why the local authority's surveyor should not carry through the supervision, and amplify the skeleton specification which would be supplied by the consulting architect, together with the eighth-scale drawings and the ½ in. details in pencil referred to in the R.I.B.A. private enterprise scale.

In considering the uses of an architect the average layman finds a difficulty in understanding why this specialist should be necessary in addition to a builder who has already built what we may call the "new type" house. The layman will argue that he can easily see that an architect might be advantageous in selecting the correct embellishments to plant on a house, but, he will say, "has not the architect himself told us that such embellishments are to be avoided, and that we must build truthfully what we want; we know what we want; the builder knows very well how to build it; so where does the architect come in?" This is an awkward question that demands a decisive answer, especially as most laymen could point to some excellent isolated houses built to a builder's design and very likely to some bad ones designed by an architect. The objection can best be met by referring to actual schemes. Those which have been built on purely utilitarian lines are easily recognizable, not because they are definitely bad, but because they are insipid and uninspiring, like lukewarm water. It has probably been necessary to go through a stage of almost total utilitarianism in order to bridge across the gulf between ugly and misapplied "ornamentation" (such as sham half-timber and crude stained glass), and to arrive at a legitimate use of architectural features. While, therefore, one would far rather see the purely utilitarian than the use of Edwardian embellishments, yet we must realize that neither of these constitutes architecture, and that we have to pass beyond utilitarian accommodation to arrive at architectural results. As a rule only the architect has had sufficient training to be able to treat housing in an architectural way, hence it is important to combat the theory that since absurd ornamentation is to be avoided the architect is likewise redundant.

Local authorities will find that an impartial element in the form of a professional man can be of great assistance in reconciling local interests and in smoothing over the difficulties and rivalries that frequently exist in the ranks of the council itself as well as in the district it is serving. Further, an architect is, or should be, more conversant with new methods of building and with the practice in other parts of the country, as well as more efficient in dealing with group design and the wider aspects of the development of the district. Under the terms of the new Act local authorities are empowered to assist schemes carried out by private enterprise, and it is greatly to be hoped that here again the authorities will take the opportunity of encouraging the employment of the consultant architect. The best builder is not the man who thinks himself the skilled designer, and the action of the National Federation of House Builders in co-operating with the R.I.B.A. in framing the new scale is proof that he recognizes the special advantages to be gained by collaboration, and once a habit is formed precedent quickly becomes a tradition. But it is the definite effort to make a beginning which constitutes the difficulty in the present crisis.

Lord Riddell, in proposing a vote of thanks to the president of the Royal Institute, complained that architects do not move the Press enough, and he suggested that every architect who lives in a provincial town should make himself a missionary by getting into touch with the local newspaper and inducing the editor to devote a certain amount of space to architecture. The obstacle is that the editor has to satisfy himself, not that it is good for the public to assimilate architectural instruction, but that it will make telling copy. To introduce such a campaign effectively it would be necessary scrupulously to avoid technicalities, and to concentrate on new, or relatively new, work rather than to expound the old. The public is firmly convinced that architecture died some centuries ago, and it has not occurred to the layman that the art might be resuscitated. Any overemphasis of old work would only confirm the ordinary man in this belief, unless care were taken to explain that architecture can once again become part of everyday life, if the everyday man cares to make it so.

MANNING ROBERTSON.

Ancient Light Law in Scotland

It is frequently urged in support of the perennial agitation for the repeal of the Prescription Act and of municipal restrictions on the height of buildings, that there is no "ancient light law" in Scotland or in America. But recent discussions on the subject of higher buildings at the R.I.B.A. and on American zoning laws at the Surveyors' Institution, elicited the fact that in many American towns it is now no longer possible for building owners to "build as they like on their own land," irrespective of the health and comfort of their neighbours; and the case which we report on page 811 shows that the analogy of Scotland is equally misleading. The judgment quoted states categorically that in Scottish burghs frontagers on a street have a common-law right to the light which they receive from that street. This common law right would presumably neither be limited by the terms of the English Prescription Act, nor modified by the precedents of English case law, such as the well-known Colls judgment. Modern judgments in ancient light disputes leave little room for doubt that under English law as at present administered a litigant with a real grievance can be assured of adequate protection from the activities of selfish neighbours, whilst actions in respect of obstructions which still leave the plaintiff with sufficient light for ordinary purposes are almost certain to fail. It is not always recognized that the English Prescription Act merely modified and regulated common law rights—it did not initiate them; and it would appear that the advocates of higher buildings would find even more legal difficulties in Scotland than in England.

But in one respect it would seem that the English courts might, with no small advantage, follow a precedent given by the case we report. It was one in which there was no sky visible from the plaintiffs' windows, a condition which often obtains with low window heads, thick walls, or deep rooms. The illumination, therefore, depended upon light reflected from the facing walls. It appears to have been urged and accepted by the judge that the alteration of those walls from stone to white glazed brick would improve the plaintiffs' light so long as they were kept clean. In the Engl courts such a plea is generally regarded as inadmissible account of insuperable legal difficulties in enforcing a order of the Court to clean periodically. Scottish law m be different, but in any case the Scottish judge appears circumvent any such difficulty rather neatly. In effect says: "I will not grant now the injunction asked for, if at any time the defendants fail to clean periodically the satisfaction of the City Surveyor, I authorize the Corpo tion to order the removal of the bridge, and the defenda to obey such order." Agreements to clean periodically common enough in England between parties, and su agreements would presumably be subject to actions breach. It seems, therefore, somewhat strange that Chancery Bench cannot devise some means of enforci the periodical cleaning of obstructing buildings, such as granting injunctions for their removal or restriction, wh would only become operative upon proof to the Court th specified periodical cleaning had not been executed. Su orders would make our towns brighter and healthier. M monetary damages benefit nobody beyond the individ recipient.

Ypres the Phœnix

The surprising progress that has been made in the building of war-shattered Ypres is a great tribute to lit Belgium's vitality and power of recuperation. Mr. Toph Forrest, whose R.I.B.A. lecture is reported and illustra in this issue, quotes some astonishing statistics relating the work that has been done there. The most striking f that emerges is that already the town has taken back itself no fewer than 13,000 inhabitants as against a p war population of 18,000. So speedy a recovery could har have been expected even by the most sanguine of optimis it is all the more remarkable when we remember that th were some, well qualified to judge, who declared that Yp could never be rebuilt. Here it is, almost a compl entity again. The methods of reconstruction afford revealing evidence of the historical sense of the Belg people. Here was a great area of ruin, appalling in completeness of its desolation. The temptation to make entirely new job of it in the rebuilding must have b almost overwhelming. But no; the old streets are clea of debris, and the new buildings rise upon the very sites the old. Many are not even new buildings, for the material is re-used with frugal care. Look at the Hotel Gand. Here was a façade badly shattered; what rema is lovingly restored, and the missing parts carefully placed. Surely the limit of refinement in economy of effo Regard for the historical past has not, however, blin the rebuilders of Ypres to the blemishes of the pre-war to Hence, one thing that you do not find in the new Ypre the slums. These are not rebuilt. The people are housed outside the town under immensely improved c ditions. Little Belgium, in her recovery, has set an exam of dogged determination and enterprise that should be inspiration to her bigger, wealthier, and less confid neighbours.

The Architecture Club

The Architecture Club's dinner last week was a suc not only in point of numbers—it was the largest mu that the club has known—but also in the matter of p prandial oratory. The presence of so distinguishe litterateur as Mr. Edmund Gosse; speakers so accomplis and witty as Mr. Paul Waterhouse and Mr. A. B. Walkl a critic so friendly and stimulating as Lord Riddell, ensu for members and guests an evening of considerable enj ment. Mr. Squire had one or two important announ ments to make, the most interesting of which was that club were co-operating with the R.I.B.A. in an exhibit of architecture next year at the British Empire Exhibit This will not, we understand, interfere with the club's exhibition, which will be held in the spring.

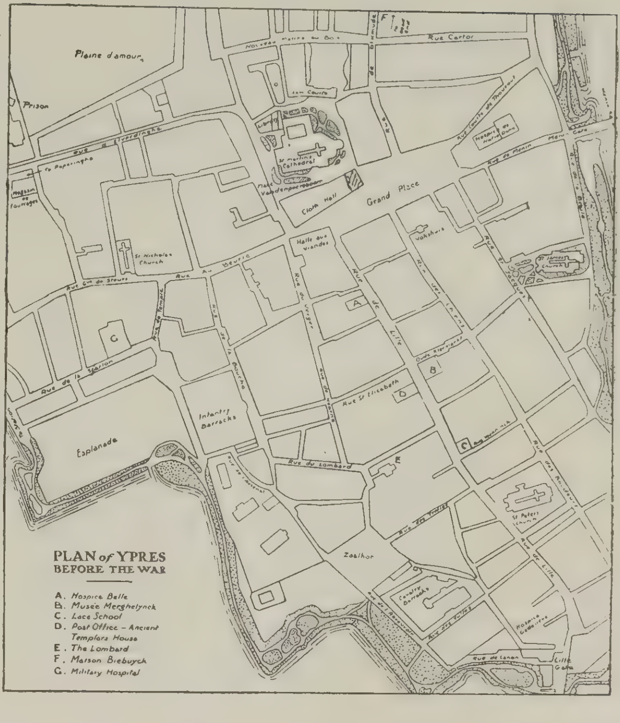
The Rebuilding of Ypres

By G. TOPHAM FORREST, F.R.I.B.A.

THE big hall at The Royal Society of Medicine was crowded on Monday of last week when Mr. G. Topham Forrest, F.R.I.B.A., chief architect to the London County Council, de- ered a lecture on "The Rebuilding of Ypres." Mr. Alfred Gotch, F.S.A., the President, occupied the air, and the Council guests of the evening included: le lecturer; the Earl of Cavan, Chief of the Im- rial General Staff; the French and Belgian Ambas- lors; the Consul-General of Belgium; Lord Meston; Earl of Haddo, Deputy Chairman, London County uncil; the Marquis de Bucy; Lt.-Col. Viscount Bury; Joseph Cook, High Commissioner for Australia; Sir alter Gibbons, K.B.E.; Sir John Collie, C.M.G., M.D.; Edgar Bonham-Carter, K.C.M.G.; Sir Arthur Griffith scawen, J.P.; Lord Riddell; Sir Lawrence Weaver, B.E., F.S.A.; Major R. Lloyd George; Major Arthur gor; Lt.-Col. J. B. P. Karslake, L.C.C.; Messrs. G. W. mphreys, C.B.E., J. C. Squire, Sydney Jones, John uart, F.R.I.B.A., and J. J. Joass, F.R.I.B.A. The ture was illustrated by eighty lantern slides showing res as it was before the war, as it was after the war, d as it is to-day.

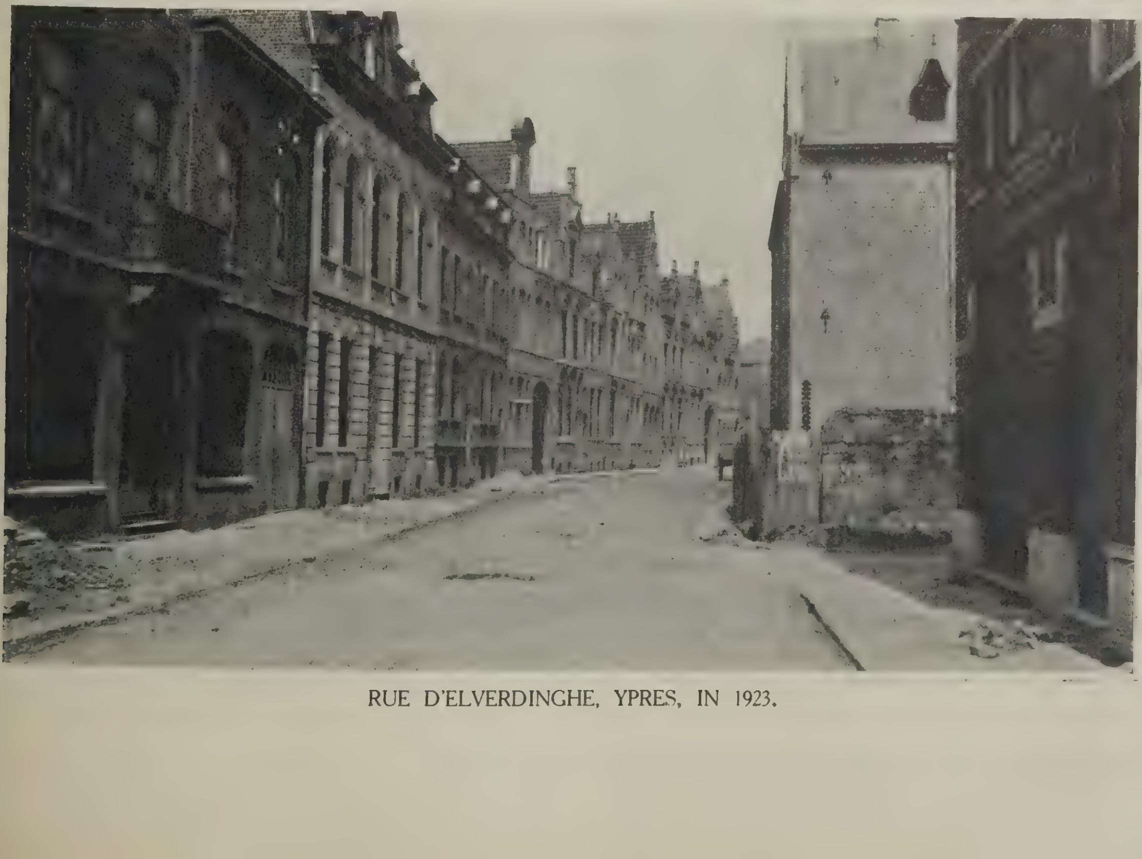
Mr. Topham Forrest, in the course of his lecture said: visit to Ypres shortly after the war had come to an l was surely an experience not to be forgotten. At erent times during the war, reports had been published arding the results of the German bombardment, and hough these made it clear that the ancient buildings re in ruins, those who knew and loved the Ypres of -war days, and remembered all that it had come through past centuries, were hoping against hope that the truction was not so complete as the reports had seemed indicate. A visit to the City, however, dispelled all h hope; in fact, one might say it was dispelled imme- itely after leaving the coast; for the traveller saw on ry hand the most appalling evidence of the destructive wer of modern gunfire.

t should be realized that Ypres was not the only place which restoration work had to be carried out; nearly other communities had suffered and, in addition, over the country, incalculable injury had been done to roads, railways, telegraphic and telephonic installations, waterworks, and canals. As soon as the capital was re-entered, the Government announced that one of the first duties of the country was to consecrate the national energy and resources to the task of helping the devastated regions to make good their enormous losses. The first stage was to bring in a Bill—which the Chambers passed with enthusiasm—with the object of placing under the patronage of the nation, the towns and communities which had suffered.



PLAN of YPRES BEFORE THE WAR

The town of Ypres which, among all the ruined districts was certainly the one which had suffered most, was, with Louvain and Dinant, those other great Belgian sacrifices, among the first to benefit from this special law. About

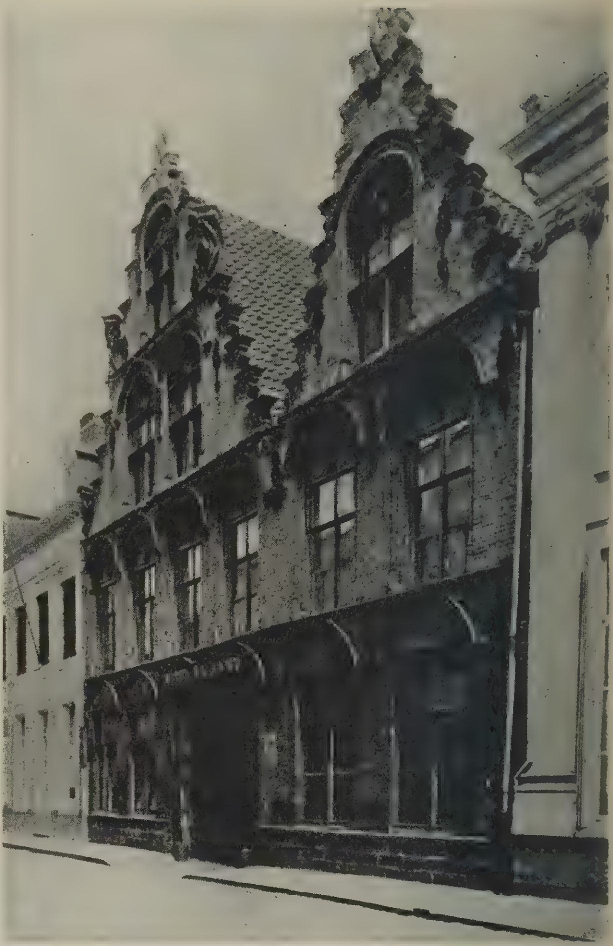


RUE D'ELVERDINGHE, YPRES, IN 1923.

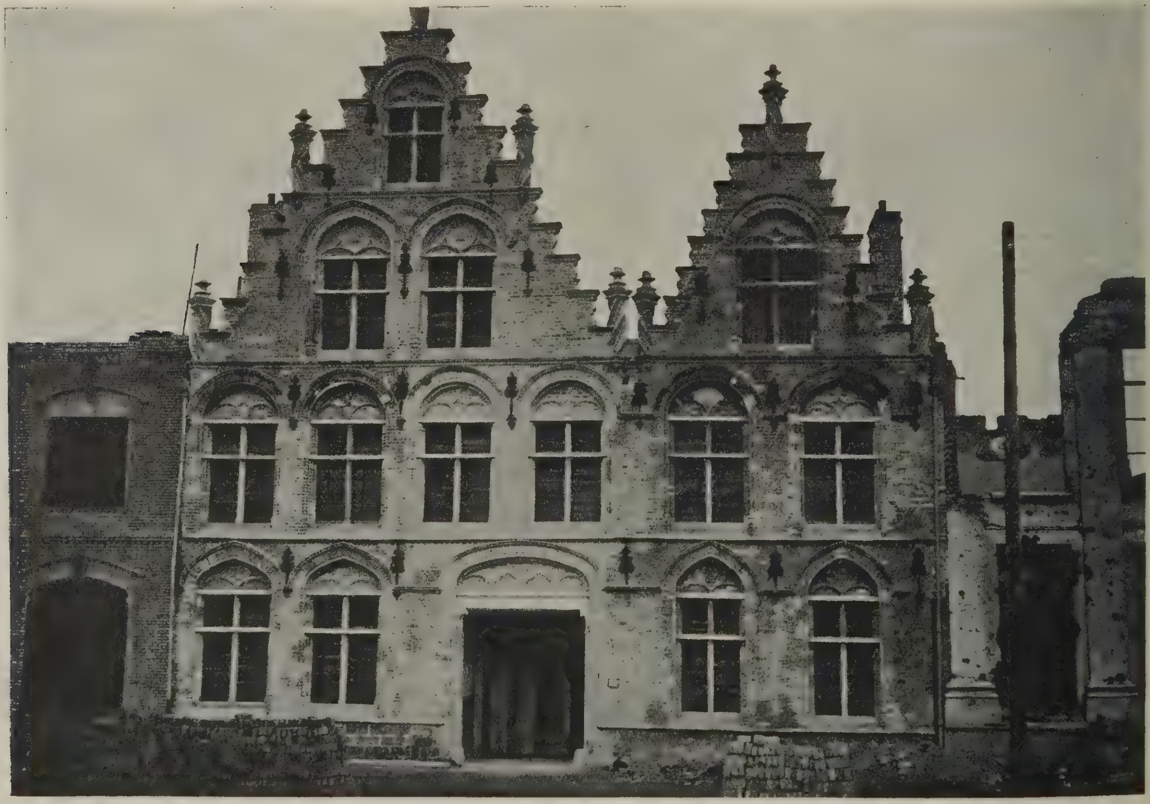
the middle of 1919, it was, as it were, adopted by the nation, and was, therefore, assured of the technical and financial assistance of the State and of those organizations especially created to assist in the prompt re-establishment of the country. Thanks to this aid, important provisional arrangements were soon made for housing the necessary public services and the first repatriated inhabitants.

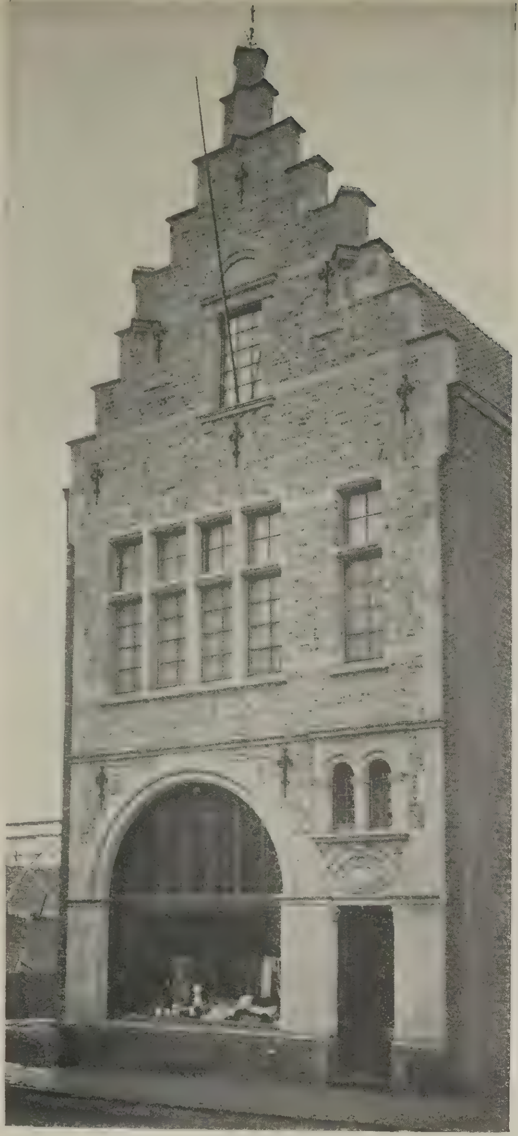
The task, at this time, was most difficult, for means of communication, railways, waterways and roads, had totally disappeared; transport failed, and labour especially, was lacking. And yet, notwithstanding all this, within a few months, quite a small town of nearly 1,000 huts was built in the neighbourhood, on a piece of land which, before the war, had been used as a manœuvring ground for the garrison stationed at Ypres. Part of this temporary village still exists and will only disappear on the completion of the reconstruction works, for it shelters a great part of the working population gathered from all parts of the country for the purpose of rebuilding the town.

Immediately these huts had been erected, the work of clearing the ruins and reconstructing the city was taken in hand, and with such speed has the work been pressed forward, that at the end of September, 1923, 1,500 houses were actually inhabited; 200 were ready for occupation; and 789 were in course of reconstruction. This gives a total of 2,489 which, added to the 750 huts remaining, gives a grand total of 3,239 buildings, and all this since the early part of 1921, for it was not till the beginning of that year that the work of clearing the ruins was sufficiently advanced to allow of a commencement being made on actual building work.

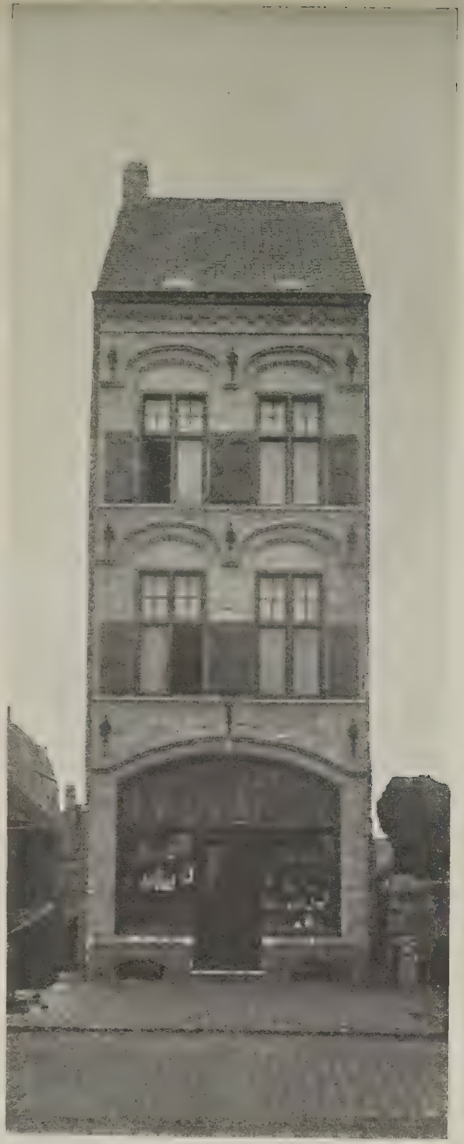

THE HOTEL DE GAND IN 1913.

The question as to whether *all* the buildings of note should be reconstructed gave rise at the first to much controversy, for it was thought by many that the principal ruins should be preserved as a witness to the horrors of the Great War. As regards the Cloth Hall, the matter has not been finally decided, but even if it had been decided to restore the building, nothing more could have been done that has been done, for up to the present the financial question has dominated the whole problem, and, generally speaking, the authorities have been compelled, of necessity, to devote the funds available to reconstructions of immediate utility. As regards th Market Place and Belfry, operations have been confine to clearing the ruins and executing certain consolidatin work. I am often asked whether the Cloth Hall wil

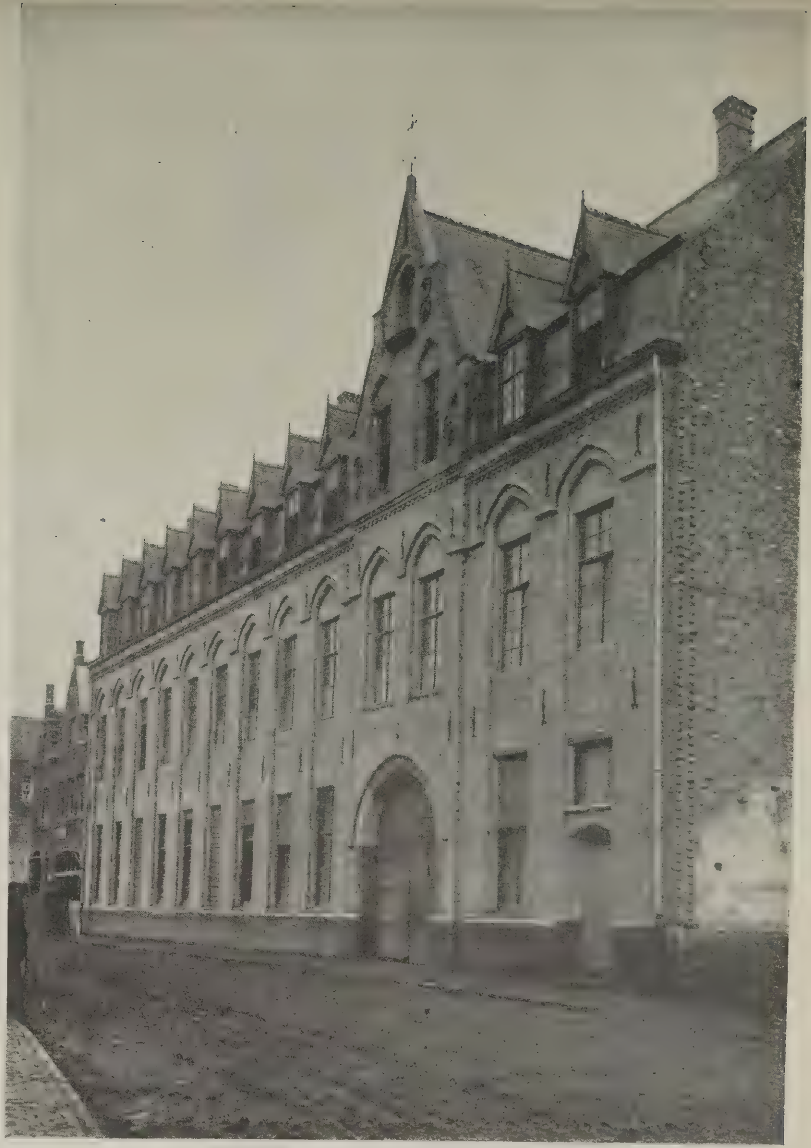

HOTEL DE GAND, YPRES, IN JANUARY, 1922.



A LITTLE BUILDING IN THE RUE AU BEURRE.



A BUILDING ON AN ISOLATED STRIP.



AN INSTANCE OF RESTORATION WORK.

YPRES: SOME OF THE BUILDINGS WHICH WERE COMPLETED BY JANUARY, 1922.

A PAIR OF HOUSES IN LIGNY GARDEN CITY (OCTOBER, 1921).

eventually be rebuilt. I have no doubt whatever about it. I am convinced that the Belgian people will not rest until the whole town has been restored to something of its former glory.

Those responsible for restoring the town have, as a rule, concentrated on the buildings most urgently needed, and special attention has been given to the reconstruction of schools, hospitals, and private buildings. Ypres had schools of various grades, several elementary, a few secondary, and an industrial and fine arts school, and all of them vanished in the great disaster. Most of them, however, are either actually completed or in course of reconstruction.

It should be emphasized that the problem which the people of Belgium set themselves in the presence of the ruined city of Ypres was an exceedingly difficult one, for they decided not merely to build a town, but to rebuild the town of Ypres exactly as it had been handed down from long past generations. The devoted zeal of all authorities and services was, therefore, first of all bent on the patient and methodical clearing of the ruins; on the herculean task of recovery and classification, stone by stone and brick by brick; on the slow and laborious search for traces of the town's communications and on the patient uncovering of the water services and sewers, both of which had been destroyed and dispersed underground. The task called for weary months of self-denial and goodwill, and more than 4,000 workmen were engaged on this work until the beginning of the year 1921. Then came the actual work of rebuilding.

At the beginning, and in great measure since, the greater part of all this reconstruction work has been carried out with the financial aid and under the control of the Government. But private enterprise has not been lacking, and is, in fact, taking a constantly increasing share in the work of restoration. The Government Department concerned, however, is deserving of the highest praise. It is exceedingly difficult to discover the names of those responsible for the commencement of the work and its continuation. I should, however, like to mention the name of State Minister Renkin, Mr. R. Verwilghen, latterly the Minister for the Devastated Regions, and Mr. Carl Verwilghen, his brother.

The speed at which the work is being pressed forward may also be gathered from the figures dealing with the population of the town at various dates. Before the war there were 18,000 people in the town. At the end of 1918 not a single civilian was in the place, but at the end of 1919 there were more than 2,000; at the end of 1921, nearly 10,000; and at the present time over 13,000.

One feels certain that before long the town will be completely rebuilt and that in ten years' time there will be very little evidence of the war. Alas! there will alway be sufficient evidence in the cemeteries round about These, however, will not tell of the missing, for unfortunatel there was a great host of men who fought and died in th sector, whose bodies have not been found. But they als are to have a witness, for at the Menin Gate is being erecte a great memorial to their memory from the designs of Si Reginald Blomfield, R.A.

There were in Ypres, as in most of the destroyed localitie certain working-class districts, containing some hundred of old houses, the reconstruction of which was neithe possible nor desirable. They had, however, to be replace in order to meet the industrial needs of the town. Th Government, realizing this, did not hesitate to grapple wit the problem, and in 1919 a most interesting scheme wa devised embodying the construction of about 250 working class dwellings. The houses are on two estates. The fir consists of about 140 dwellings. They are carried ou partly in wood and partly in brick, and were erected in th year 1921, in the short space of three months. The othe estate is described as a garden city and well deserves th name. About 100 buildings in all have been erected. Th planning of the estate has been carried out with a view the future provision in the neighbourhood of more impo tant buildings, such as villas, commercial houses, an public buildings, which will form dominating features the streets and give to the suburb a less uniform but mo picturesque appearance.

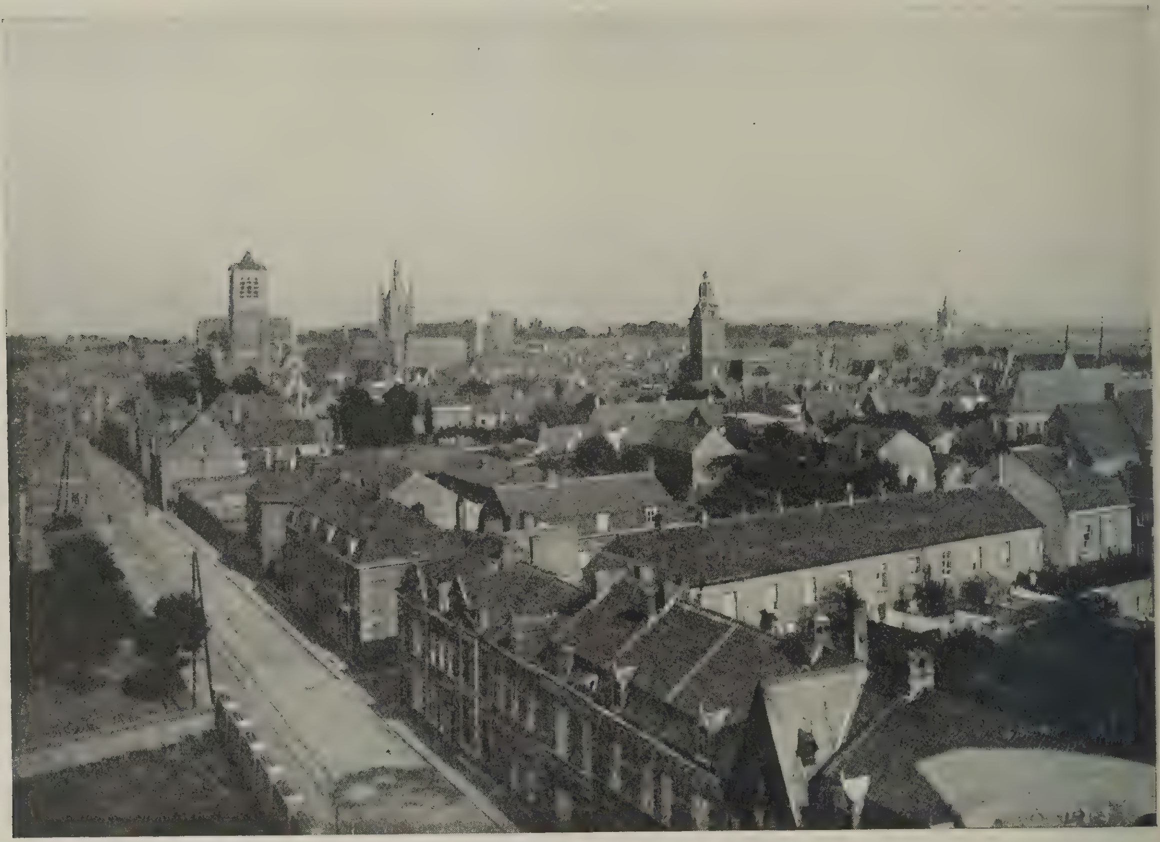
I would like to remind you that what was only son three years ago an immense field of desolation and deat is to-day a vast workshop in full activity. Those who d not see the ruins of the unhappy city on the morrow of th armistice, or during the months immediately following, ca form but little idea of the labour and energy required render the reconstruction possible. The masses of ruin fallen in disorder, had obliterated almost the very traces the streets; in fact, in most parts of the town the de truction was so complete, that even the foundations ha disappeared, and the sites of many of the buildings had bee shattered and reshattered.

At the end of 1918 it looked as if Ypres would be for ev a great silent mound, a pathetic token of the struggles the British army on Belgian soil. Fortunately, neither t Belgian people nor their rulers shared that view. The wo which they have already accomplished shows that t spirit which constrained them to raise the standard again the forces of Germany in August, 1914, still prevail when the time came for deciding whether or not t fallen places should be restored. It would have bee a comparatively easy task to have made a clean swe f the ruins and to have built in their stead a new ty on modern lines, but those who understand ie Belgian people, and can gauge all that so fondly taches it to the past, will realize that such a proceeding ould have been but a mutilation, destined grievously to ound again a people who had already suffered too much. o, the people of Belgium decided to attempt what was iought by many to be the impossible, just as they decided attempt the impossible in 1914; and they resolved to uild again the ancient city exactly as it had been handed own to them by their forefathers. In the result they have ompelled the admiration of the world—not only because what they have achieved at Ypres, but also throughout l the ruined territory in the way of restoring farms, llages, towns, roads, railways and all that makes for the -establishment of their country.

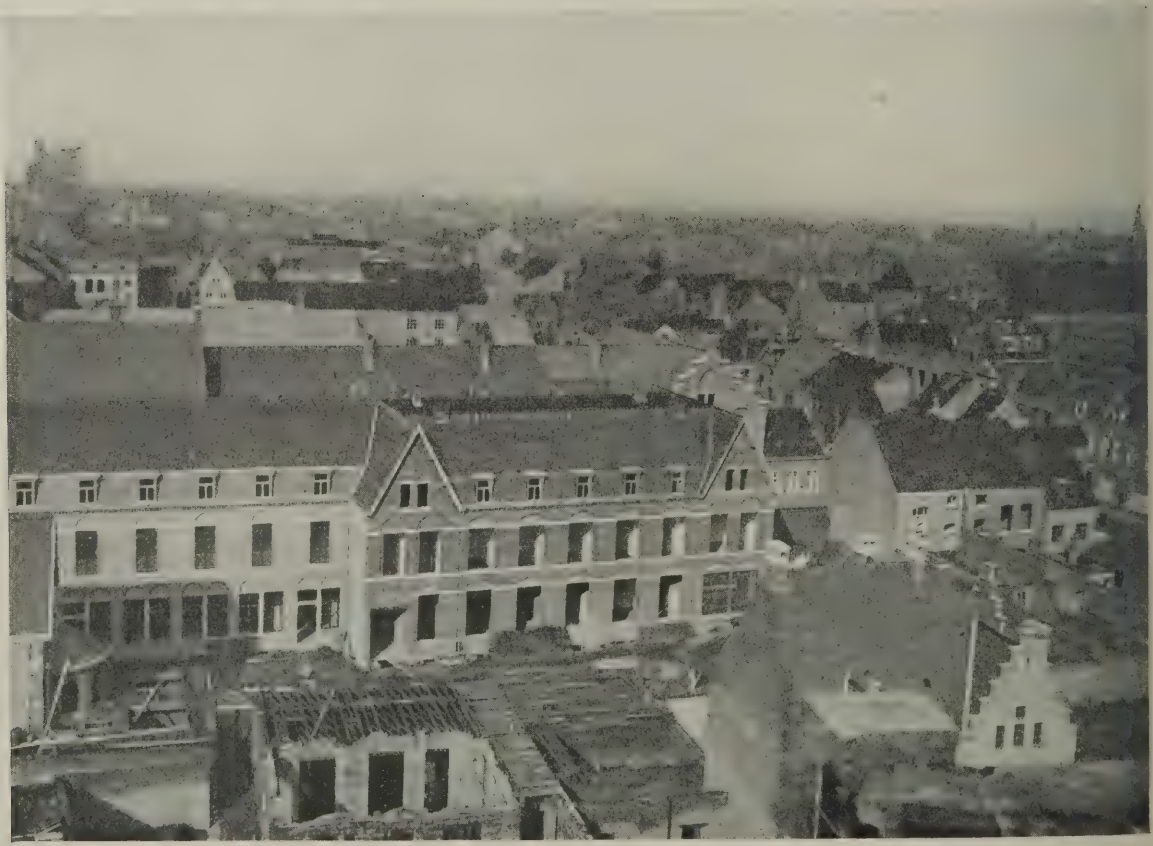
Surely they have been well advised to restore the ancient ildings. We all know something of the moral effect of lendid architecture on the life of a people. Who can gauge that Westminster Abbey and all the Wren's work means in the life of this country? Who can measure the moral influence of the great buildings of a great past in the life of Italy?

Great buildings are the expression of the greatness of the soul of the people, and their influence cannot be confined to the nation which produces them. It is an influence which passes out to all peoples, and therefore the loss of such buildings makes the world the poorer. The world is certainly the poorer for the loss of the Cloth Hall, and one of the consoling lessons of the war is to be drawn from the fact that the peoples of civilization rose up in anger at the presence of the force which wantonly destroyed it. The civilized world was filled with horror at the destruction of Ypres, and that horror was expressed by men who were neither archæologists nor architects: in some strange way they realized that a great wrong had been done, not merely to the people of Ypres, but to the whole of mankind, including the generations not yet born. This, too, explains why so many of us are not at all attracted by the prospect of leaving Ypres in ruins. We wish to see her restored, and

TWO VIEWS IN LIGNY GARDEN CITY (AUGUST, 1922).



A PANORAMIC VIEW TOWARDS THE EAST IN 1912.



A PANORAMIC VIEW TOWARDS THE NORTH-EAST IN 1923.

THE REBUILDING OF YPRES.

we at all understand the Belgian people, we are certain iat the work shall yet be completed. It is impossible to lieve otherwise, and when the Cloth Hall has been stored, I sincerely hope that a tablet will be erected on walls telling in simple words the story of the restoration the town, and recording in letters cut deep and that nnot fade, a word written long ago concerning the re-uilding of another city:

"The people had a mind to work."

The Earl of Cavan, in moving a vote of thanks to the cturer, referred to the magnitude of the task which the Belgians had undertaken and said that he was astonished that the work described by Mr. Topham Forrest had already been done. He regretted that no mention had been made of the Ramparts, which had proved absolutely safe against shell-fire. They had been used as the headquarters of many brigades and divisions during the war, and he had never known a single casualty by gas or shell taking place within them. He heartily congratulated Belgium on what she had done. Not many countries would have taken up such a colossal task and brought it to such fruition.

The vote of thanks was seconded and supported respectively by the Belgian and French Ambassadors.

The Exhibition of Town Planning at Olympia

IT is not surprising that the growing popularity of motor vehicles for commercial purposes should have been followed since the war by a demand on the part of business men for more arterial roads designed for avy motor traffic.

Such demands are significant inasmuch as they prove that e general public are in a position to appreciate the tremen-us increase in national efficiency which will be obtained a system of regional planning throughout the country. s an army in the field exists by a unified control of its es of communication, so the national life of a people can ly be vigorous if a judicious control be obtained over the owth of its arterial system. Town planning and main road mmunications are, therefore, inseparable, for to-day ies are inter-related in one vast organism of which dividual cities form the units.

The town-planning section of the Commercial Motor hibition at Olympia is consequently arranged in order interest the general public in modern town-planning oblems, which naturally arise from an extension of our gional arteries.

Viewed in this light the exhibition is very comprehensive d of international importance, examples having been sely selected from material contributed by most European tions and from America. The drawings and models now view in the new annexe at Olympia are divided into eight ctions, viz., civic surveys, town-planning schemes under Town Planning Acts, road forms, London, City develop-nt, regional or joint town-planning schemes, garden ies, and lastly, the section devoted to parks and recreation ounds.

n the civic survey section the set of drawings from nchester, providing in graphic form their statistics of pulation, traffic, open spaces, etc., show a system of ation which is excellent and might well form the model survey work by other communities preparing emes under the Act. In this connection it is olutely essential that some common and simple thod of notation should be adopted, which will be ily recognized by everyone without constant rence to the "Legende." As an example of graphic resentation of the growth of communities from the nze Age to the nineteenth century, we would recommend udy of the seven small diagrams of the town of Newbury, ical of the useful data collected by sociological students showing how the average citizen interested in his lity can help the town-planning expert engaged on structive proposals. The special value of aerial survey k, so vital in war time, is here illustrated by a valuable ibit in this section of the aerial survey of Lucknow. s Cartes du Department de la Seine" are a very work-like set of drawings from Paris showing the existing nicipal services.

ection 2 contains large maps illustrating town-planning emes for Bradford, Cardiff, and other cities. The ortance of obtaining a relief map or contoured model uld be emphasized. As schemes for town development are usually discussed by lay members of a town council, the value of a model as exhibited by the City of Bradford cannot be over-estimated.

The Berlin road-map is interesting for road experts, but the plans of the City of Zurich will appeal more strongly to architects. Here there is definite evidence of an appreciation of architectural values, so often absent from town-planning exhibitions. Something more than efficient roads and sewers are required to produce the city beautiful and the Zurich drawings contain much that rises above mere efficiency.

In this section are shown Mr. W. R. Davidge's proposals for the Rotherham region, also his immense scheme for the extension of the City of Bombay. At Bombay the engineer plays a very important part, for the land available for Mr. Davidge's plan has to be reclaimed from the sea in Back Bay, and encompassed by a great sea-wall two miles long. The chief problem which the architect visitor will note in this scheme is the difficulty of combining the new development with the old City of Bombay, so as to produce a unified whole, not to mention the fact that the net result must show an economic return on so vast a civic undertaking. The authority responsible for the carrying out of the scheme no less than the architect are to be congratulated on their courage and the long views which they have taken. An excellent model of this scheme to a scale of 20 ft. to the inch, made by Mr. Partridge, will explain the plan to those unacquainted with the site.

It is quite unnecessary for a city to wait for a detailed town-planning scheme under the Act before it takes steps to control its growth. Every town, however small, might prepare a preliminary development plan as a basis for discussion. Such a plan is well illustrated by the development plan of Plymouth prepared by Professor S. D. Adshead. Plymouth is in some ways unique in the problem it presents for the expert. Lying as it does on a very hilly site, bounded by estuaries and with only two obvious approaches, showing evidences of sudden growth at various periods quite unrelated to each other, it is difficult for the expert to obtain unity of plan and forecast the future growth of his Majesty's Dockyards. The old fishing village of Plymouth, so intimately connected with the departure of the Pilgrim Fathers and containing much of architectural merit, had to be preserved without sterilizing development and Professor Adshead's suggestions for dealing with this show a very human treatment often absent in modern town-planning schemes. His rough pen-and-ink studies made during the preparation of the scheme are delightful, and help materially in visualizing his proposals.

The most interesting exhibits in Section 3 are the designs submitted by the Architectural Association and London University Schools for a modern charabanc station. Space forbids a detailed criticism of these designs, but they show a very real attempt to solve an entirely modern problem, divorced as it is from any traditional form which might be used as a prototype.

Section 4, on London, contains a large number of maps and plans prepared or provided by the London Society, and include a map prepared by Major Hardy-Syms (the Organizing Secretary of the Exhibition) showing the present state of progress of London's new arterial roads.

The fifth section is perhaps the most interesting for the expert. It contains a collection of drawings from Sweden (that pioneer country of town planning), notably Gothenburg, Upsala, and other cities. Swedish town planners evidently have a thorough knowledge of big architectural composition, and their plans, moreover, are invariably dynamic, showing their cities as living organisms rather than, as so many English cities, merely exploitation grounds for the speculative builder. We would particularly recommend the visitor to study the very beautiful plan of Upsala, with its focal points at the Cathedral and the Castle, proposed University Extension, and magnificent parkways, arranged radially in order to provide vistas into the heart of the town. Ample provision is also made in the plan for circumferential parkways.

The Society de la Renaissance des Cities (whose vigour we fear may be impaired through lack of funds) has sent several city plans, including Mr. George Ford's plan of Rheims, an object-lesson in grouping and disposition of its parts. A recent visit of the writer to this city to note progress makes one fear that reconstruction is going on apace without much control over architectural façades. The whole of Section 6 is devoted to the Society's exhibit. A noteworthy piece of civic design is exemplified in the model of Mr. Barry Parker's Civic Centre at Oporto. As a proof of the public spirit of Messrs. Cadbury there is shown a small-scale model, familiar to many people, of the village of Bournville.

Naturally, little space is devoted to housing schemes, forming as they do but the detailed portions of big regional schemes.

The excellent plan of Dormanstown, however, is shown again as a self-contained community, but it is here related to the South Tees-side Regional Scheme (Messrs. Adshead, Ramsey and Patrick Abercrombie).

Of Garden cities, Letchworth and Welwyn both provide new proofs of the absolute necessity of drawing off the surplus population of our overgrown cities, and Mr. Louis de Soisson's fine plan of Welwyn, which shows a definitely built-up area forming the heart of the town, should dispose of the wrong impression held by many people that a garden city is merely a collection of small houses, each isolated in its own garden, spread out at the rate of eight to the acre. That no doubt would have a desolating effect, but at Welwyn there will be a solid core to an otherwise open development. Incidentally, the geographical situation of Welwyn in relation to the Great North Road is ideal, as future communities will tend to establish themselves to one side of rather than astride those great motor highways which will presently traverse the country in trul Roman fashion.

Mr. T. H. Mawson's imaginative designs for recreationa areas are well illustrated in Section 8, also numerous photo of continental playgrounds, etc.

Finally, to particularize on the main feature of thi exhibition, new motor roads, we should realize that, excep for the motorist travelling at high speed the big moto road of the future might become as demoralizing an devastating as the railway track of the last century No one who has travelled on foot or on horseback alon the Napoleonic roads of France will deny that lon straight roads without breaks can become exceedingl exhausting, mentally and physically, to the average traveller. It is essential, therefore, that if our new communications are not to disfigure the countryside, roa designers must pay some attention to those æstheti considerations which are equally important with stabilit of structure and more vital to the joy of travel than th provision of a surface suitable for a racing track.

In conclusion one must refer to the large model 212 ft long by 20 ft. wide made by Professor Adshead and severa architectural students in five days to illustrate th Brentford by-pass road, approximately six miles long, t avoid the congested High Street at Old Brentford. I gives a very realistic impression of a typical arterial road 120 ft. wide, and should be seen by all students of tow planning.

H. T.

The space available for the exhibits in the gallery of th new hall at Olympia covers approximately 15,000 sq. ft. o wall space and 30,000 sq. ft. of floor space.

The committee found that the exhibits promised wer so numerous that it became necessary to make a selection, a the exhibits were greatly in excess of the space available.

The range of exhibits cover several sections, com prising :—

Section 1.—The civic survey.

Section 2.—Plans, photographs, and models illustratin town-planning schemes under Town Planning Acts, Britis and foreign.

Section 3.—Road forms, plans, photographs, and model of arterial roads, road and street design, parking spaces i streets, road junctions, parking stations for char-a-bancs traffic centres, petrol filling stations, tree planting an conservation.

Section 4.—Great London traffic problems generally.

Section 5.—City development, British and foreign.

Section 6.—Regional or joint town planning.

Section 7.—Zoning.

Section 8.—Parks, open spaces, and athletic grounds.

Bolesworth Castle, Cheshire

Its Reconstruction by CLOUGH WILLIAMS-ELLIS, Architect

FOR several years the complete reconstruction and refitting of Bolesworth Castle some ten miles from Chester has been proceeding under the direction of Mr. Clough Williams-Ellis.

The work commissioned by Major Robert Barbour included sweeping changes within the house and considerable changes without, the original building being an exercise in "the Gothic taste" of the early nineteenth century.

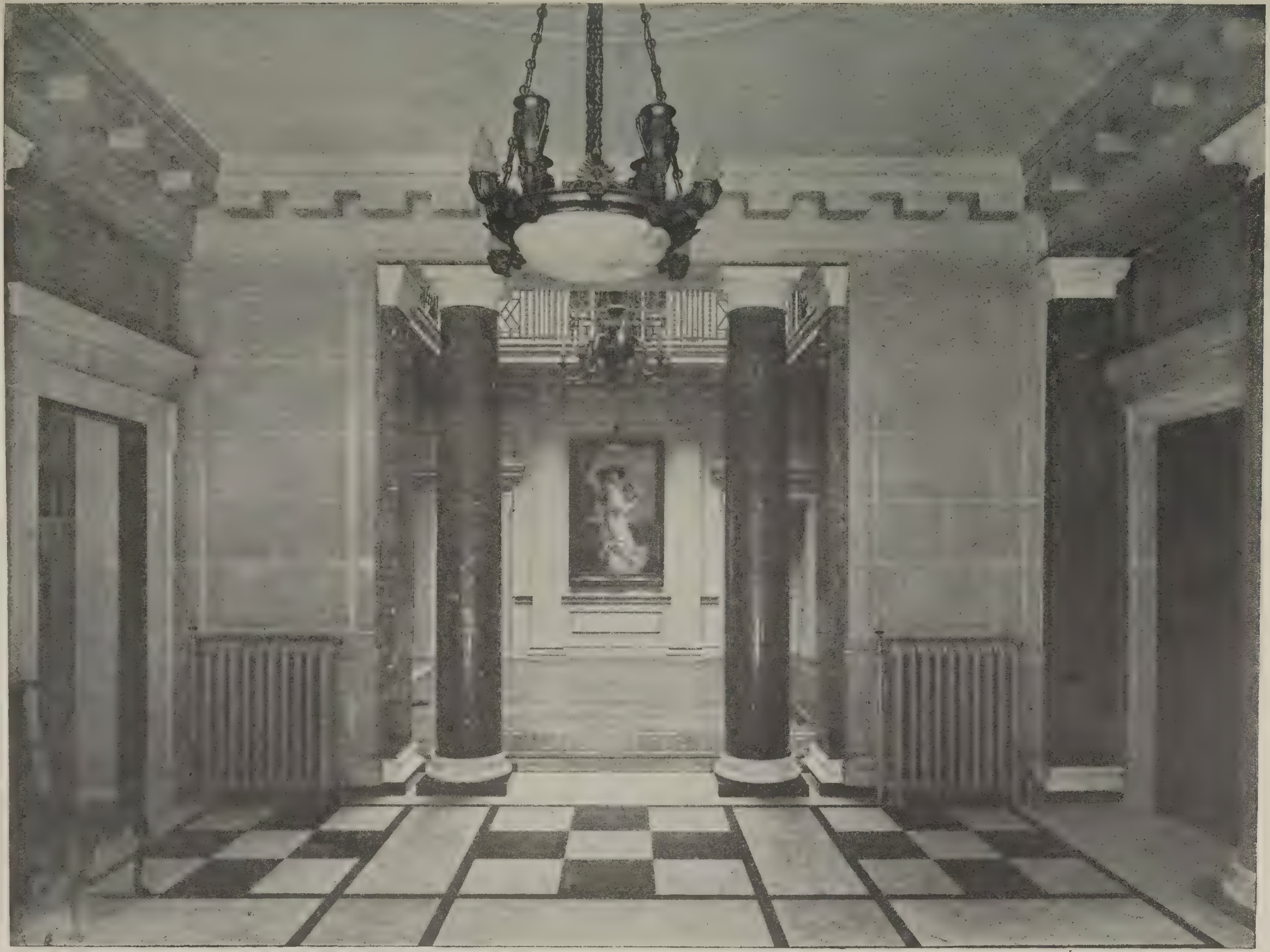
Somewhat vainly, the convenience of the interior plan had been largely sacrificed to the feudal aspirations of the exterior—a state of things by no means easy to deal with.

A new approach and point of entrance were early decided upon, and soon after the desirability of a drastic re-castin of the old garden scheme became obvious.

The only photographs thus far available show the ne entrance hall and the saloon, the latter having been contrived out of various smaller rooms that occupied its sit under the old dispensation, their gothicky glories havin departed with the cartloads of dingy lath-and-plaste rubbish into which they so pathetically dissolved at th touch of the housebreaker.

Mr. Williams-Ellis has certainly reacted vigorously to th old Bolesworth environment and has replaced the wa ghosts of misunderstood mediævalism by a robust classicism which if "free" is for that reason also very much alive.

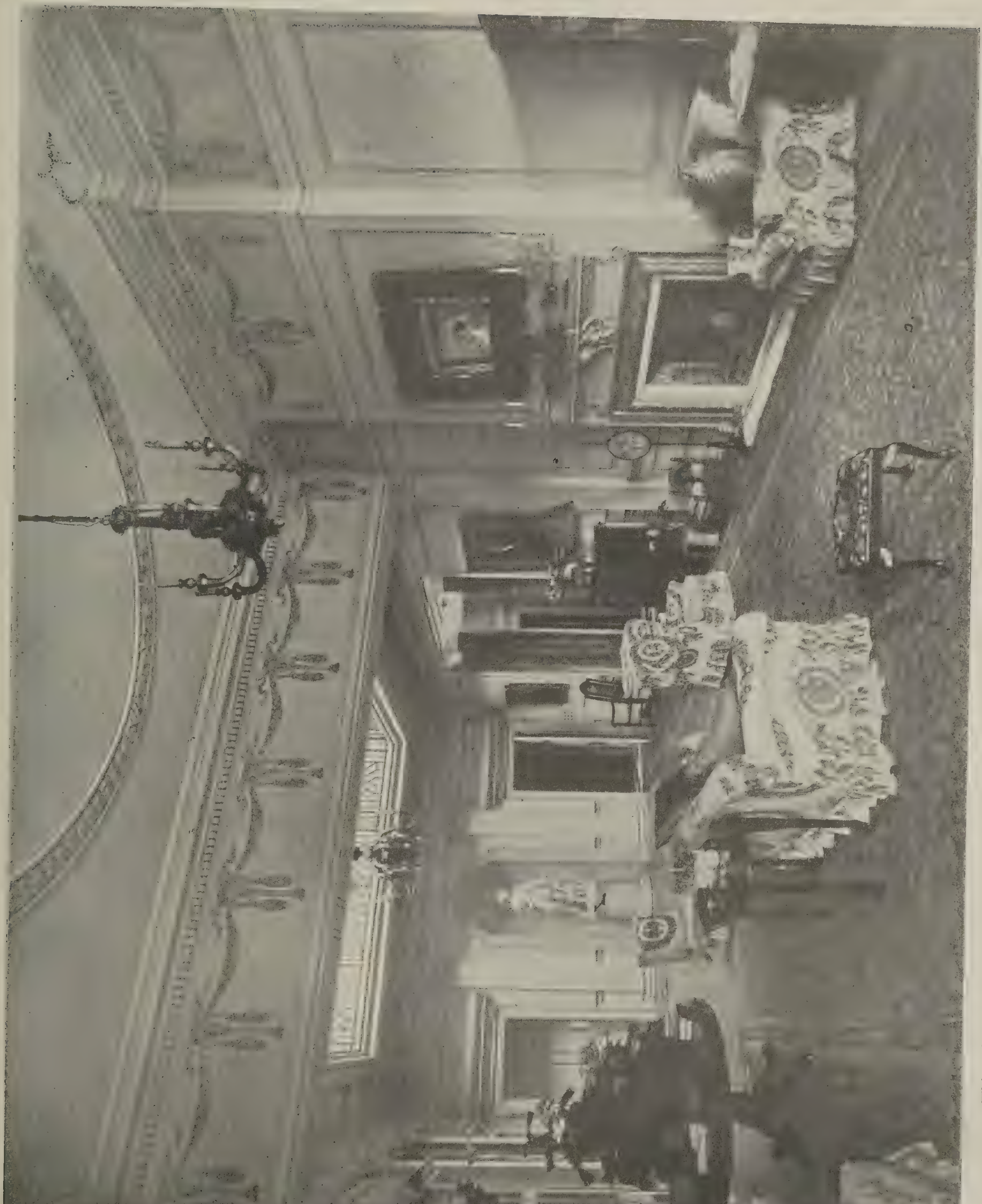
Clough Williams-Ellis, Architect



Bolesworth Castle, which stands about ten miles from Chester, has for several years been undergoing complete reconstruction and refitting. Among the many alterations made, are a new approach and point of entrance and the provision of the hall shown above. The saloon is illustrated on the following page.

THE LIBRARY
OF THE
UNIVERSITY OF ILLINOIS

Clough Williams-Ellis, Architect



This saloon—one of the most notable improvements to the Castle—has displaced a number of small rooms of Gothic design.

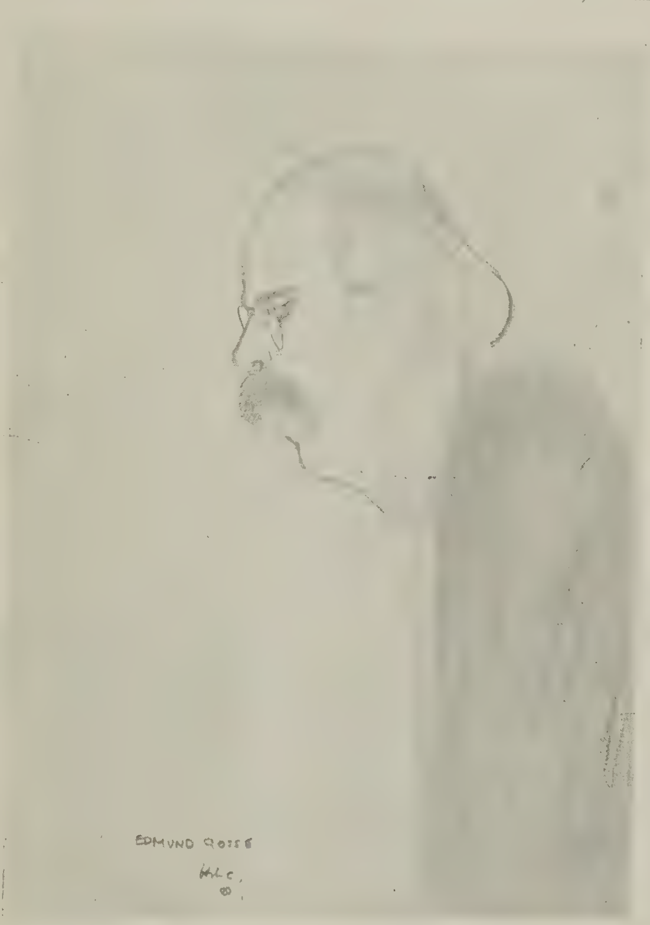
THE LIBRARY
OF THE
UNIVERSITY OF ILLINOIS

The Architecture Club

Mr. Gosse on the Protection of Old Buildings

THE fifth quarterly dinner of the Architecture Club was held last week at the Hotel Cecil, under the presidency of Mr. J. C. Squire.

Proposing the toast of "Architecture," Mr. Edmund Gosse said that architecture was not only an ncient and noble art; it was, he thought, the only art that was of universal application. A man might live without poetry or music, painting or sculpture, but no man in a ivilized community could live—excepting possibly the ipsy—without having some application to architecture, or a man must live in a house or part of one. The beauty f France's Gothic buildings, especially in the north, greaty appealed to him. The myth that the Gothic was the xercise of Teutonic genius was one of the many absurdies no longer held. One of he great merits of France ad been the splendidly conervative spirit in which she ad guarded her memorials f the past. Here in England e had no such legislation. t present certain of the ity churches were threatened. While he was not prepared o say that all these edifices ould be compared with the athedrals at Ely and Linoln, still they were in a reasure works of art. Never the history of civilization, o far as he could recall, had a beautiful building been estroyed without it being egretted afterwards. If they estroyed a beautiful church n the City, it would be gone or ever, and the next generaion would discover beauties n it which those who detroyed it had never pereived. The club could do a reat deal in the way of proecting magnificent buildings hat were in danger of being st on industrial grounds. he club had helped in regard the preservation of the fine d hall at Croydon, and it was naturally concerned over e threatened destruction of many of the City churches. hile not claiming that everything was worthy of preervation, he hoped they would watch with care all efforts destroy.



EDMUND GOSSE.

(From a Caricature by H. de C.)

Mr. Paul Waterhouse, replying, said there was much that terature could do for architecture, and something that chitecture could do for literature, and he rejoiced that here was a society like theirs to blend the two together.

Lord Riddell, proposing the toast of "The Club," said hat the main purpose of the club was to popularize architure. They would never do it unless they adopted opular methods. In his capacity as a newspaper proetor he thought he knew how to gain the public ear. r example, in writing about the architecture of Liverol, it would be no use to do anything on scholarly or ademic lines. One should introduce the personal note d say that Liverpool contained two of the most remarkable buildings in the world, both designed by young men of little over twenty years of age—St. George's Hall and Liverpool Cathedral. That, he believed, "was the stuff to give 'em." One of the advantages of the club, continued his lordship, was that there could be a free interchange of views between members. He was a building owner, and, in common with most building owners, one of his most painful memories of his dealings with architects was "extras." That was a very difficult point, and one that ought to receive very careful consideration by architects. The reason for extras, in his belief, was the inadequate way in which working drawings were prepared in this country. He had lately returned from the United States, where he had been interested to see the detail in which American architects prepared their working drawings, so that a building owner could see at a glance what he was committed to. This was really a practice favourable to architects themselves, for if any variation becames necessary they could only be carried out at the instigation and on the responsibility of the building owner. Like Mr. Strachey, he advocated that architects should sign their buildings. He saw the disadvantages attending such a course, but he himself would go so far as to get doctors to put their names on their patients' tombstones.

Mr. A. B. Walkley, replying to the toast of "The Club," confessed that he knew little about architecture. He lived for best part of the year in a house at a little coast town which his friends assured him was like a house in the Camberwell New Road. He had never seen the Camberwell New Road, but he was quite willing to believe that his house was like one that could be found there. He had some early association with architecture which might perhaps justify his replying to that toast, for, while a Government servant, he occupied an office in a big Government building that was spoken of with great respect as it had been designed by a chief architect to the Office of Works. From this building he looked out upon another Government building that had been spoiled, as many other buildings had been spoiled, by the addition of a top story. This building, shortly after he left the Government service, had been demolished, to reveal, in all its ethereal beauty, another wonderful City building—the Goldsmiths' Hall. He regarded it as a cruel stroke of fate that he should have left his official office before having an opportunity to look at that building from so advantageous a point of view.

The Chairman made a satisfactory report as to the progress of the club, and said they had been asked to organize for next year's exhibition at Wembley an exhibition representative of the best work done in architecture in the Empire during the last twenty years. He appealed for support for the guarantee fund.

The company included: Lord Bury, the Hungarian Minister and Countess Szapary, Sir Edwin Lutyens, Sir Frank Newnes, Sir Charles Walston, Sir Hugh Bell, Sir Chartres Biron, Sir John and Lady Hall, Sir Theodore Cook, Lady Colefax, Lady Constance Hatch, Mr. and Mrs. John Walter, Sir Lawrence and Lady Weaver, Mr. Matthew Dawson, Mr. and Mrs. C. Lewis Hind, Mrs. J. C. Squire, Colonel H. Cart de Lafontaine, Mr. C. Holden, Mr. and Mrs. A. R. Powys, Mrs. Edmund Gosse, Mr. and Mrs. Ralph Knott, Mr. and Mrs. Lionel Guest, Mr. and Mrs. Robert Lynd, Mr. and Mrs. Ian MacAlister, Mr. and Mrs. A. J. R Tudor-Craig, Mr. and Mrs. Sixsmith, Mr. and Mrs. Ragla Somerset, Professor J. Hubert Worthington, Mr. and Mr F. R. Yerbury, Miss Elizabeth Robins, Mr. and Mrs. Oswal Barron, Mr. and Mrs. J. Bone, Mr. and Mrs. P. Tilden, M H. S. Goodhart-Rendel, Mr. Ian B. M. Hamilton, Mr. an Mrs. W. Naseby Adams, Sir Ryland Adkins, Sir Hug Bell, Bart., Mr. Darcy Braddell, Mr. and Mrs. Ewart Culpin, Mr. and Mrs. Arthur J. Davis, Mr. C. F. W Dening, Mr. J. Murray Easton, Mr. H. M. Fletcher, M and Mrs. G. Topham Forrest, Mr. Walter H. Godfrey, M E. Stanley Hall, Mr. and Mrs. H. Austen Hall, and M and Mrs. Stanley Hamp.

The Hull Art Gallery Competition

The Winning Design

THE first premium of £1,000 for designs for a new art gallery at Hull has been awarded by the assessor (Mr. John W. Simpson, PP.R.I.B.A.) to Messrs. S. N. Cooke and E. C. Davies, of Montague Street, London.

Londoners also won the second premium of £500, the successful competitors being Messrs. Gibson and Gordon, Old Bond Street.

There were seventy-nine competing designs, but the assessor ruled out several because they would have exceeded the price stipulated.

The gallery's site and £52,000 to build are the gifts of the Right Hon. T. R. Ferens.

Before the war Mr. Cooke had an extensive practice in domestic, office, and factory buildings. His most important works are the Birmingham Repertory Theatre and St. Chad's Hospital. He served in the R.A.F. overseas, and since the war has been placed second in two competitions the Auctioneers' Institute, London, and the Mason Temple, Birmingham. In collaboration with Mr. W. Twist he was placed first in the Birmingham Hall Memory and Balham Swimming Bath.

Mr. E. C. Davies was educated at Bedford Gramm School, and received his architectural training at t Architectural Association, London, under the headmaste ship of Mr. H. P. G. Maule. He extended his period training at the same school under Mr. Robert Atkinso From the A.A. he entered Sir Edwin Cooper's office befo the war, and returned to him after the war. He enter into partnership with Mr. Cooke three years ago. Durin the war he served in the Royal Flying Corps and the Roy Air Force as flying officer. He is thirty-two yea of age.

The winning design is illustrated in the following page

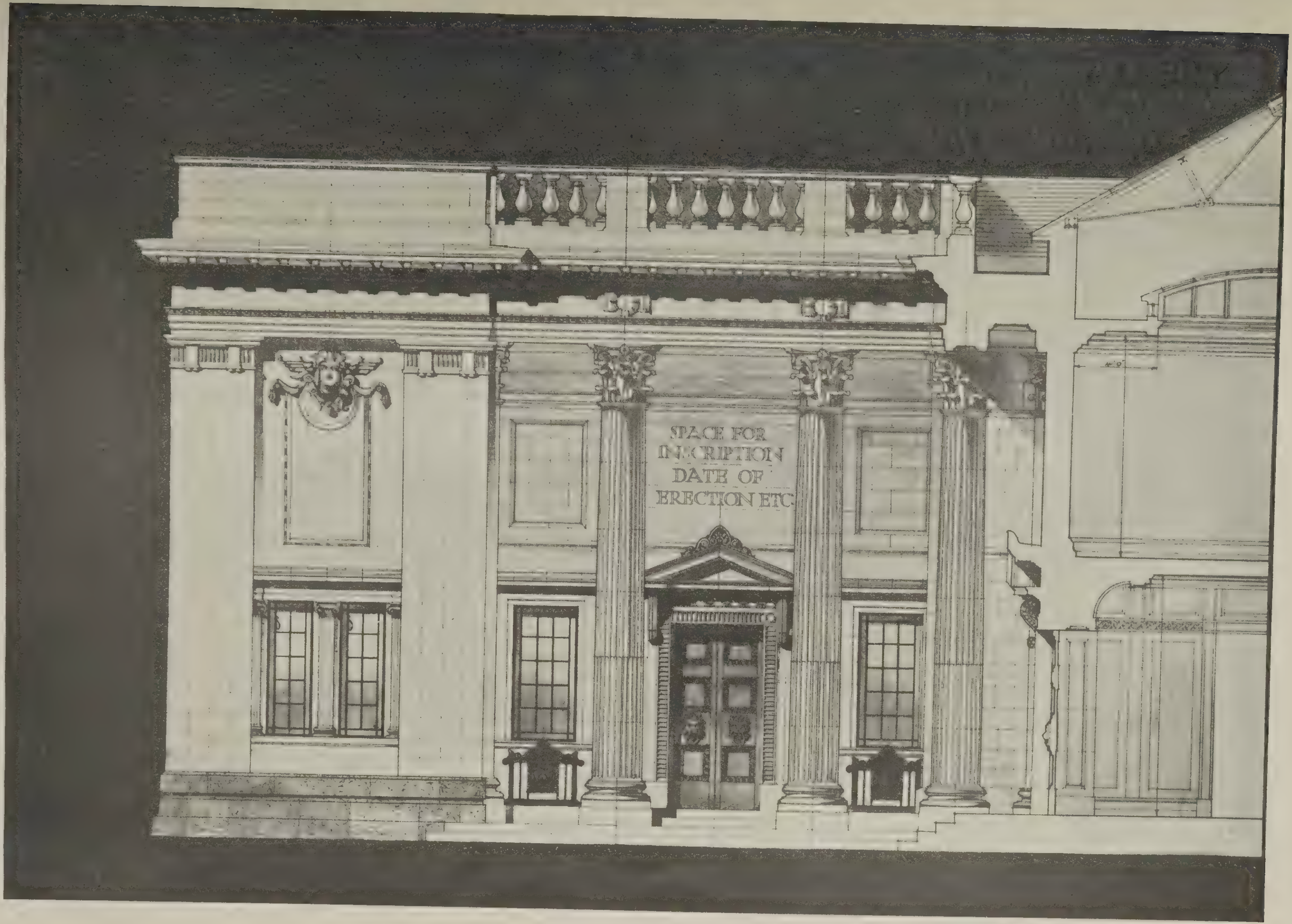
MR. S. N. COOKE, F.R.I.B.A.

MR. E. C. DAVIES, A.R.I.B.A.

THE WINNERS OF THE COMPETITION.

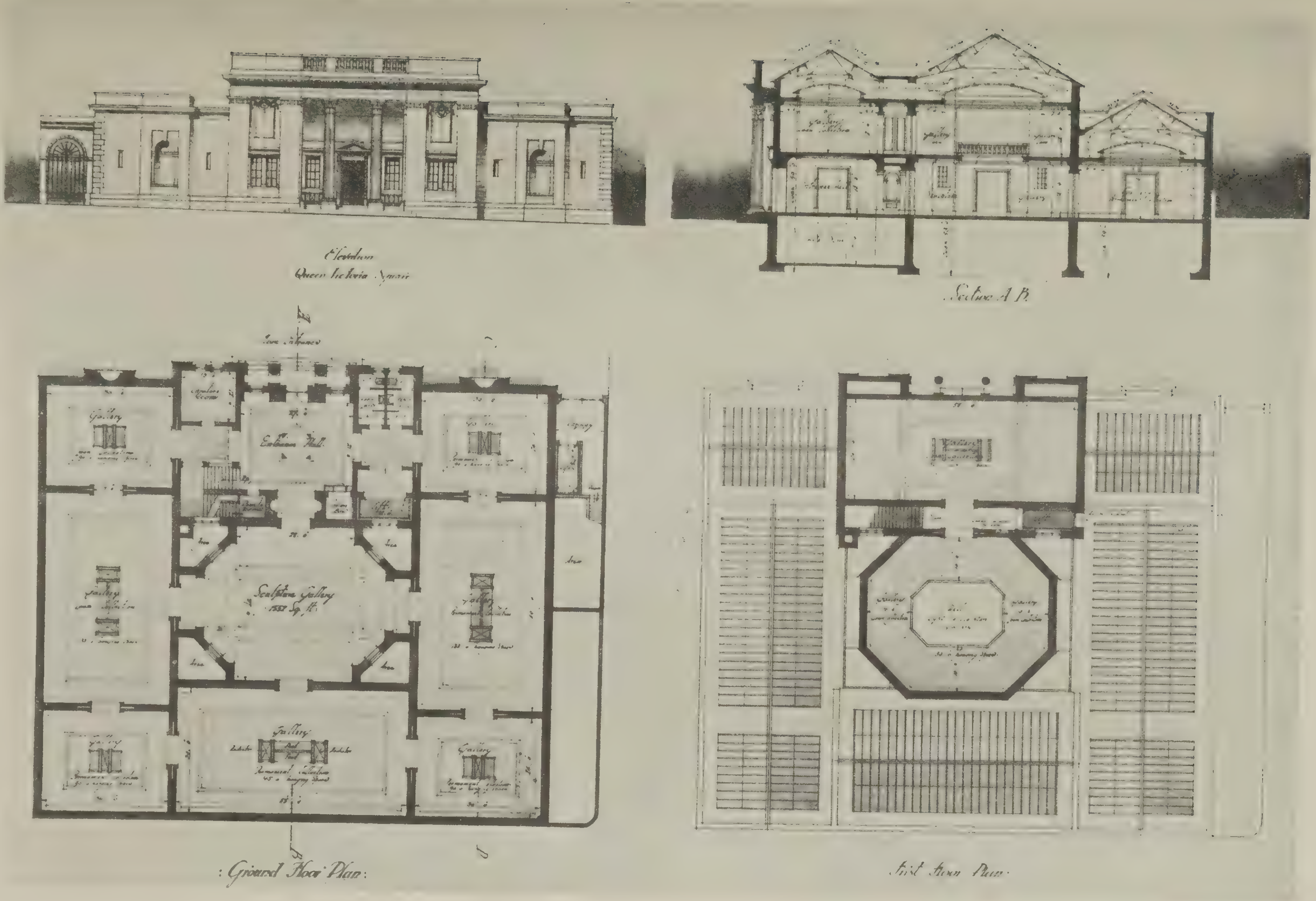
Gallery Competition: The Winning Design : A Detail of the Main Front

S. N. Cooke, F.R.I.B.A., and E. C. Davies, A.R.I.B.A., Architects

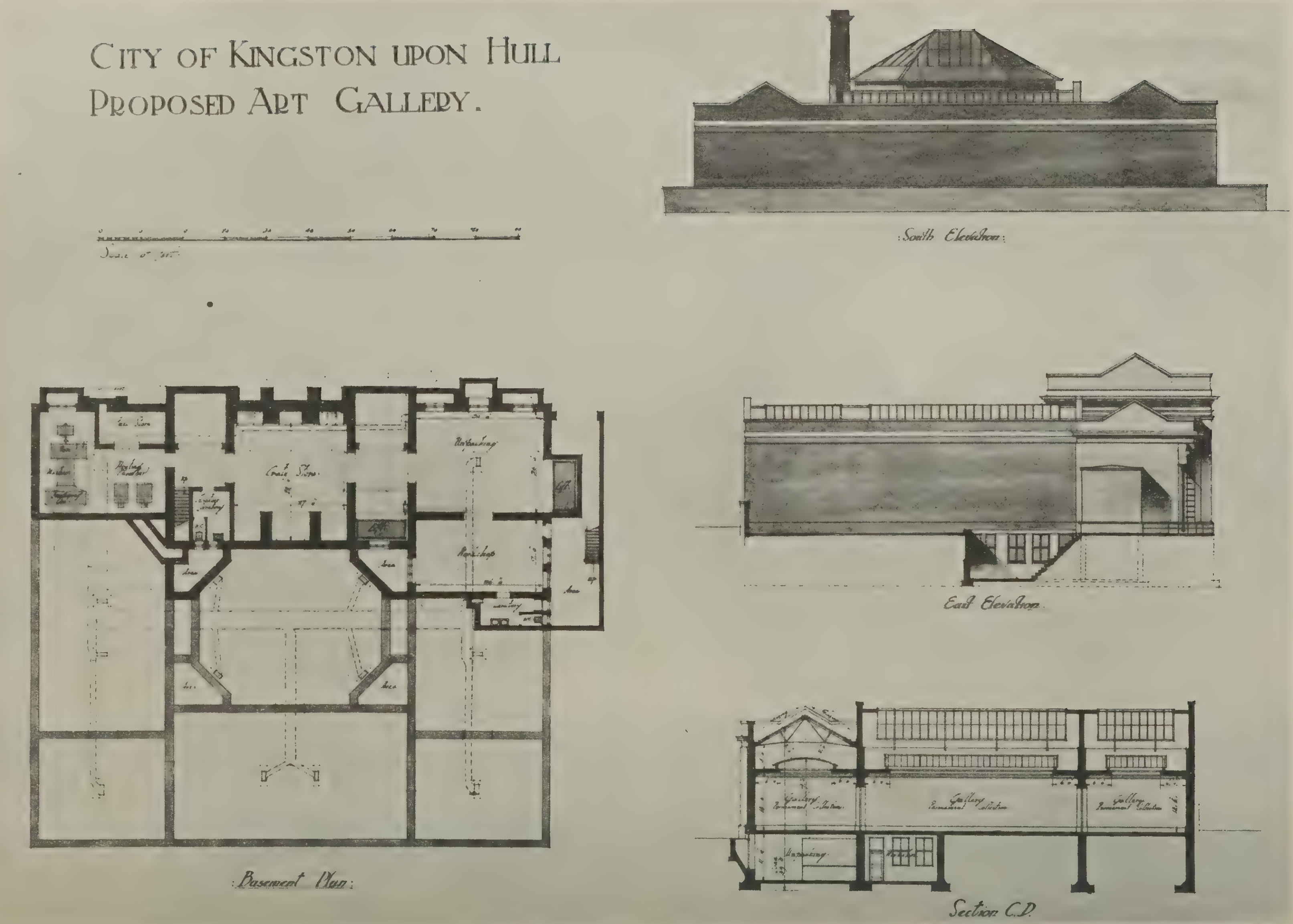


Mr. John W. Simpson, PP.R.I.B.A., the assessor in this competition, made the following awards : First, Messrs. S. N. Cooke, F.R.I.B.A., and E. C. Davies, A.R.I.B.A. Second, Messrs. J. S. Gibson and Gordon. Seventy-nine designs were submitted.

THE LIBRARY
OF THE
UNIVERSITY OF ILLINOIS



HULL ART GALLERY COMPETITION: THE WINNING DESIGN. S. N. COOKE, F.R.I.B.A., AND E. C. DAVIES, A.R.I.B.A., ARCHITECTS.



HULL ART GALLERY COMPETITION: THE WINNING DESIGN. S. N. COOKE, F.R.I.B.A., AND E. C. DAVIES, A.R.I.B.A., ARCHITECTS.

Correspondence

Cambridge Collegiate Buildings Competition

To the Editor of THE ARCHITECTS' JOURNAL.

SIR,—In your issue of November 21, I observe that a tter appears with reference to the recent competition for e new buildings for King's College, Cambridge. The letter, hich is signed by three of the unsuccessful competitors, r. T. S. Tait, Mr. G. H. G. Holt, and Mr. V. O. Rees, nsures the Building Committee of King's College, and cuses the winners of violating the conditions of the com-tition. It is, incidentally, a document that bears a rious and interesting likeness to the anonymous criticism the competition that appeared in your paper for Novem-r 14, and that included special praise of the work of one the signatories of the letter.

This letter must, under the circumstances, appear extra-dinarily unsportsmanlike—to use a common English rase. If defeated competitors cannot take their beating a more generous spirit, they should at least refrain from public display of their chagrin, and not rush into print ith suggestions that a lay committee ought to have fused to endorse the award of a Fellow of the Institute, d that the longer the successful design is studied the more bious about it the Building Committee of the college must el.

Questions of professional conduct are here involved that uld seem to demand the attention of the Practice Stand-g Committee of the Institute. If nothing is done to impose me reasonable standard of loyalty and etiquette in com-titions the prestige of the profession must be seriously maged.

C. H. REILLY.

To the Editor of THE ARCHITECTS' JOURNAL.

SIR,—As one of the architects who was honoured with invitation to take part in the competition for the new ildings for King's College, Cambridge, I feel very strongly at the letter published in your issue for November 21, d signed by Messrs. Tait, Holt and Rees cannot be owed to pass without comment.

The authors of that document, in making public their eral private misfortunes, appear to place themselves fessionally in a very queer position.

They assert that the winners of the competition ignored conditions, and instance as an example the fact that enty instead of twenty-two sets of chambers were vided in the successful design. This arrangement y competitor was perfectly at liberty to adopt in his eme if he thought fit, just as he was equally free, ording to the conditions, to put his top story either in roof or not, as he might think best. In the early stages developing my own design I, at least, tried these alterna-es and for various reasons abandoned them. Perhaps would have been better for me if I had not done so: I am not now going to pretend that they were specifi-ly ruled out by the conditions—and Messrs. Tait, Holt, l Rees should not either. These gentlemen are at pains mply that a result more satisfactory to them would have n obtained if a jury rather than an individual had been rusted with the responsibility of judging.

would point out that neither Mr. Tait, Mr. Holt nor Rees was under any compulsion to accept the invitation enter the competition: that, if they had such definite nions about the defects of the system of individual gment, they should have declined to enter; and that in spite of these considerations, they still desired to pete, they should have regarded themselves as bound ccept the result decently.

Professions of general public zeal and of particular concern for the welfare of the profession cut more ice when the issues are raised by persons less obviously interested than are Messrs. Tait, Holt, and Rees in the present case.

I am sure that I speak for the rest of the younger men who were invited by King's College to participate in this competition, when I say that we valued the invitation because it gave us just that kind of opportunity and recognition which we need and which so rarely come our way. I, at any rate, want to dissociate myself from any criticism of the conduct of the competition.

W. NASEBY ADAMS.

To the Editor of THE ARCHITECTS' JOURNAL.

SIR,—There seems something belated in the action of the gentlemen who did *not* win a place in the Cambridge competition in now writing to the papers saying how strongly they disapprove of competitions for which there has been appointed but a single assessor. I take it that they knew of it before entering, even knew the *name* of the assessor, and accepted the condition of the assessor's decision being final. If any of these public-spirited gentlemen had had the forethought to voice their principles prior to themselves being so very much concerned—perhaps a little prejudiced?—we might have listened to them with other ears.

ONE WHO DID NOT TAKE PART.

Parliamentary Notes

[BY OUR SPECIAL REPRESENTATIVE.]

Sir Wm. Joynson-Hicks, Minister of Health, in answer to questions in the House of Commons, said that the houses provided for in schemes approved under the new Housing Act totalled 57,830. Of these, 26,705 were to be built by local authorities and 31,125 by private enterprise. Under the 1919 Act 9082 houses were either being built or had not been begun. No fewer than 36,000 houses under the new Act were in course of construction, for which no subsidy would be payable. It appeared from this that private enterprise was fulfilling its proper duty. The total number of houses in course of construction on September 30 was over 50,000. Although he had had to defer approval of many houses on account of the scarcity of building labour, he confidently anticipated that the number of houses of all kinds built within a year of the passing of the new Act would approach 100,000, which was greater than any number since 1909.

Answering Mr. Foot, the Minister said that 9,756 houses were included in the schemes of rural district councils approved under the new Act.

In reply to further questions Sir Wm. Joynson-Hicks stated that where a local authority obtained approval of a scheme for granting assistance to private enterprise in anticipation of the passing of the Housing Bill, and in pursuance of that scheme had undertaken to give assistance, any houses to which such undertakings applied would by virtue of section 2 of the Housing Act be eligible for grant. He had also undertaken where assurances had been given by or on behalf of local authorities, on the faith of which builders had proceeded with building, in anticipation of the approval of a scheme for assisting private enterprise, to pay the equivalent of the Government grant under the Act in respect of houses which would otherwise be eligible for assistance. Houses, the construction of which was begun in the absence of any such assurance by the local authority, would not be eligible for assistance. The proposals submitted to him by local authorities to date covered upwards of 28,000 houses, but he had no information as to the number of applications which local authorities had for any reason refused.

The dissolution of Parliament took place on Friday, November 16.

A House in Surrey

G. ALAN FORTESCUE, A.R.I.B.A., Architect

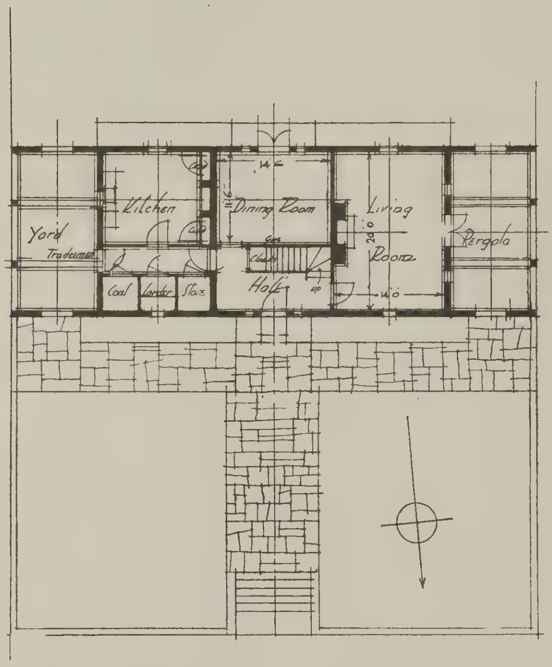
THE walls of this house are of brick, rendered on the outside with Portland cement stucco in two coats, the final coat being finished with a wood float and twice distempered in Duresco. The plinth is of concrete, and the window and door-frames are in concrete with the surface faced up. The windows are steel-framed built into concrete frames, the entrance door surround is in onyx marble, and the doors to the garden and the pergola are of steel in concrete frames.

For the roof Roman tiling has been used fixed at 8 in. centre on 3 in. by 2 in. battens to 1 in. square boarding. The eaves project 2 in. from the face of the wall and a matchboarded with V-jointed boarding.

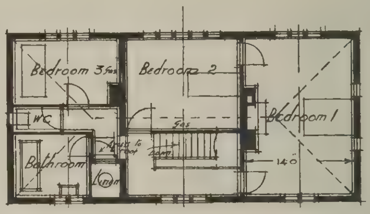
The tradesmen's yard, which has been designed to matc the pergola, has posts and cross bearers, upon which t hang washing, and is enclosed all round. The electri light fittings, switch plates, and door furniture are of blac ebony finish, and built-in gas fires are installed.

The cost of the house was about £1,400, but it could hav been built for £1,250 with cheaper fittings.

A general view of the house appears on the followir page.



Ground Floor Plan:



First Floor Plan

The A.A. Sketch Book

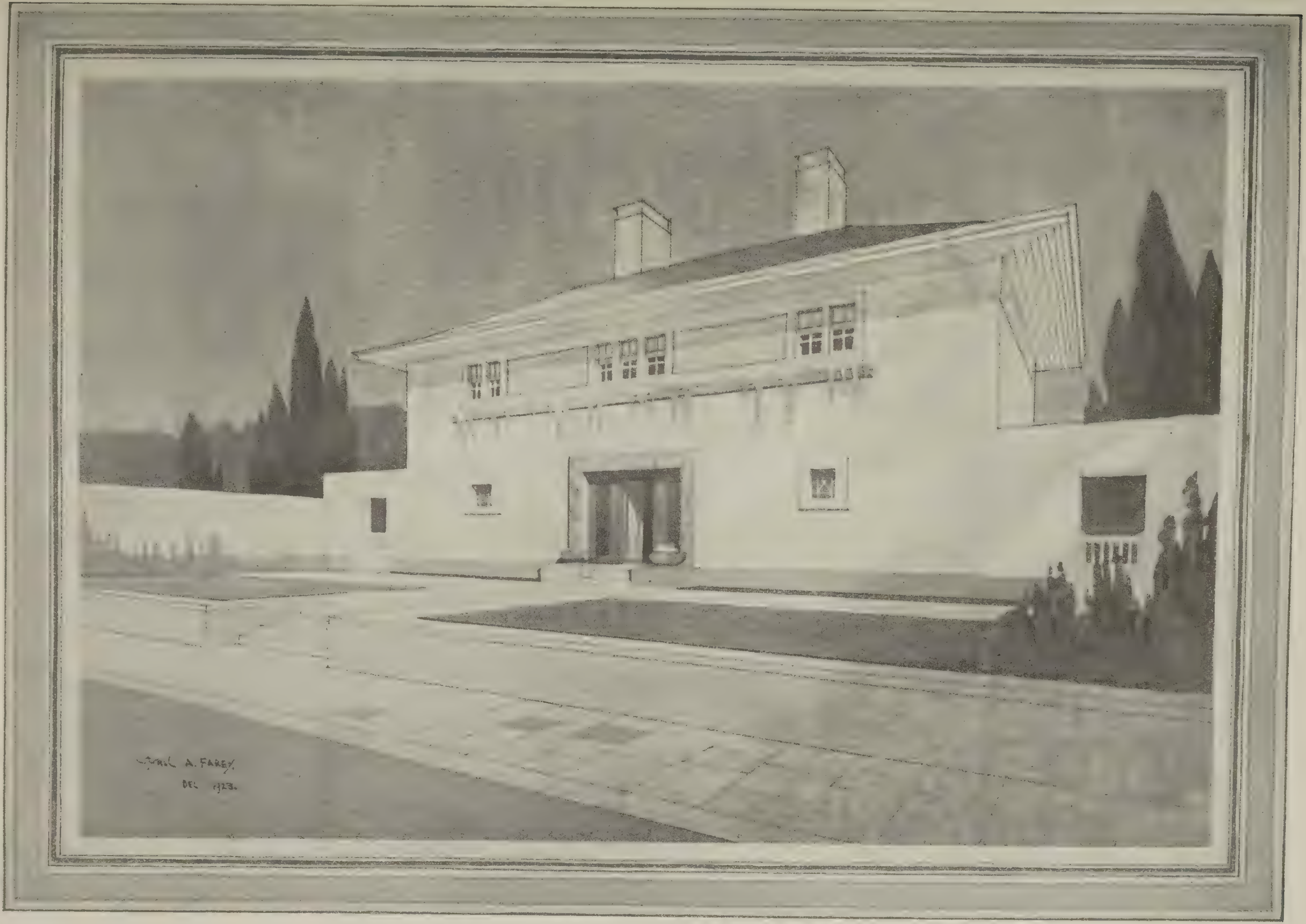
Our wars are done, and some of the good things we never, perhaps, appreciated at *quite* their worth before are slowly coming into being around us again. In the case of the A.A. Sketch Book (how fondly familiar is the name! You would not guess it had been denied to us for so long) we cannot but welcome it with open arms. "Although there were many difficulties to contend with, the Council of the Architectural Association considered it an obligation to continue with the publication of this work at the first possible opportunity, and thus continuing the series which was commenced in 1867 and published regularly until the outbreak of war."

Yes, the A.A. *had* an obligation—a solemn one. The volumes published in the past contained valuable and unique records of fine buildings in all parts of the worl and many of them have since been destroyed. The A. Sketch Book pleads with oblivion for their memory.

The contributors to this present part are: J. M. Easto (Colonel Gardiner's House, Preston Pans); R. E. Enthov (The Palazzo Horne, Florence); H. St. John Harris (Worcester Cathedral, Winchester Church, Glos.; Tl Oddfellows' Club, Coventry, and 55 Westgate Roa Newcastle-upon-Tyne); Philip D. Hepworth (Notre Dar de Fourniere, Lyons, The Parclose Screen, Southwo Church, Suffolk, Palazzo Doria Tursi, Genoa, Palaz Serra, Genoa, Cathedral of San Maurizio, Florence, a Church of the Immaculata, Genoa); Gordon Holt (Elg Cathedral, Scotland); E. B. Musman (Ashmolean a Taylorian Institute, Oxford, and Doorway, San Mich in Bosco, Bologna); J. C. Shepherd (Pulpit of St. Nicol Ghent).

"The Architectural Sketch Book." Edited and Published by the Architectural Association. Issued in half-yearly parts, each containing 30 plates of drawings (mostly measured) of old architecture. (18 in. × 14 in.), at a subscription of 35s. per annum.

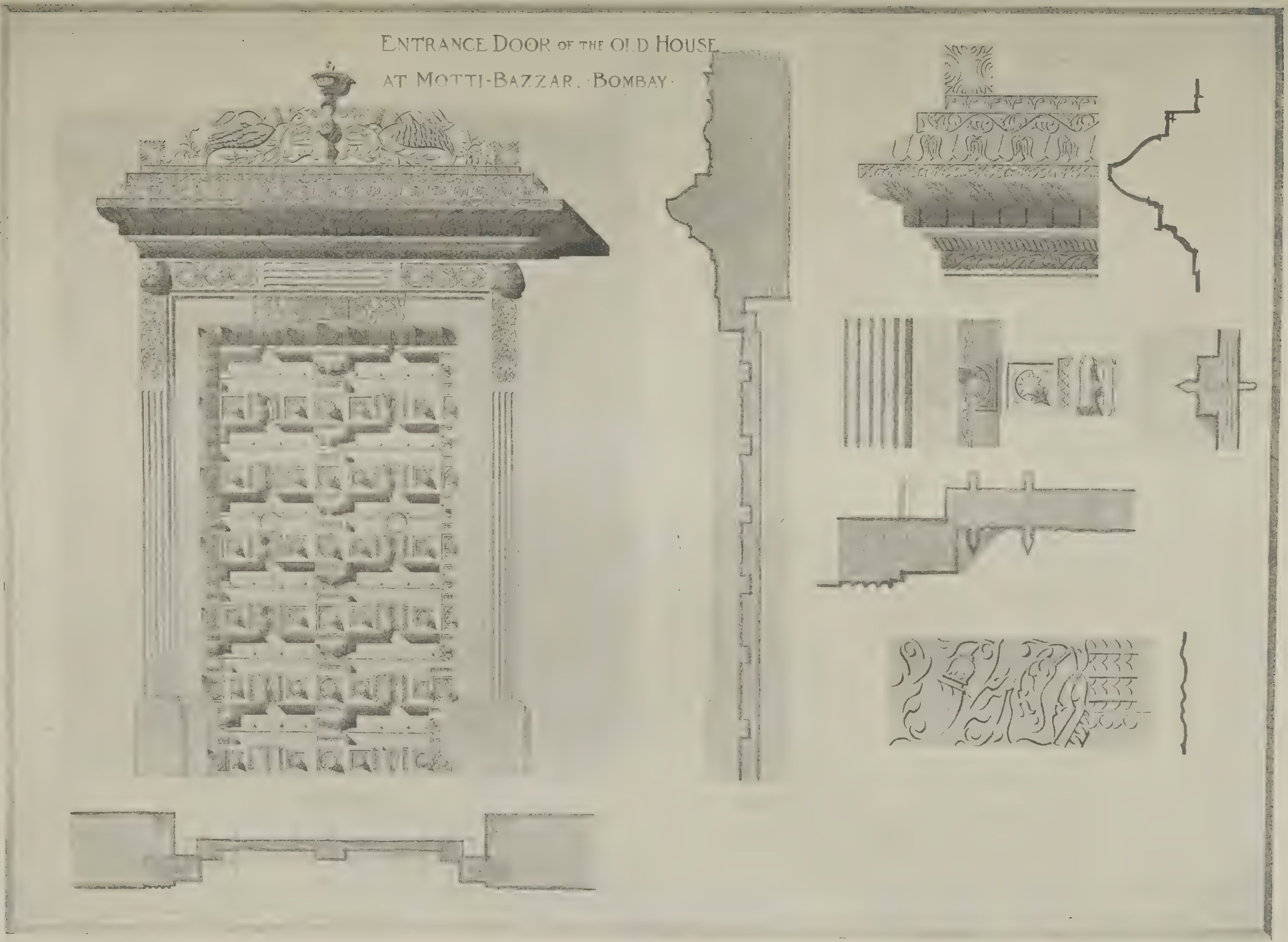
G. Alan Fortescue, A.R.I.B.A., Architect



The exterior of this house is brick rendered with Portland cement stucco, finished with a wood float, and distempered. The entrance door surround is in onyx marble. The plinth is of concrete, as are the windows and door frames, with the surface faced up.

THE LIBRARY
OF THE
UNIVERSITY OF ILLINOIS

Measured and Drawn by Samson A. Elijah



This is the entrance door of the old house, 17 Sutar Chawl, Motti Bazaar, Bombay. It was made by the Indian carpenters and craftsmen about one hundred years ago. The door is in good condition, and its base is in stone, iron stirrups being fixed between the carved panels in order to give additional strength.

THE LIBRARY
OF THE
UNIVERSITY OF ILLINOIS

The R.I.B.A.

Associateship of the R.I.B.A.

he Board of Architectural Education desire to draw atten-
n to the following decision of H.M. Board of Education with
erence to Technical Teachers' Qualifications :—
rchitecture.—H.M. Board of Education recognize the
ociateship of the R.I.B.A. (if awarded after passing the
minations of the Institute) as the equivalent to degrees of
versities in Great Britain and Ireland.

R.I.B.A. Statutory Examination.

he attention of architectural students is called to the
tutory examination of the R.I.B.A. The Building Acts
uire every candidate for a district surveyorship to hold
ertificate of competency of the R.I.B.A. In addition to
tificates of competency for the office of district surveyor
ler the Metropolitan Building Acts, certificates are also
nted of competency for building surveyor under the
blic Health Acts. Since the war the number of candidates
this examination has fallen off, and it is thought that
ention might be called to the examination with a view
eviving interest in it.

he examination was started in 1856, and from that date
1914 an average number of five candidates has passed
h year. Looking through the list of these candidates
s seen that many architects in the past sat for it who have
er applied for a district surveyorship, but have taken
examination as a qualification for private practice. A
owledge of the Building Acts is of great use to provincial
hitects as well as to architects who practise in the
tropolitan area. It is often found that when provincial
hitects start building in London their designs have to be
dified to meet the requirements of the Building Acts.

he examination is a thorough test in a knowledge of the
lding Acts and building construction, and requires a care-
study of those subjects which every architect ought to
ow. The syllabus covers the supporting power of soils
methods of securing good foundations, a thorough
owledge of building materials, their strength and decay,
-resisting construction and the means of escape in case
fire; calculations for steel-framed construction and
nforced concrete. Dangerous structures are dealt with,
ring, underpinning, scaffolding, derricks, and other
chinery and plant used in the erection of buildings.
the graphic questions subjects are set for design which
olve the application of all the foregoing subjects. It
be seen that the examination is essentially a practical
, bringing down the studies of the schools to the touch-
ne of actual practice.

Coming Events

Wednesday, November 28.

C.C. Central School of Arts and Crafts, Southampton Row,
.1.—Lecture IX. "The Parthenon." By Sir Banister
cher. 6 p.m.

Thursday, November 29.

ritish Museum.—"Akhenaten and his City," etc. 4.30 p.m

Friday, November 30.

rt Workers' Guild, 6 Queen Square, W.C.1.—Scottish Night.
–1800.

oyal Technical College, Glasgow.- "Stone Decay: Its
ses and Treatment."

stitution of Mechanical Engineers, Storey's Gate,
James's Park, S.W.—General Meeting. 6 p.m.

Monday, December 3.

I.B.A., 9 Conduit Street.—Election of Members. 8 p.m.

adwick Public Lectures at Goldsmith's College, New
s.—"Housing Standards: How they can be Raised." By
A. K. Chalmers. 8 p.m.

Tuesday, December 4.

verpool Architectural Society.—"Our Clients and Our-
s—and possibly other thoughts." By Mr. H. T. Welch,
I.B.A. 6 p.m.

stitute of Civil Engineers—Ordinary Meeting. 6 p.m.

Competition News

Hereford Butter Market.

Prizes are to be offered by the City Council for plans for the rebuilding of Hereford Butter Market and for the development of the city on commercial lines.

Holmside and South Moor Collieries Welfare Scheme.

The committee invite architects to submit competitive designs for a cottage hospital for twenty-eight beds. The committee have appointed Mr. T. R. Milburn, F.R.I.B.A., as assessor. Conditions and plans of the site may be obtained from Mr. J. E. Fairley, Colliery Offices, South Moor, Stanley, S.O., Co. Durham, on or before December 7, on a deposit of £1 1s., which will be returned on receipt of a bona-fide design.

Barton-upon-Irwell Hospital.

The Guardians of the Barton-upon-Irwell Union invite architects with experience of hospital planning to submit their names and qualifications to Mr. Charles Faulkner, Clerk to the Guardians, Union Offices, Patricroft, near Manchester. From these a list of twelve will be selected and invited to submit designs for the proposed hospital at Davyhulme, near Manchester, for about 275 beds. The Guardians have appointed Mr. William A. Pite, F.R.I.B.A., as assessor.

List of Competitions Open

Date of Delivery.	COMPETITION.
Nov. 30	Taunton School War Memorial. The Council of the Taunton School invite designs for a War Memorial, consisting of an Art and Science Block, the cost of the building to be approximately £10,000. The Assessor is Mr. Robert Atkinson, F.R.I.B.A., who will have the power to nominate a second Assessor if desirable. Premiums first, £100; second, £50. The first premium will merge in the architect's commission. Particulars, together with photograph of the present buildings, may be obtained from the Secretary of the School, Mr. H. J. Pollard, F.C.A., 3 Hammet Street, Taunton, in return for a cheque for £2 2s.
Dec. 10	Designs for a dining-room and bedroom furnished in the style of 1924, to form part of the applied art section of the Palace of Arts at the British Empire Exhibition at Wembley next year. Prizes to the value of £400 have been offered by "Country Life" for the best designs submitted. The Palace of Arts will include among its other interesting features a series of six decorated rooms illustrating the progress of decorative art since 1750. Two of these rooms will be designed and be furnished in the styles of the Georgian and Regency periods covering the years 1750 and 1815: two more will illustrate the standard of interior decorative art, attained respectively in 1851 and 1880. The modern rooms will demonstrate the remarkable advances made in this sphere of applied art since those dates. Competitors must be of British birth or of British parentage, and all manufactured goods to be provided must have been manufactured within the British Empire. The designs are to be considered by a special Jury of Award, consisting of: Sir Edwin Lutyens, R.A., Miss Ellen G. Woolrich, Mr. P. Morley Horder, and Mr. Norman Wilkinson. The Exhibition is to arrange for the carrying out of the prize designs under the supervision of the successful competitors.
Dec. 10	The War Memorial Committee of the Burgh of Coatbridge invite designs for the erection of a War Memorial on a site in the West End Park. The estimated cost of the work amounts to £3,000, and premiums of £75, £50, and £25 are offered for designs placed first, second, and third respectively. Assessor, Mr. James Lochhead, F.R.I.B.A., Hamilton. Apply Town Clerk. Deposit £1 1s.
Jan. 1	The Imperial War Graves Commission invite architects who served during the war as members of the Military, Naval, or Air Forces raised in any part of the British Empire to send in their names for admission to a competition for the designing of memorials to the missing to be erected by the Imperial War Graves Commission at Bethune, Armentières, Cambrai, and Soissons. Applications for particulars of premiums and other regulations from those desiring to compete are to be addressed to the Secretary (Works Branch), Imperial War Graves Commission, 82 Baker Street, London, W.1, and must be received there not later than January 1, 1924, and must be accompanied by a statement giving particulars of the war service and professional career of the applicant and clearly stating which of the memorials it is desired to compete for. Deposit, two guineas for each set of plans. The Assessor is Sir Aston Webb, K.C.V.O., P.R.A.
Jan. 5	Memorial Building and Tower, Dudley. The Council of the County Borough of Dudley invite Competitive Designs from duly qualified Architects for the "Brooke Robinson Memorial" Building and War Memorial Tower comprising a public hall, coroner's court, small museum, and a new sessions court. Premiums £300, £200, and £100. Mr. W. Curtis Green, A.R.A., F.R.I.B.A., Assessor. Conditions of competition, together with a copy of the site plan, can be obtained on application to Mr. E. W. Tame, Town Clerk, Town Clerk's Office, Dudley, with deposit of £2 2s.
Feb. 1	Proposed Concert Hall and Public Baths for Newcastle-upon-Tyne. Premiums £750, £250, and £100 respectively are offered, the first premium to merge into the commission or other payment to be made to the author of the successful design. Assessor, Mr. Alfred W. S. Cross, M.A. Apply, with deposit of £2 2s., to Mr. A. M. Oliver, Town Clerk, Town Hall, Newcastle-upon-Tyne.
No date *	The Eastleigh and Bishopstoke Urban District Council invite designs for the extension of their existing Council buildings, and the erection of an assembly hall, on the site adjacent. Premiums: 50, 30, and 20 guineas. Apply, with deposit of £1, to Mr. J. Lawrence, Clerk to the Council, Council Offices, Eastleigh.

* Indicates Competitions whose conditions are not in accordance with those laid down by the R.I.B.A. and the Society of Architects.

Law Reports

A Right of Way Dispute

Wright v. *Shorthose, Lee & Co.*

November 2. King's Bench Division. Before Justices Lush and Sankey.

This case came before the court on an appeal by the plaintiff from a judgment of Judge Tebbs, sitting at the Dudley County Court.

The plaintiff brought an action against the defendants claiming damages and an injunction for alleged obstruction of the plaintiff's right of way in a cul-de-sac running from Hall Green Road, Dudley. The County Court judge found in favour of the defendants.

Mr. Wylie argued the case for the appellant, and said his client was the owner of four houses in the cul-de-sac, and he claimed that he was entitled to use it for the passage of persons and vehicles on the ground that he had enjoyed the unrestricted use of the road for a period of more than twenty years. The cul-de-sac had not been made up and was not a parish road. Defendants had works adjoining it. Counsel contended that the County Court judge was wrong in holding that the evidence did not establish a private right of way, especially having regard to the fact that the judge intimated that he did not desire to hear certain witnesses plaintiff was prepared to call.

The court dismissed the appeal with costs, holding that the appellant had failed to give the evidence necessary to establish a private right of way, though the evidence went to establish a public right of way.

Machinery and Furnace—Alleged Nuisance—Judge's Inspection

Benson and others v. *Jacobs.*

November 8. Chancery Division. Before Mr. Justice Astbury.

Plaintiffs in this action, Mr. A. H. Benson and Miss Garner, sought an injunction against Mr. A. C. Jacobs, to restrain him from so using the machinery and furnace at his glass factory at Violet Hill, St. John's Wood, as to be a nuisance to the quiet enjoyment by plaintiffs of their property near by, viz., Mr. Benson at Abercorn Place, St. John's Wood, and certain occupiers of premises in Abbey Gardens, St. John's Wood.

Mr. Luxmoore, K.C., and Mr. Hunt represented the plaintiffs, and Mr. Archer, K.C., and Mr. Israel, the defendant.

The facts fully appear from the judgment.

His lordship said in this case it appeared that the backs of the houses faced towards the defendant's factory. It was on September 24 that the defendant commenced work at his factory, and in the course of his business he used a number of blow-pipes, which were fed by air and oil under pressure by means of a reciprocating pump. The blow-pipes emitted a considerable amount of noise which could be described as a sort of dull roar, and the pump also made a certain amount of noise. There was no doubt that for some period subsequent to the opening of the factory there was a nuisance from the noise and at times from the smell, which prejudicially affected the plaintiffs. Later, in October, defendant endeavoured to mitigate the nuisance. The evidence which had been given was of a curious character. The witnesses called by plaintiffs stated that they had endured an intolerable nuisance, and those called for the defence stated that there was no nuisance at all. Mr. Benson described the effect of the factory upon him as more or less appalling. In these circumstances his lordship visited the premises. In Mr. Benson's house it was only with great difficulty that he could hear any noise from the factory at all. With the windows shut he could hear nothing, and with them wide open he could just hear, if everything was quiet, a sort of dull, continuous noise. Mr. Benson quite candidly stated that if he was not ask to put up with anything worse than what his lordship cou hear he would have no cause for complaint. It was perfect obvious that very substantial improvements had bee effected in the working of the factory. His lordship the went to the house of Miss Garner, another plaintiff, wh lived in Abbey Gardens, where with the windows sh he could hear the noise from the factory. It was true it w very slight, but with the windows open it was a ve distinct noise which the household ought not to be forc to put up with. His lordship said he also inspected t factory and saw what had been done to mitigate the nois With regard to the smoke and smell, this had been entire stopped. In his opinion it was the noise from the pum mingling with the roar from the burners which created t sound which was so perceptible in Miss Garner's hous He was of opinion that the wind had a great effect on whe the noise could be heard and what it sounded like, and th explained a good deal of the discrepancy in the eviden Defendant had arranged to substitute for the noisy pum an apparatus which his lordship believed would work qui silently, and to make certain further improvements. T experts were satisfied that the noise could be stoppe In these circumstances, although he was satisfied defenda had done his utmost since the complaints were made, was of opinion that when the writs were issued there was a actionable nuisance, but it had been substantially modifie since that date. His lordship thought the proper ord would be to grant an injunction restraining defendant fro carrying on a business so as to cause a nuisance to th plaintiffs, but he would stay the injunction on defendant' undertaking to make such improvements as would mitigat and avoid any nuisance following. As to costs, he ordere the defendant to pay the costs of the action.

A By-Laws Prosecution

Merton and Morden U.D.C. v. *Brocklesby.*

November 15. Wimbledon County Court.

In this case Mr. John Sydney Brocklesby, of Merto Surrey, architect, was summoned by the Merton an Morden Urban District Council for three contraventions the Council's by-laws during the erection of a house, "Fli Barn," Mostyn Road, Merton.

Mr. E. J. Naldrett, instructed by Mr. C. J. Mountifie (clerk to the Council), appeared for the prosecution, an Mr. W. E. Watson, F.R.I.B.A., instructed by Messr Wilde, Wigston and Sapte, was counsel for the defence.

The first summons raised the question of whether pipe of No. 2 quality could be used for soil drainage purpose The by-law stated: "Every person . . . shall, in the construction of every drain of such building intended to be use for conveying sewage use good sound pipes formed of glaze stoneware, heavy cast-iron, or other equally suitab material."

Mr. R. J. Thomson, local architect, said he had inspecte and tested the drain and it was perfectly sound.

Mr. W. R. Davidge, formerly Housing Commissioner fo the Greater London area, said he had that week submitte the drain to a twenty-five minutes water test and wa satisfied that good, sound pipes had been used. He agree that it was more satisfactory to use first quality pipes, bu he had no hesitation in saying that in this case the drai had been constructed in compliance with the by-laws.

The justices, after private consultation, came to the conclusion that the Council had not established its case tha the drain was not made of good, sound pipes of glazed stoneware.

The second summons was under a by-law stating: "H (person erecting a new building) shall cause such floor to b roperly and sufficiently supported. In the case of a amed floor or of a floor formed with beams at short dis- nces apart, and covered with battens, deals or planks, ithout joists, the several timbers of such floor shall be of ich size or strength as may be adequate to secure due ability."

Here it was contended that the timber used, elm, was not sufficient strength, the joists being laid so that the weight as taken on the narrower dimension of the timbers. The sult was that the (bedroom) floor sagged in the centre id the furniture rocked.

For the defence it was denied that the results alleged isted.

The justices said in their opinion the Council had got the st in this case, and the bench must decide in its favour. fine of 40s. was imposed.

The third summons related to the plugging between the n boards of the ground floor. The by-law stated: " . . . iall cause the boards, planks or wood blocks to be pro- rly tarred or creosoted on the underside or otherwise nilarly treated, or to be laid on a sufficient thickness of neral bitumen or similar material. He shall cause such ards, planks or wood blocks to be so laid and jointed as ectually to prevent any moisture from penetrating be- teen the joints and between the underside of such boards, inks or wood blocks and the surface of the concrete or nilar foundation. He shall cause every block or plug of ood used in the construction of such floor and laid in the ncrete or other similar foundation to be properly tarred creosoted, or otherwise similarly treated."

For the Council it was contended that the planks of the lor were not plugged, that there were openings through ich water such as would be used in scrubbing the floor ght soak. For the defence there was in court a large odel showing the entire section of the floor, and the thod adopted to prevent damp rising. The Council did t contend that the danger was from damp rising, but im damp going down between the floorboards.

By agreement each side consented to call only one wit- is, and the justices without retiring decided to convict, icting a fine of 20s.

The question of costs in all three cases had been deferred til the three summonses had been heard. Their worships lered that each side should pay its own costs. Mr. Watson In intimated that in respect of the last two summonses client would appeal.

A Scottish Ancient Light Case

Rentons, Ltd. v. Forsyths, Ltd.

Edinburgh. Before the Sheriff.

Judgment was recently given in the above case, re- ing to the proposed rebuilding and enlarging of a block business premises in Princes Street which backed on to narrow thoroughfare known as Meuse Lane, running allel with Princes Street. The Corporation having given ent under their ordinary powers to the raising of build- is on both sides of Meuse Lane, and under a provisional ier to the erection of a large bridge intended to connect artments on both sides of that street, the "pursuers," were owners of adjoining properties also on both sides Meuse Lane, appealed against such assent, on the ground *r alia* that the proposed bridge would damage their light.

he Sheriff disallowed the Appeal, subject to the following ditions being embodied in the Corporation's order of nt, viz.: That the back walls of the properties of defenders abutting on the south and north sides of ise Lane be constructed of white glazed brick; that surface of the walls of the said properties abutting on lane and of the walls of the said bridge shall be odically cleaned by the defenders, or their succes- , at least once every three years after their erection, the satisfaction of the Burgh engineer of the City dinburgh; that if the defenders, or their successors, fail lean the said walls after notice by the Burgh engineer hat effect the Corporation shall have power to order the removal of the said bridge, and the defenders shall be bound to obtemper that order; that the said bridge shall be constructed in such a manner that its under surface shall be 15 ft. 6 in. above the level of the surface of the said lane.

In explanation of these findings the Sheriff said: At common law the proprietor of property abutting on a public street in a burgh had a right to the open space vertically above the street from which the light to his property was derived. These rights, however, were not of the nature of servitude rights.

He did not think it necessary to consider the question of amenity or air space, as counsel for the pursuers in arguing the case confined his objections to the questions of light and access.

The question of how the bridge would affect the daylight illumination of the pursuers' premises was a somewhat difficult and technical one. The only witnesses who professed to speak with authority on the subject were Dr. Houston, for the pursuers, and Mr. P. J. Waldram, for the defenders. Other witnesses, architects and surveyors, expressed opinions for and against. Dr. Houston was Lecturer on physical optics in Glasgow, and author of a standard "Text-book on Light." Mr. Waldram was a consulting engineer and surveyor in London, and a member of the Council of the Society of Illuminating Engineers. He had made a special study of daylight and artificial illumination of buildings, and had published the result of his researches. Dr. Houston said that the quantity of light which an interior would receive was difficult, or even impossible of exact ascertainment. Mr. Waldram, on the other hand, said that great advances had in recent years been made in the study of lighting problems, and that it was now possible to ascertain what the lighting conditions would be in a building which was not actually in existence. By actual observation he found that no direct sunlight from the sky at present entered the windows of the pursuers, and very little direct light from the sky. As the sky could not be seen, the proposed bridge would not obstruct light from it. Light travelled in straight lines, so that direct sky rays which pass the windows need not be considered. In his opinion the illumination of the pursuers' buildings was received from such light as could be reflected from the building fronts opposite. Great improvement would be effected by substituting white glazed bricks for the sandstone of the walls. The sandstone absorbed 75 to 85 per cent. of the light which comes to it and glazed brick only 25 per cent. The erection of the bridge would, in his opinion, make no difference or measurable diminution of the light. There might be an observable increase owing to the better reflection, also at certain times of the day by direct reflection of rays coming from the west and going to the east which at present passed up the lane and were lost. Any of these which would be stopped by the bridge would be reflected back into the pursuers' windows.

Mr. Waldram's evidence was given quite fairly, and he preferred it to that of Dr. Houston. Dr. Houston based his evidence largely on a diagrammatic representation of angles. That seemed to him to show what the lighting of the roadway would be if the bridge were erected as sanctioned by the Corporation, and had got little to do with the lighting of the rooms on either side of the street. He thought, therefore, to that extent his evidence must be discounted. He thought Mr. Waldram had demonstrated that the light received by the pursuers' windows was the diffused reflected light from the opposite walls, and as most of it came from a height above the top of the bridge, it would not be affected by the erection thereof. Further, that the skimming light coming from the east along Meuse Lane had not much effect in lighting the windows of the pursuers' properties.

He was of opinion that, if the walls of Messrs. Forsyth's properties abutting on Meuse Lane were reconstructed of white glazed brick, and the bridge erected as above proposed, and the surfaces of both were periodically cleaned, the lighting of the pursuers' premises would not be appreciably affected.

Progress in Road Construction

The Exhibition at Islington

THE great amount of thought that is being devoted to the application of modern science to road construction is evidenced by numerous exhibits at the Public Works, Roads, and Transport Congress and Exhibition, which opened last week at the Agricultural Hall. The changes which in recent years have taken place in the character of the traffic has demanded a corresponding change in the character of the main thoroughfares. Time was not so very long ago when a concrete foundation of moderate thickness beneath stone setts, asphalt, or wood-block paving gave satisfactory results, but with the increased speed and weight of vehicles very much stronger foundations are required. If concrete alone were used the bed would have to be of great thickness; therefore, to keep a medium depth, to bind the concrete together, and to add the necessary strength to withstand the stresses, reinforcement in the form of steel bars or drawn steel wire is resorted to. On many stands various types of reinforcement are displayed. Numerous other kinds of road surfaces, designed to meet modern needs, are shown. Considerable attention is also directed to modern methods of sewage disposal.

Some of the Exhibits

Tuke and Bell, Ltd. (Row B, Stand No. 7).—Among the exhibits of the firm is a "Grip" patent manhole cover and frame, for heavy road traffic. Tapered concentric rings, graded in height, hold up the road material to the frame, and make abrupt edges impossible. Large numbers are in use in this country and the Colonies.

Ingersoll-Rand Company, Ltd. (Row B, Stand No. 8).—Among the exhibits are numerous labour-saving devices of interest to quarry owners, municipal engineers, county surveyors, and general contractors.

Ransome Machinery Co. (1920) Ltd. (Row B, Stand No. 12).—The exhibits include tar macadam, concrete, and piling plant of various kinds.

Ruston and Hornsby, Ltd. (Row C, Stand No. 1).—The exhibits are crane navvies, motor rollers, etc.

Tarmac Limited (Row C, Stand No. 2).—"Tarmac" is used for tarbound road construction. "Tarmac" is manufactured of specially selected blast-furnace slag and the company's own preparation of refined tar and other ingredients.

Richard Hill and Co., Ltd. (Row D, Stand No. 4).—This firm is exhibiting samples of "Maxweld" electrically-welded steel fabric in varying strengths and spacings. The company manufacture a comprehensive range of different strengths of fabric suited to any set of conditions likely to be met with in reinforced concrete constructions.

Winget Limited (Row D, Stand No. 10).—The outstanding feature of the "Winget" stand is a quarter-size model of the much discussed "Wonder Plant" for the automatic production of tar macadam. This is the new stone-drying and tarring plant which takes the crushed stone and dries it, frees it from dust and dips it in tar or bitumen, and finally loads it into a railway truck, practically without any handling by man labour from start to finish. The working model is a quarter-size of the plant capable of producing 100 tons per eight-hour day. Practically all the exhibits on this stand may be seen at work. They include the "Winget" pressure machine, for manufacturing concrete blocks and slabs—the machine which has played such a large part in housing schemes all over the country; a portable engine-driven crusher; and a wide range of mixers, suitable for mixing not only wet or semi-wet concrete, but also—by the addition of special blades—tarred or bituminous products as well. There is also a new "Winget" portable conveyor, capable of handling materia of every description at a far greater speed than manua labour and at a fraction of the cost.

Johnson's Reinforced Concrete Engineering Co., Ltd (Row E, Stand No. 4).—Special attention is drawn to thei new pattern steel-wire lattice reinforcement, as used fo concrete roads, culverts, tanks, floors, roofs, walls an similar construction, for which is claimed rigidity withou interference with the quality or continuity of the mai tension wires.

Brookes, Ltd. (Row E, Stand No. 7) exhibit granit macadam from their various quarries, kerb, channel, setts etc., granite for architectural, monumental, dock, harbour and engineering work, "non-slip" stone footway paving artificial stone, architectural dressing, paving, etc.

The British Reinforced Concrete Engineering Co., Ltd (Row F, Stand No. 5).—The exhibit consists of a larg number of photographic enlargements illustrating roa work in which B.R.C. fabric has been used. These photo graphs cover various types of road work, and they ar taken from all parts of the country.

C. A. Peters, Limited (Row F, Stand No. 6).—"Carbo lineum" wood preservative is used constantly by railways public bodies, builders, estate agents, etc. It has a beautifu nut-brown appearance which is specially pleasing for half timbered work in houses, fences, etc.

The Expanded Metal Co., Ltd. (Row F, Stand No. 10).– The exhibit consists of samples of the company's variou products; a model section of kerbing and road; also photo graphs of a few of the more important municipal work carried out on its systems.

Ferodo, Ltd. (Row G, Stand No. 2).—Specimens ar shown of Ferodo friction linings for general engineering quarry and mining work. Further exhibits are samples an models of Ferodo patent stair-treads, specially suitable fo public offices and works. Samples are also shown o Feroleum fibrous flooring, which is clean, silent and lon wearing.

Ernest Mathews and Co. (Row H, Stand No. 3 exhibit dry and tarred slag from their own quarries i Hollinswood. Aberdeen adamant artificial stone paving which is well known in London, and has been laid in th Boroughs of Wandsworth, Westminster, Lambeth, etc Multi-coloured facing bricks, sanitary pipes and fittings roofing tiles of all kinds and colours, blue and grey roofin slates from quarries in Port Penrhyn.

Messrs. Brown and Tawse, Ltd. (Row C, Gilbey Hal Stand No. 1) exhibit various types of fabric reinforce ment, kerb reinforcement, patent steel kerb-edge protection and brick reinforcement.

On the stand of the Aerograph Company, Ltd., unde the direction of Mr. M. W. Brand Makins, a director of th company, is a working model of the engleoxidizing plant– a new scientific method of oxidizing oils. The invention c Mr. Russell England, F.I.B.D., who has been assisted b Dr. H. Schofield, the Principal of Loughborough College The discovery of Mr. England is of great importance to th paint industry. It is claimed that linseed oil can be s treated that it will dry naturally in four hours without th aid of any artificial dryer.

Millars' Timber and Trading Co., Ltd.—An interestin collection of photographs and literature, describing th whole of Millars' constructional plant, is available. Owin to the magnitude of the complete range, it is impracticab to exhibit a really representative selection in the hal All, however, are being demonstrated at the works, an visitors are cordially invited to travel there in comfort i the motor-cars provided for this purpose. The journey ca be made in about fifteen minutes.

Contemporary Art

Royal Society of British Artists.

A large number of water-colour drawings gives to the pearance of the large gallery a livelier air than usual. any of the works are good; few are really bad at Suffolk reet now that the deadweight of ponderous oil paintings s been lightened, but there are some small oil paintings importance still: E. Hesketh Hubbard's "Zinc Shop: mes" is an example, and J. H. Amshewitz has a good corative subject in "The Court of Cupid." In the central llery there is a distinguished bit of drawing in "The Auld ig," by A. Carruthers Gould, a charming composition low colour tones. J. F. Wilson contributes three works: small "Place Stein, Bruges," "The Artist's Pantry," d a charming landscape, "Towards Blankenberg, from ebrugge," which gives the characteristics of that bit of ast country admirably. W. T. M. Hawkesworth's erry, Great Yarmouth," is another pleasing drawing. he Interior, Segonia Cathedral," is a good architectural dy. There are some nice country scenes by T. F. Catchle, Algernon Talmage, E. Handley-Read, Tatton Winter, d Vivian Rolt. The president, Solomon J. Solomon, kes a contribution, and Leonard Richmond sends some the larger and more important works, while Cyril Roberts esponsible for several of the limited number of portraits d figure studies.

Modern French Painting.

ike last season, London is again treated to good views of more advanced artists' work of the last century and s. There was the recent show at the Leicester Galleries, l now, at the Lefèvre Galleries, there are no less than rteen examples of the work of Auguste Renoir; seven of louse-Lautrec, three of Gauguin, to which are added ee of Van Gogh, who seems to have been accepted as a mber of the French school. These are all full of interest, l they are all styled post-impressionist, although Renoir for years looked upon as one of the three leaders of pressionism and did nothing to advance the further elopment into post-impressionism, which Van Gogh and uguin so vigorously accomplished. Neither is it exactly rect to include Toulouse in the gallery any more than as. These two were concerned more with form as form n with light as light, or with the luminous further erimentation of Van Gogh and Gauguin. Degas and louse-Lautrec owe their pre-eminence to other causes—as for his drawing, Toulouse for his humour.

t the Independent Gallery there is a splendid collec- of the latter's drawings. There is a slyness in his hour which is irresistible; a Parisian wit which requires nswering mood in order thoroughly to appreciate, but n appreciated there is none keener nor more killing. re are eighty of these drawings which should stir London siderably.

The Faculty of Arts Gallery.

o. 10 Upper John Street, Golden Square, must cerly be hailed as the home of an entirely new and desirable ement in art. No one should fail to get a copy of the hure which tells all about it. The galleries for exhibi- of painting and sculpture are admirable, and the rooms prising the rest of the premises are altogether jolly. re is a one-man show of the works of W. B. E. Ranken, he inaugural exhibition, which reveals this artist's tling versatility and decorative powers. His free lling of figure work is better than his tight treatment rtrait heads, but his chief virtue lies in his architectural ies, both outdoor and interior, of which there are ty, and in his decorative work. There is a large overtel panel which is excellent.

The Beaux-Arts Gallery.

There is another one-man show here—Gerald Moira's. It is representative and individual. A large decoration has the benefit of being arranged at a sufficient distance. "The Cornish Floral Dance" is to be seen well, and the other decorative pieces make a display that gives a decided feeling of satisfaction in having in London an artist who so well understands the true principles of mural work, and is so well able to carry them out.

The St. George's Gallery.

The last of the one-man shows is the posthumous exhibition of some hundred drawings by Lovat Fraser, which exhibit a striking consistency in style, and the endearing fancy which was the note of the artist's personality as it was of his work.

Honoré Daumier.

The collection of paintings and drawings at Barbizon House, 8 Henrietta Street, Cavendish Square, makes you realize that Daumier was a great modern, predating the acknowledged masters of post-impressionism by half a century. His pictures are modelled light. With a few thick black lines to contain or emphasize his design, with a few planes of tones, he constructs his figures solidly and convincingly. His lines are fragmentary, his planes are arbitrary, but their result is alive. Daumier had a fresh vision of humanity and the means of expressing it in a new manner. He was an analyst of humanity as well as an analyst of light. He was a humorist as well as a tragedian; he saw life seriously and was never funny, comic, nor witty at its expense. There is gravity in all his humour and deep knowledge in all his tragedy. There is great beauty of form in his work—new form for his time—and there is magnificent quality in his paint, which alone would make lesser work great; and this quality is consistently present, rising at times to brilliant intonation. The highly modelled paint of "Les Deux Politiciens," the fine graphic lines of "L'Artiste," the beautiful soft colour of "L'Arrivée au Chemin de Fer," the monochrome of "Les Pièces à Conviction" (purchased by the Fulton Bequest Committee for the Melbourne Gallery) are ciphers in the sum of general excellence.

Connell's Gallery.

Laura Knight is a bold artist; she has no fear of life or of media, and, what is best of all, none of herself. Here she plunges boldly into the nitric-acid bath and brings forth aquatints and etchings which are none the less interesting, because they display a raw talent rather than a practised smooth, and, perhaps, decadent technique. There is nothing tired about any of these prints; they make a joyous show.

The Alpine Gallery.

So do the seventy-and-seven oil portraits, figure subjects, landscapes, and cartoons for the Balcombe frescoes with which Neville Lytton has incontinently filled this large gallery. He has not waited to become accomplished; he has dashed at things and seen them and reproduced them. This exhibition is a riot of pleasurable creation, which pulsates within every frame.

Bird and Animal Studies.

There are, at least, six London galleries devoting their wall space to the exhibition of paintings, drawings, and prints of birds and beasts, some treated naturalistically as specimens, some pictorially. At the Fine Art Society John G. Millais' "Wild Life in Many Lands" includes large oil paintings of elephants and buffaloes, of lions and tigers, of deer and ducks, of Carpathian stags, and of capercailzie. At the Greatorex Galleries Philip Rickman exhibits astonishingly realistic evocations in water-colour of the very tints and sheen of some of the most beautiful of the game birds. Pheasants, mallards, king fishers expose their violent beauties as they do in life, and scores of others. At the Art Gallery of Bromhead Cutts, in Cork Street, Allen W. Seaby contributes wood-block colour prints of birds, and beasts of small size; and in addition some very clever architectural subjects with fine effects, rarely seen in prints, examples of which are the white light and reflections of "The Mill," and the snow of "Winter." Nature in many phases attracts you in the sixty drawings in water-colour of W. Egginton at the Fine Art Society, "On and Around Dartmoor." It is true and direct observation that has gone to their making, and a nice feeling for what is the right way of making such drawings. W. Russell Flint at the same gallery shows his easy and pleasant talent in a variety of recent paintings and water-colours.

KINETON PARKES.

Mr. McArthur Butler's Long Service

The close of the Society of Architects' session in October, 1923, coincides with the completion by Mr. C. McArthur Butler of his twenty-fifth consecutive year of office as secretary. After being articled to the late Clapton C. Rolfe, A.R.I.B.A., of Oxford, and working as an assistant for other architects in various provincial centres, he was elected a member of the Society in 1894, and was engaged in practice as an architect when he took up his present appointment in 1898. Mr. McArthur Butler, who numbers amongst his qualifications that of a chartered secretary, is constantly representing the Society on conferences and committees dealing with matters connected with the profession and the building industry, and is an original member of the Beaux Arts Committee of which he was for many years the honorary secretary, and also a member of the Executive Committee of the Architects' and Surveyors' Approved Society under the National Health Insurance Scheme. He also took a prominent part in the deliberations of the Unification and Registration Committee. Durin the War period (1914-1918) Mr. McArthur Butler, in additio to carrying on and extending the work of the Society Architects under the difficulties and restrictions impose by War conditions, gave his services in an honora capacity to the profession and the community in oth directions. He served on the Executive Committee the Architects' War Committee, the Architects' Committ of the Professional Classes War Relief Council, the Joi Conference on Civic Surveys, and was joint honorar secretary of the Architects' Re-organisation Committee an a member of the Architects' Demobilisation Committe At the same time he served in the London 43rd V.A.D with the London Ambulance Column, and later commande a Company in a Volunteer Battalion which did useful wor on the defences of London. Mr. McArthur Butler tak an active share in the work of County Societies in Londo and was for some years secretary of the Association Men of Kent and Kentish Men, and was afterward member of the Council and served on the Committee the Cumberland and Westmorland Association. He wa admitted a Freeman of the City of London in 1907 and i the same year became a Founder and the first Seni Warden of the Society of Architects' Lodge of Freemason and after serving the office of Master was appointe Secretary, a position which he retains. He is also a Pa Master of the Lakeland Lodge, and was appointed London rank in 1911. He has twice occupied the cha in the Hiram Royal Arch Chapter, and in 1921 became Founder and first Scribe E of the Society of Architect Royal Arch Chapter.

MR. C. McARTHUR BUTLER
Secretary of the Society of Architects.

The R.I.B.A. Alfred Bossom Travellin Studentship

The subject set by the jury for the R.I.B.A. Alfre Bossom Travelling Studentship is as follows :—

A company is formed for the purpose of developin an island site 150 ft. by 100 ft., in the business quarter a first class provincial town of not less than 400,00 inhabitants.

The student is required to name the town and th position of the site and to submit a scheme as archite to the company which complies with the following co ditions :—

(*a*) He is to state the annual value of the site.

(*b*) The property is to be developed to the best advantag say as a store, shop, offices, banks, etc., and the capit expended must be such as with its revenue will appe to the public under current conditions. The capitalisatio of the company being stated in outline.

(*c*) Local rates to be stated.

(*d*) The height is to be left to the student, but is not exceed 100 ft. to the springing of the roof, but there ma be two floors in the roof.

(*e*) The model bye-laws of the Ministry of Health similar enactment must be assumed.

(*f*) Promotion and legal expenses to be estimated £2,000.

(*g*) Central heating must be provided.

The scale of plans, elevations and sections is to 1-16 in. to 1 in. No perspective drawing will be allowe and no repetition of plans or elevations is required. Draw ings may be lightly tinted in monochrome.

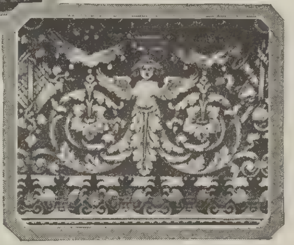
The report accompanying the plans must deal with th approximate cost of building and the financial return the whole scheme.

Associates of the Royal Institute who have not passe through one of the schools included in the competitio are required to deliver their designs and reports (in com petition for a Silver Medal) at the Royal Institute n later than 5 p.m. on Monday, December 1, 1924.

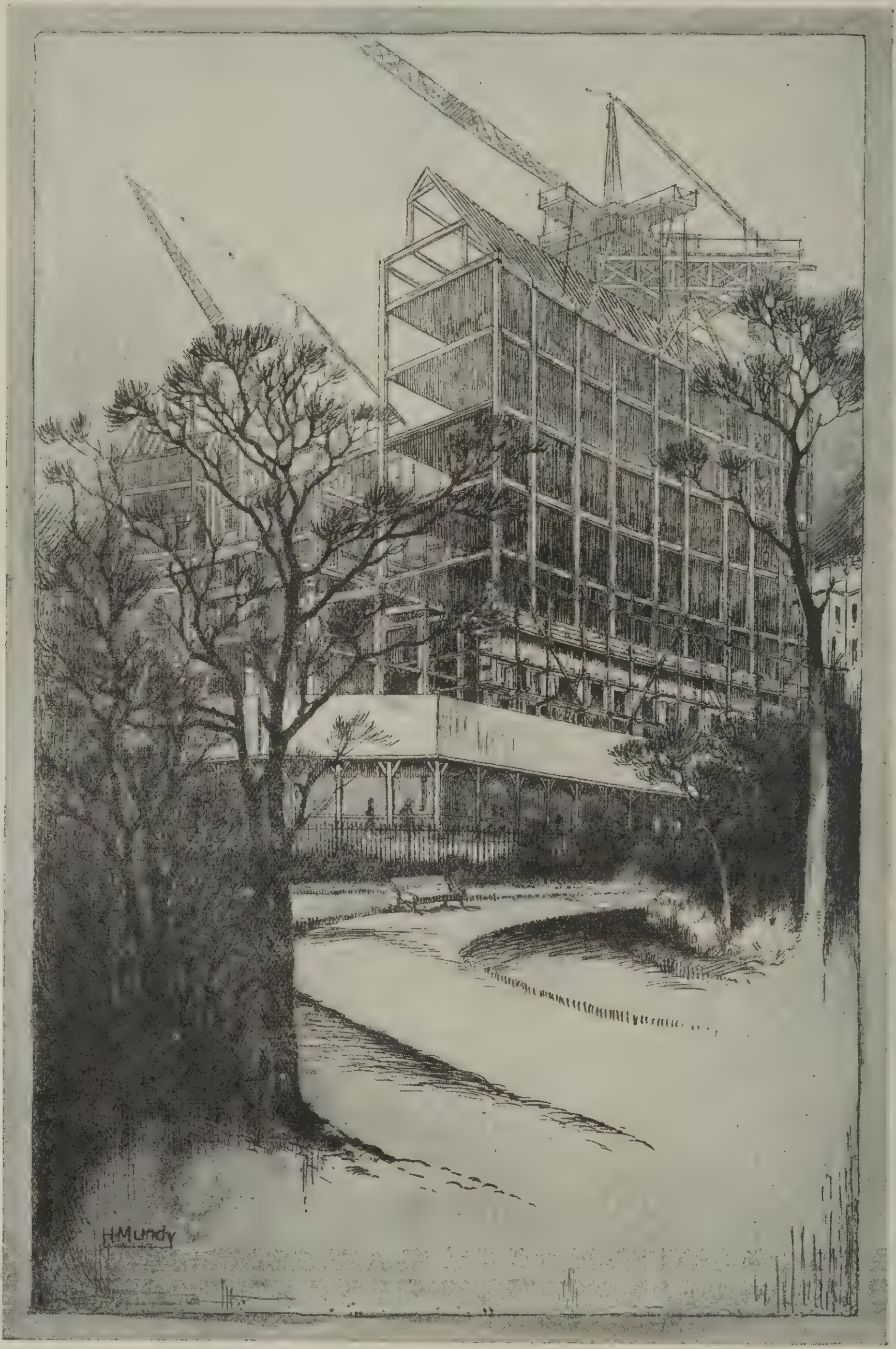
Schools of Architecture included in the competitio are required to announce that Monday, December 1, 192 is the closing date for the local Silver Medal Competition

The form of Italian decoration known as sgraffito possesses rare charm. Students of architecture who visit Italy will find numerous sgraffito façades centuries old, as handsome to-day as when executed — evidence of the durability of exterior sgraffito finishes—in spite of the excessive heat and heavy rainfall of the Italian climate. The two examples of exterior sgraffito decoration illustrated on this page show two shopfronts in New York City. The specification for these two installations read as follows: Erect a backing of expanded metal lath and channels, including all rod hangers, etc., required for their ample support. Apply a scratch coat of "Atlas White" Portland cement and selected white silica sand, evenly applied and scratched. Apply a similar second or straightening coat of "Atlas White" and silica sand, evenly applied and left ready for finishing the sgraffito work. Upon this two-coat base apply a third coat ¼ in. in thickness, composed of "Atlas White" and white silica sand, tinted by the addition of an approved pigment to a warm sienna colour. Before this tinted coat has entirely set, apply a fourth coat of "Atlas White," white silica sand, and granulated white marble dust. Place the stencil (cut to the desired design) over this fourth rendering, and carefully trace the design, removing all the white mortar of the fourth coat which may be visible through the interstices of the stencil. This will, of course, expose the brown sienna third coat and leave the design in relief in white against the brown background. Do not model the design. That would destroy the character of the decoration. I illustrate this sgraffito work merely to show how varied are the methods in which "Atlas White" Portland cement may be applied, to secure beauty. Write to me at Regent House, Regent Street, London, W.1, for a copy of "Guide to Good Stucco." Every architect should be familiar with the general subject of exterior textural finishes therein discussed.

(The sgraffito shopfront in the upper illustration cost less than **£100** all told.)



Frederic Coleman



Architect:
Sir E. L. Lutyens,
R.A.

Steelwork Manufactured and Erected by
Redpath, Brown &
Co., Ltd.

BRITANNIC HOUSE, FINSBURY CIRCUS.

REDPATH, BROWN & CO., Ltd.

CONSTRUCTIONAL ENGINEERS.

3 LAURENCE POUNTNEY HILL, E.C.4

WORKS AND STOCKYARDS

London
Riverside Works,
East Greenwich, S.E.

Manchester
Trafford Park.

Edinburgh
St. Andrew
Steel Works.

Glasgow
Westburn, Newton.
Office: 19 Waterloo St.

Birmingham
Office:
47 Temple Row.

Newcastle-on-Tyne
Office:
Milburn House.

Registered Office:—2 St. Andrew Square, Edinburgh.

he local juries should meet as soon as possible after ecember 1, 1924. The Silver Medal designs and reports ust be submitted to the Royal Institute not later than p.m. on Wednesday, December 31, 1924.

In the case of schools not recognised for exemption from ie R.I.B.A. Final Examination the local award of a lver Medal is subject to the approval of the jury for the old Medal and Studentship.

R.I.B.A. Council Meeting

Appended are notes from the minutes of the last Council ieeting of the R.I.B.A. :—

The City Churches.—It was decided to issue a public rotest against the threatened demolition of City Churches.

Preservation of Places of Natural Beauty or Historic terest.—It was decided to join the Royal Academy, the ciety of the Protection of Ancient Buildings, and the ciety of Antiquaries in sending to the Chancellor of the kchequer a proposal for exempting the owner of any aces of natural beauty or of historic interest from hedule A of the income tax chargeable upon that property, provided that he keeps the property in such repair will prevent decay and allow reasonable access to embers of the public who wish to enjoy the beauties of e place or to appreciate its historic interest.

Royal Commission on Fire Brigades and Fire Prevention.—It was decided to appoint a joint committee of embers of the Practice and Science Standing Committees collect and collate reports from the allied societies on e report of the Royal Commission on Fire Brigades and re Prevention, and to advise the Council as to any steps hich it may be desirable to take in connection with the port.

Lay-out and Town Planning Competitions.—It was cided to take steps to arrange an early conference of presentatives of the Town Planning Institute, the Town anning Committee, R.I.B.A., and the Competitions mmittee, R.I.B.A., to consider and report to the Council I.B.A., upon the whole question of town planning and -out competitions.

Illegal use of R.I.B.A. Affix.—It was decided to publish note annually in the R.I.B.A. Journal and the profesnal press calling attention to the fact that the use of the I.B.A. affix or of any affix suggesting membership of the I.B.A. by those who are not members of this body is gal, and that if any cases are reported to the Council al proceedings will be taken.

The Charter and By-laws Committee.—Mr. Maurice E. ebb was appointed as an additional member of the mmittee.

Road Access to the London Docks.—It was decided to mmunicate with the Port of London Authority and the nister of Transport to the effect that the Royal Institute glad to note the probability of the above improvement, d will be glad to be assured that the work is likely to be ceeded with during the winter, especially in view of the ployment that might be provided.

Undercutting of Fees.—Under the provisions of By-law 24 member was severely censured for quoting fees lower than ose prescribed by the R.I.B.A. scale in competition with her architects for an appointment under a public body.

Competitions.—A Licentiate was expelled for taking part a competition which had been banned by the R.I.B.A.

R.I.B.A. Examinations.

a) Probationership.—It was decided to accept chemistry an alternative to physics, mechanics, or higher mathetics in the qualifications for the probationership.

b) Town Planning.—It was decided to institute a special mination for members of the Royal Institute leading a diploma in town planning.

(*c*) Final Examination.—The Board of Architectural Education reported to the Council that the following students of recognized schools exempted from the final examination had passed the examination in professional practice : Brooke, Donald ; Chambers, Isabel M. ; Coia, J. A. ; Crickmay, George H. ; Ferguson, James D. ; Fry, E. Maxwell ; Harrison, Edith Gillian ; Higham, E. H. H. ; Hirst, Harold ; Hutton, C. H. ; Hyslop, C. G. C. ; Knight, C. R. ; Musker, Doris ; Raafat, Mohammed ; Sutherland, T. Scott ; Vallis, R.W. H.

R.I.B.A. (Henry Jarvis) Studentship at the Architectural Association.—The Board of Architectural Education reported that they had approved the award of the studentship of £50 to Mr. Arthur Edwin Cameron.

Retired Fellowship.—Mr. F. E. F. Bailey (elected Associate 1879, Fellow 1905) was transferred to the Retired Fellowship.

Health and Town Planning

The first of a series of three Chadwick public lectures on hygiene and architecture by Major Harry Barnes, VP.R.I.B.A., F.S.I., was given recently at the Royal Society of Arts, under the chairmanship of Mr. W. E. Riley, F.R.I.B.A., M.Inst.C.E. In his lecture Major Barnes dealt with health and town planning. He discussed the relation between hygiene and architecture, and after quoting a definition of hygiene as the art of securing a healthy mind in a healthy body, and of architecture as the index of the mental and moral qualities of a people, he proceeded to point out that the conclusion which might be derived from those definitions, namely, that in the history of a people their hygienic developments would precede their architectural achievements seemed to be falsified by the facts. There had been two great periods of architectural perfection in European civilization, while the hygienic age was still in the future.

After giving some interesting historical references, including a proclamation by Edward III in 1357 prohibiting the throwing of filth into the rivers of Thames and Flete, he pointed out that those malodorous days were the days in which the genius of Gothic architecture in England bloomed to its finest flower, and while admitting the attention paid to water supply and drainage in the Hellenistic and Latin cities, he contended that there was nothing of substance to support the thesis that architecture was the aftermath of hygiene. The contrary view seemed to be supported by the fact that while architecture achieved its crowning glories in a period when sanitary science was almost unknown, the battle of public health was fought and won in that period of the nineteenth century when architecture in England was at its lowest ebb. Despite that evidence, the lecturer submitted that the conclusion that the only relation between hygiene and architecture was one of indifference and disregard was premature and false.

He then proceeded to show that the same conditions that gave hygiene its problems and architecture its chance were the conditions which arose from urbanization. The course of experience had led to an ever-growing number, both of those who practise architecture and those upon whom it was practised, to understand that it was more than an aggregation of materials, however precious, enriched by craftsmanship however cunning. It was the apex of man's material achievement, and must be broad-based on a safe foundation of health. This perception, he said, it was that gave us the science and art of town planning. He then proceeded to sketch out the stages by which we had come to the coordination of the efforts required to produce a wholesome environment, pointing out how, in the Public Health Act of 1875, half a century of efforts made in different directions were brought together in that Act in a proximity which had been a powerful factor in producing a unified conception of the things which were for the health and happiness of a community. This unified conception was that of town planning.

While reserving the problems of construction which turn a countryside into a town for his next lecture, he concluded by insisting that it was the interpenetration of country with town which was the vital essence of town planning. Endorsing the view that from every town it should be possible to reach the country through an uninterrupted environment of grass, trees, and water, he said that playgrounds, gardens, and parks were the links in the chain which should bind the country to the town.

Health and the Building

Mr. John Slater, F.R.I.B.A., presided at the Royal Society of Arts, London, when Major Harry Barnes, VP.R.I.B.A., F.S.I., delivered his second Chadwick public lecture. Major Barnes took for his subject "Health and the Building." He said that there were not many chances of selecting the sites of new towns in this country. In that respect America had the advantage of us. On the other hand, if a mad rivalry in the military control of the air was to follow that of the sea and land, it might well be that after the next great war a second Wren would have a chance to try his hand upon a greater London. Sites of towns were determined in old days by strategic, defensive, and military considerations. In these days a railway junction or coal deposit was a more determining factor. In most cases, however, the main considerations were geographical and geological.

He concurred in the views expressed by Sir Henry Maybury that more good could be done by laying down entirely new roads than by conducting surgical operations on the old ones, that the aim should be not to see how much traffic could be forced through an ancient centre, but how much could be deflected to roomier channels. He said he never looked at an old map of London without thinking what a pity it was that the old villages, which have grown into the London boroughs, had not been preserved and the extension of London taken place on the land between them, remarking how fascinating a stroll along some great London street would have been if one could have turned off through some lane and found oneself in the old village of St. Giles or Marylebone or St. Pancras or Shoreditch; or, a Merry Islington might have been retained. He expressed the hope that the new road developments might spare the old villages and towns which should lay off the new high roads so that those who had no interest in them need not pass through them for the discomfort of those who had. He pleaded for a land in which not only the business man was provided for, but where the loiterer may find a place.

Further information about Chadwick Public Lectures may be obtained of the Secretary, Mrs. Aubrey Richardson, O.B.E., at the Offices of the Trust, 13 Gt. George Street, Westminster.

Roman Architecture

Mr. Paul Waterhouse, M.A., F.S.A., PP.R.I.B.A., was the lecturer to a large audience of members of the Reading W.E.A. at the University College, Reading, when the second address on architecture was given. Mr. Waterhouse was introduced by Mr. Edward P. Warren, F.S.A., F.R.I.B.A. (President of the Berks, Bucks and Oxon Architectural Association). Mr. Waterhouse's lecture, which was illustrated by lantern slides, was entitled "The Roman Point of View."

Renaissance Gardens and Town Plans

In his sixth lecture on town planning at Birmingham University Mr. William Haywood, F.R.I.B.A., said that the influence of landscape architecture upon Renaissance town planning was more apparent in the seventeenth-century France than in sixteenth-century Italy. Italian gardens favoured the hill side, and the prospect of great natural effect external to their boundaries. Le Notre, the greatest of French landscape architects, was responsible for the best French work between A.D. 1661 and 1700, including the gardens of Versailles, St. Germain-en-Laye, Trianon, Marly, and St. Cloud. Versailles was especially interesting as having formally planned gardens on the west front of the palace, and a formal planning of streets and buildings on the east, the composition in each case centr ing on the chateau. The Place d'Armes, around which th palace and town were grouped, had central and branchin avenues, evidently inspired by the plan for the Piazza d Popolo at Rome, built eighty years before. This feature als reappeared in Germany, at Karlsruhe (A.D. 1712), where th geometrical association of town plan, palace, and palace garder —which Versailles uses with discretion—is carried to grea extremes. Neither at Versailles nor elsewhere did any tow planning appear in the seventeenth, eighteenth, or nineteent centuries which could compare with Wren's plan for rebuil ing London in 1666. For spacious effect, and a utility suite to its own and later times, this plan stood alone, and there wa no greater lesson to be learned from the history of town plan ning than the loss suffered by London from an absence legal power at a time of great opportunity.

Personal

Mr. Arthur Stratton, F.S.A., F.R.I.B.A., has returne from Holland where he has been lecturing on "Histor English Architecture." The lectures dealt especiall with the influences from the Low Countries, Hollan and Italy, and were everywhere well received.

The Architecture of Oxford

Under the auspices of the South Wales Institute of Architec (Central Branch) and the Institute of Builders (South Wal Branch), a lecture on the Architecture of Oxford was give recently by Mr. W. S. Purchon, M.A., A.R.I.B.A., head the Department of Architecture and Civic Design at th Technical College, Cardiff. Mr. J. E. Turner, J.P., was the chair.

The lecture was illustrated by a large and representati collection of lantern slides.

The lecturer explained that he selected Oxford for h subject partly because the forthcoming conference of th R.I.B.A. is to be held in that city, but mainly because carve in its stones is a record of English architecture from its earl beginnings to the present time. It would be difficult, he sai to over-estimate the influence of that architecture on thos who have studied at Oxford. After expressing the regret tha modern developments in Oxford outside the colleges are n more worthy of the noble traditions of the city, the lectur proceeded to consider, in chronological order, some of i leading buildings.

Of the mediæval work, the lecturer, after explaining th growth of the college plan, dealt mainly with the cathedra with its remarkable nave arcade and its elaborate chanc vault, Merton Chapel, the steeple of St. Mary the Virgin, ar the beautiful tower of Magdalen.

Following some curious, interesting, and in some cas beautiful examples of the Early Renaissance, and after notin the reluctance with which the Oxford builders forsook Goth forms, the lecturer passed on to some fine examples of the wo of Vanbrugh and Hawksmoor, and then referred to th influence of the amateur.

"The Battle of the Styles" was in no small degree foug at Oxford—the lecturer giving examples of the work of bo types. He pointed out that it was often only lack of fun which saved fine Gothic work during the Renaissance, a that the architects of the Gothic Revival often had as litt respect for Renaissance work, but that the attempt made 1910 to pull down Butterfield's Gothic Revival Chapel Balliol was frustrated.

Of the buildings recently erected at Oxford, Mr. Purch dealt with work by Sir T. G. Jackson, Mr. Basil Champney Mr. H. T. Hare, Mr. Warren, and Sir Reginald Blomfield.

In conclusion, the lecturer said :—

"Having thus briefly examined many buildings of vario types and degrees of beauty, let us now imagine that t visitor's last half-day in Oxford has arrived. He will do we I think, to revisit Magdalen, to see once more its beautif tower, to walk down 'the stream like windings of that glorio street' to the church of St. Mary the Virgin. Then by way the Radcliffe camera into Broad Street and so to the interi of Trinity Chapel; and finally I would have him spend an ho in the gardens of St. John's, leisurely examining the gard front of that college. So that it will be with thoughts of the beautiful buildings that he takes leave of 'that sweet city wi her dreaming spires.'"

The New Liberty Building.

Architects :
EDWIN T. & E.
STANLEY HALL.
(E. Stanley Hall,
M.A., F.R.I.B.A.)

Contractors :
HIGGS & HILL,
Limited.

FIRST SECTION OF THE REGENT STREET BLOCK.

THE elaborate organization which is necessary to undertake fine building on the big scale under modern conditions is not merely a matter of ample capital, adequate equipment, and efficient system.

The long training of the personnel, the building up of the living tradition of good work—that is the true heart of the business. And before that can be there must needs be understanding of what good work is, and conviction that it matters.

HIGGS & HILL, Ltd.

BUILDING CONTRACTORS
Crown Works, South Lambeth Rd., S.W.8.
Telephone: Brixton 2340
City Office: 14 Godliman Street, St. Paul's
Churchyard, E.C.4. Telephone: Central 2311

P.G.

THE SAGE SERVICE TO ARCHITECTS

FOR THE INTELLIGENT AND CAREFUL EXECUTION OF CONTRACTS

FOR SHOPFRONTS, STRUCTURAL ALTERATIONS, BANK AND OFFICE FITTINGS, PANELLING, JOINERY AND CARVING, MOSAIC FLOORS, ENTRANCE TREATMENTS, BRONZE AND ART METAL WORK, STALL PLATES, FASCIAS, SIGNS AND ELECTRIC LIGHTING INSTALLATIONS, ALSO INTERIOR DECORATIONS. MAY WE MAIL YOU ILLUSTRATIONS OF RECENT CONTRACTS EXECUTED BY US FOR VARIOUS MEMBERS OF THE PROFESSION?

WE ILLUSTRATE THE BRONZE AND METAL FRONTAGES OF MESSRS. DICKINS & JONES AS AN EXAMPLE OF FAITHFUL AND SATISFACTORY EXECUTION. THE ENTRANCE TREATMENT AND ENCLOSURES WITH THE MAJOR PORTION OF THE INTERIOR FITTINGS WERE PART OF THE CONTRACT ALSO ENTRUSTED TO "SAGE."

ARCHITECTS—MESSRS. HENRY TANNER.

FREDK. SAGE & CO. LTD.
Head Office & Showrooms-
58-62, GRAY'S INN ROAD, LONDON, W.C.1

The Week's News

Swansea and Concrete Houses.

The Swansea Housing Committee propose to erect 250 oncrete houses on the Maesteg site.

£34,500 for London Slum Clearance.

To clear insanitary areas in Islington the L.C.C. has proposed a scheme which will cost £34,500.

Lack of Bricklayers at Tilbury.

It is reported that a firm which contracted to build 143 houses at Tilbury cannot do so because of lack of bricklayers.

Free Bricks for Houses.

Welshpool Housing Committee have decided to erect forty working-class houses. Mr. David Davies is giving the bricks ree.

Wetherby Racecourse Extensions.

The Wetherby Rural District Council have passed plans for he extension of the various buildings in connection with the acecourse.

A New London Sewer.

The Main Drainage Committee recommend the London County ouncil to sanction the expenditure of £57,500 for a sewer in treatham Hill and Brixton Hill.

New Embankment Subway.

It was announced at the last meeting of the London County ouncil that a subway is to be constructed at the Victoria mbankment crossing at Westminster Bridge.

The Royal Sanitary Institute.

The next congress of the Royal Sanitary Institute will be eld at Liverpool from July 14 to 19, 1924, by invitation of he Lord Mayor and City Council.

Change of Address.

Messrs. George A. Allan, M.S.A., and L. W. E. Foster, rchitects, have removed their offices from 317 High Holborn, .C.1., to 5 Staple Inn, W.C.1. Telephone: Holborn 4586.

The Inner Development of Leicester.

Leicester's internal development scheme, in connection with hich the Council has decided to have a Parliamentary Bill repared, is estimated to involve a net cost of £2,433,813.

£50,000 Timber Fire in London.

Damage estimated at £50,000 was caused by fire in the workhops and stores of Messrs. Peacock, Ltd., builders, at St. ndrew's Street, Clapham, although 150 firemen worked hard r more than two hours.

More Houses for Liverpool.

The Liverpool Housing Committee are considering the building of Prince Edwin Street, Saltney Street, and Blenheim Street areas. So far the committee has built 6,000 ouses, and at least 12,000 more are required.

Felixstowe Improvements.

The Town Council are carrying out some important street nprovements in the town. A number of shops are in course construction near the site of the new General Post Office. rivate residences are being erected in all parts of the town.

Darton Water Supply.

The Darton Urban District Council have decided to augment eir water supply, and to construct two concrete reservoirs, ch having a capacity of 1,000,000 gallons. The Council's gineers are Messrs. W. H. Radford & Son, of Nottingham.

The Prince of Wales's Hospital.

The Prince of Wales has promised to open the extensions of e Prince of Wales's General Hospital at Tottenham on ecember 12. The extensions have cost about £35,000, wards which £28,000 has been given or promised.

The Town Planning Institute.

Owing to the general election taking place on December 6, e Right Hon. Neville Chamberlain, M.P., finds it impossible attend the anniversary dinner of the Town Planning stitute on Friday, December 7. The function, therefore, ll be postponed.

Lanchester Housing Subsidy.

Lanchester Rural District Council have obtained sanction to a loan of £35,000 for housing subsidy purposes. It has been agreed to approve of 420 houses to be subsidized, the total capital grant being £33,100. The remainder of the loan is to be applied to future housing requirements.

New Park for Alfreton.

The Alfreton Urban District Council have accepted an offer of the Alfreton Miners' Welfare Committee of the gift of twenty-two acres of land which are to be laid out as a public park and sports enclosures. The gift includes the existing football and cricket enclosures.

Hull Bath Extensions Scheme.

A Ministry of Health inquiry is to be held into the application of the Hull Corporation to borrow sums of £5,500, £20,500, and £8,000, for the provision of ladies' slipper baths, hot air and vapour baths at Beverley Road, slipper baths and washhouses in St. Paul's Street, and cottage baths in Albert Avenue, Hull.

Housing in Moscow.

It is stated that Moscow lost during the revolution and civil war about 13,000 houses, comprising over 35,000 flats and lodgings. These houses were partly ruined through neglect, while the wooden ones were pulled down for fuel. Now the communal authorities are faced with the problem of reconstruction, and are advocating a recourse to private enterprise, with facilities for investment in building, as State housing has proved a failure.

Plans Approved for Half Houses.

The Building Plans Committee of the Blackpool Town Council have passed plans for 325 and a half houses. In regard to the half, it is explained that the boundary line between Blackpool and the Fylde rural district at Marton cuts through the side of a proposed house, and whilst Blackpool Corporation approve the one half, the other part will have to receive the approval of the Fylde Rural Council.

Rating and Valuation.

In view of the dissolution of Parliament, and the fact that many members of the representative bodies who have been asked to consider the Government's draft Rating and Valuation Bill will at present be otherwise engaged, further time may be required for the submission of observations, and we are informed by the Ministry of Health that a further month may be regarded as available for this purpose if it is not found possible to complete the examination of the proposals by December 15, the date originally suggested.

A Newcastle War Memorial Chapel.

Along with the work of restoring parts of the ancient church of St. John, Newcastle—a work estimated to cost about £6,000—a part of the church has been converted into a war war memorial chapel. The chapel was designed by Sir Charles Nicholson, and is a conversion of the south transept. It is screened off from the main body of the church by the chancel screen, which has been moved by Faculty into the required position. The chapel commemorates the lives of the members of the parish who fell in the war, and their names are inscribed upon oak panels, affixed to the chapel walls to the height of the window sills.

House Shortage in Dockyard Towns.

The Admiralty Joint Industrial Council, meeting in London under the presidency of Lord Linlithgow, discussed the urgent need for the provision of more housing accommodation in the Royal Dockyard areas. A resolution submitted by the trade union representatives on the council suggested that provision should be made during the next financial year for housing schemes for workers. Figures laid before the council showed that while the shortage of houses was acute in all dockyard areas, it was especially felt in Devonport and Portsmouth. Lord Linlithgow, after a long discussion had taken place in private, intimated that the matter was not one for the Admiralty, as a Government department, to deal with, but that they were prepared to bring pressure to bear upon the Ministry of Health with a view to pressing forward the construction of dwellings in and about Government establishments where there was a great shortage of such accommodation.

(*Continued on page* 818.)

The Week's News—*continued.*

Matlock Improvements.

The Matlock Urban District Council have bought a block of ancient business property in Crown Square for the purpose of demolition to widen the thoroughfare. The County Council have promised £2,000 towards the cost, providing the buildings are not re-erected.

Proposed Public Hall for Sheringham.

Sixteen gentlemen have offered to pay five-sixths of the cost of purchasing a plot of land at Sheringham between the War Memorial and the Grand Hotel so that the Urban District Council may consider the erection of a public hall and reading-room.

Chelmsford Cathedral Extension.

The chancel of Chelmsford Cathedral is to be extended eastwards, thereby providing accommodation for canons' stalls, as a memorial of the diocese to Dr. Watts Ditchfield, the late Bishop of Chelmsford. Sir Charles Nicholson is the architect for the extension, which will cost between £5,000 and £6,000.

The Devastated Areas of France.

A problem of the devastated regions of France that has not been solved is that of the concrete "pill-boxes." In the Nord Department alone there were 6,000 "pill-boxes" and concrete dug-outs. Some of these have been destroyed, but whenever possible the authorities prefer to pay farmers an indemnity. Indemnities have now been paid on account of a thousand such constructions; the fate of 3,600 is still not decided.

Wages in the Building Trade.

At a meeting at Liverpool the National Federation of Building Trade Operatives decided to apply to the Wages Board for the wages of building trade operatives to be raised throughout the country to the Liverpool level, namely: Bricklayers, masons, and plasterers, 1s. 9d. per hour; joiners and painters, 1s. 8½d.; labourers, 1s. 3½d.; and scaffolders, 1s. 4½d.

London Slum to Go.

Bermondsey Borough Council have decided to demolish 151 dwellings in the neighbourhood of Salisbury Street, displacing 1,035 persons. Forty-nine families will be housed in Parish Street Workhouse, which is to be converted into flats. On the cleared site fifty-two cottages are to be erected at an estimated cost of £27,300, or £525 each. The total cost of the whole scheme is £71,050.

Part of London Wall Found.

A section of the Roman wall that surrounded the ancient city of Londinium has been discovered during excavations in Goring Street, Houndsditch. The stonework was in fine condition. It has now been practically demolished. The top of the wall, which runs parallel with Houndsditch, passing under Goring Street, was only a few feet below the surface. The wall was several feet in width.

Birmingham Bricklayers and House Building.

The suggestion made at a recent conference of Birmingham building trade representatives, held under the chairmanship of the Lord Mayor, that the workmen should agree to a longer working week, was submitted to a meeting of the operative bricklayers. The proposal was rejected by the trade union members, who definitely decided against any extension of the working week beyond forty-four hours.

Peabody Buildings as Flats.

Negotiations have been completed for the Peabody Buildings, in Westminster, to be transformed into 140 middle-class flats. The buildings have been bought by Mr. T. C. Gordon, the proprietor of the London Club and several hotels. The flats will have four rooms or more, a bathroom, and kitchen. Work will be started on the reconstruction immediately, and this will cost about £40,000. The total amount which the scheme involves is about £140,000.

Northumberland's Big Road Programme.

Mr. J. A. Bean, County Surveyor of Northumberland, stated at a meeting of the Royal Automobile Club's North of England Committee, held at Newcastle, that it was proposed to reconstruct eighty-three bridges. The County Council also proposed to carry out £163,000 worth of work to main roads in addition to the ordinary annual estimate. During the past year the work had proceeded very satisfactorily, and the estimate of £403,000 for road work had nearly all been spent.

More Houses for Brighton.

The Ministry of Health have granted permission for the Corporation to proceed with the erection of the eighty-seven houses still remaining to be built on the roads south of Pankhurst Avenue, on the Queen's Park Road site, such houses to rank for financial assistance under the Housing, etc., Act, 1923. The Corporation sub-committee recommend that the panel of architects prepare plans and invite tenders for the houses; and that the Ministry of Health be asked to sanction a loan of £33,000 for forty years.

Building Trade Operatives and the British Legion.

A scheme put forward by the National Executive of the British Legion for the employment of ex-Service men on house building has been rejected by the National Federation of Building Trade Operatives. The Legion proposed the employment of men at union rates, that all employees must be trade unionists, and that all those trained must have passed through the Government's instructional factory. In its reply the Federation has declined to be parties to any such arrangement.

The Home of James Watt.

Heathfield Hall, Birmingham, the home of James Watt, with surrounding grounds, has been acquired by a syndicate who intend to develop the estate for the erection of private residences. Watt planted the shrubberies and gardens, and many of the trees. The garret was fitted up as a workshop, and there the great engineer continued his mechanical studies and experiments for many years after his retirement. The room remains in the precise condition in which it was left by Watt.

Rockeries and Gardens for Southend.

A scheme for the improvement of the West Cliffs at Southend has been prepared by a committee of the Corporation, and it has been decided to apply for a loan of £18,000 to carry it out. The work will extend from Shorefields to the Nore Yacht Club's house, and will include a retaining wall, into which bungalows and shelters will be built. Lawns for deck chairs will be laid out, in addition to rockeries and gardens. Another sea front improvement will be the abolition of the bathing machines and the substitution of cubicles.

Leplay House Educational Tours.

The directors of the Leplay House educational visits abroad are taking a group of their members, and others who care to join, to Spain for the Christmas vacation, leaving London December 23, and returning January 6, or with extension to January 13 (1924). Visits to different cities, towns, and villages will be arranged as far as possible with their historical development in view. For full particulars apply to Miss Margaret Tatton, Leplay House, 63 Belgrave Road, Westminster, S.W.1.

Stained Glass Discovery at Sherborne.

A quantity of church glass, probably dating from the fifteenth century, taken from the windows of Sherborne Abbey, Dorset, at its restoration in 1838, and stored away in the muniment room ever since, has been rediscovered and sent to South Kensington Museum for examination. Experts at the museum say that "there does not seem to be anything exactly like it elsewhere in England. It includes several figures, probably part of a series of minor prophets, and a certain amount of heraldic glass of great interest."

Housing Progress in Scotland.

The following figures show the progress that has been made in State-aided housing schemes in Scotland to October 31: Permanent houses completed, 19,741; temporary houses completed, 665; reconstructed houses completed, 101; houses completed under the Private Subsidy Scheme, 2,287, making a total of 22,794. There are 3,063 houses at present under construction in connection with housing schemes carried out by local authorities and public utility societies. The total amount paid by the Scottish Board of Health in respect of the 2,287 houses completed under the Private Subsidy Schemes is £546,276 13s. 4d.

Hertfordshire Road Schemes.

The Hertfordshire County Council have authorized a committee to negotiate with the Ministry of Transport regarding the schemes for constructing by-pass roads in Hertfordshire, towards which the L.C.C. have promised to give a substantial contribution on condition that London labour is employed. One road would branch from the New North Road traverse Finchley and Hendon, passing west of Mill Hill and Chipping

(*Continued on page* xxi.)

The Week's News—*continued.*

Barnet south of Mimms, to regain the New North Road beyond Hatfield. The second would branch from the Finchley Road to West Hampstead, pass west of Hendon, proceed north of Stanmore and Bushey, and join the London to Birmingham road between Watford and King's Langley.

Victoria and Albert Museum.

The Department of Woodwork of the Victoria and Albert Museum has recently been enriched by the gift of a set of three chairs for the master, senior warden, and junior warden respectively of an old Lodge of Freemasons (No. 76) constituted in 1730, and meeting at the "White Bear," King Street, Golden Square. The department has also acquired by purchase, supplemented by a gift from Mr. F. C. Harper, a reading-table of carved mahogany, made in 1770 by William France for the library at Kenwood, under the supervision of Robert Adam, who built the house for Lord Mansfield.

Manchester Plans for 2,000 Houses.

At a meeting of the Housing Committee of the Manchester Corporation it was reported that consent had been received from the Ministry of Health for about 300 houses to be built by private enterprise, the builders of which were each to eceive the £100 subsidy. More than 240 of these were approved by the Committee, and they would be glad if possible o grant permission for another 600 houses. In view of the many applications received it was decided to recommend that pplication should be made to the Ministry of Health to uthorize the building of 2,000 houses. The Committee regard he present situation as very hopeful.

London Landmark to be Transformed.

One of London's most fantastic sights, the mysterious house f Upper Cheyne Row, is shortly to be transformed. This ouse, which stands at the corner of Oakley Street and Upper Cheyne Row, has its frontage covered with an extraordinary medley of carved stone, brought from an old house in France. From basement to roof there is a riot of twisted columns, hields, carved figures, and elaborate ornamentation. Originally t belonged to Dr. John Samuel Phené, who died in 1912. The ouse has been sold to an architect, and is to be reconstructed. The elaborate carving will be removed, and when the work is ompleted the house will have a normal appearance.

The Golden Age of Greece.

In a lecture on ancient Greek architecture at the Central chool of Arts and Crafts, Sir Banister Fletcher reviewed the onditions—religious, geological, and geographical—which led p to the architecture of the developed or "Hellenic" type. During his lecture Sir Banister Fletcher gave some interesting iews and brief, vivid descriptions of Olympia, Delphi, Athens, elinus, and Pergamon. At the capital city, he said, the ictories over the Persians gave the impetus for the blaze of rtistic achievement seen in the Parthenon on the Acropolis nd other buildings early in the fifth century B.C.—the summit f achievement in this world-centre of the building art.

Proposed New Lancashire Schools.

Lancashire Higher Education Committee's proposed building rogramme for 1924–5, includes new secondary schools at shton-under-Lyne and Nelson, extension of the Waterloo Girls' econdary School, and the acquisition of sites for a grammar chool at Urmston and a secondary school at Chadderton. In lace of the technical school suggested by the Haydock War emorial Committee as the local war memorial, the county uthorities have suggested a building containing a memorial all, which could be divided into classrooms, woodwork, and omestic subjects room for elementary pupils, and a science struction room for evening classes. The Elementary Education Sub-Committee's programme includes new council schools Longton, Ashton-in-Makerfield, Crompton (Shaw), Little ulton, Burtonwood, and Whitworth, and the acquisition of tes at Kearsley, Ainsworth, and Litherland.

The Education of Building Apprentices.

On the invitation of a large number of building teachers the North West Area, a number of the members of the anchester Branch of the Institute of Builders attended a nference at Manchester. The conference was attended over 70 persons. On the motion of Mr. Steele (Wigan), was agreed "that a small committee of building teachers formed to arrange for conferences on building topics from ne to time in the North West area, and to help in the improvement of the connection between the industry and the achers." One of the matters which might be referred to such a committee, he said, was the progress of the negotiations which had been taking place between the Institute of Builders and the teachers throughout the country concerning the preparation of students for the examinations of the Institute, which had recently been set up.

Hot Surfaces and Radiation.

A report has just been issued on the research work carried out by Mr. Arthur H. Barker, B.A., B.Sc., Whit.Sch., and Mr. M. Kinoshita, M.Sc. (Lond.), "on the effect of the shape and surroundings of a hot surface and the radiation from it." Messrs. Barker and Kinoshita are director and assistant respectively in the laboratory of the Department of Heating and Ventilating Engineering at the University of London, University College, and the work has been carried out for the Research Committee of the Institution of Heating and Ventilating Engineers with the aid of grants from the Department of Scientific and Industrial Research. The report is in part a résumé of a paper by Mr. Kinoshita, dealing with the mathematical theory of the mutual interchange of heat between two surfaces or different parts of a surface, each of which is emitting radiant energy, some portion of which impinges on the other surface. Only the results of the mathematical treatment adapted for application to practical work are given in the present report. Some of the more theoretical matters involved are explained in the appendix, in which the experimental work undertaken to confirm the theory is also described.

"Murite" Plaster

Messrs. Cafferata & Co., Ltd., of Newark, who have devoted many years to the study of plastering, have, after prolonged research, produced a gypsum plaster called "Murite." It is claimed to be a superior plaster, the first cost of which brings it within the scope of every estimate. This economy of cost is due entirely to the fact that "Murite" will carry a heavy proportion of sand. It is claimed that "Murite" can be worked efficiently with six parts of sand if the wall to be plastered is sufficiently absorbent. Successful plastering has, it is stated, been carried out with a combination of one part "Murite" to ten parts of sand, but this is admittedly an experimental proportion and the manufacturers do not recommend its adoption in general practice.

We have before us a sample of "Murite" consisting of a smooth hard surface coat superimposed on a 6 : 1 backing. A portion of the backing remains exposed and demonstrates a firm uncrumbling surface which is sufficiently hard to function as a striker for matches. The finishing coat is worked to a fine polish and is adaptable to the will of the plasterer, its character varying with the thickness of its application and the amount of trowelling given. In the matter of time, labour, and working costs, the firm claim confidently "that 'Murite' has effected a revolution." The backing already described is ready for the application of the finishing coat in a matter of twenty-four hours, and it is stated that two to two-and-a-half hours suffice for the setting of the finishing coat. The drying out is then rapid, as most of the water used in gauging combines chemically with the "Murite," forming a hard crystalline solid. Immediately the wall is dry enough decorating may be proceeded with.

It is claimed that "none of the plasters hitherto in use can approach 'Murite' in this respect, and the resulting work—in common with that of all good gypsum plasters—is superior in strength and hardness to the best lime plaster, while it entirely eliminates the use of wooden corners and angle staffs. It is not suggested that precisely similar results will be obtained with any kind of sand. It is, however, proved that 'Murite' is affected to a lesser degree by organic and other impurities in the sand admixture than any plaster previously produced."

The "Murite" finish coats are claimed to have the useful property of retaining moisture to a remarkable degree. This renders them exceptionally easy of application and allows a considerable economy in labour. Even on a highly absorbent surface it is stated that little brush work is needed and the plaster works evenly without dragging under the trowel, and that when dry it provides a satisfactory base for decoration. It is also pointed out that it neither expands nor contracts in setting, that it offers a firm hold for any good distemper, and that it has no effect whatever upon the colouring of the decorating medium employed.

For the convenience of users, "Murite" is made in four grades, each specially adapted to specific needs and together covering the whole range of plastering practice. The first grade is specially made for use on laths and expanded metal and contains the best quality hair ready mixed in the right proportion. The second grade is prepared for use as a backing on brick, stone, plaster slabs or breeze slabs. Both the remaining grades are for finishing coats. Number three is designed for service where the colour of the finish coat is immaterial; the fourth grade is a rather more expensive quality, which dries to a pleasing white. The manufacturers have issued a most informative little booklet, giving full particulars and containing a series of useful specifications and tables. These will be of the greatest interest to plasterers and will provide practical assistance in the application of "Murite" to all classes of work.

Trade and Craft

B.R.C. Roads.

The County Surveyor of Antrim, Mr. D. Megaw, giving evidence in Belfast before the Committee on Industrial Development in Northern Ireland, said that the experimental length of 50 yds. of reinforced concrete road outside Glengormley, at the Sandy Knowes, had been very satisfactory. It was laid in 1915, and was still in good order, only occasional tar-spraying being given to it. This road was made to the B.R.C. specification, and reinforced with B.R.C. Fabric Reference No. 9, made by Messrs. The British Reinforced Concrete Engineering Company, Ltd., Trafford Park, Manchester. The road had previously given the Council a great deal of trouble owing to the boggy subsoil.

"The Roadmaker."

"Bricks without Straw," by G. H. Jack, M.Inst.C.E., F.S.A.; "The Roadmakers of Foulness," by J. Taylor, and a portrait and biographical details of Mr. G. H. Jack, M.Inst.C.E., F.S.A., county surveyor and architect of Hertfordshire, are among the prominent features in the October issue of "The Roadmaker." Illustrations are also given of roads at Reigate, Hendon, Foulness, and Brooklands, Cheshire, in the construction of which B.R.C. fabric has been used. "The Roadmaker" is issued on behalf of the British Reinforced Concrete Engineering Company, Ltd., of London and Manchester.

Big Development Scheme for Newfoundland.

The Office of His Majesty's Trade Commissioner at Montreal reports that in connection with the development scheme in the Humber Valley, Newfoundland, a company is building a township at Corner Brook (some 400 miles from St. John's on the west coast of the Island) to house from 5,000 to 10,000 people. It is understood that the company have enough material to last them through the winter, but will require quantities of material in the spring and early summer of next year. Further particulars may be obtained by United Kingdom firms upon application to the Department of Overseas Trade, 35 Old Queen Street, London, S.W.1. (Reference No. 12496/E.D./C.C.l (2).)

Electric Lighting.

Messrs. Simplex Conduits, Ltd., of Garrison Lane, Birmingham, have issued a series of interesting booklets on electric lighting. The range covered by the booklets is comprehensive, and includes fittings for practically every domestic, industrial, and commercial purpose. A glance at the illustrations in one of them of Simplex triple-purpose electric signs at once reveals the possibilities of shop-window lighting. The sign not only lights the window, but with the same light draws attention to the name or virtues of the wares displayed. In addition to the illustrations of outside signs are several others showing various fittings specially designed for showroom and departmental purposes. The company's industrial lanterns and reflectors are made in a number of designs, each adapted for its own particular purpose. They are claimed strictly to conform with the high standards necessary for the economical and efficient lighting of streets, mills, factories, yards, etc. Another booklet deals with lighting fixtures and accessories, from which it should be an easy matter to select fixtures for any particular use.

New Inventions

Latest Patent Applications.

28241.—Gilbert, H. F.—Wall construction. November 9.

27855.—Hill, W. B.—Entrance doors for buildings. November 6.

27909.—Read, C. W.—Rubber blocks for road surfacing and flooring. November 6.

Specification Published.

205970.—McNay, J. T.—Reinforcements for concrete.

Abstract Published.

203960.—Cutting roof tiles.—Winship, A. J., of Llandaff Chambers, Regent Street, Cambridge.—A tile cutter comprises bevelled blades with curved ends carried by fixed and moving arms respectively. The fixed arm is hooked into a lath and held by driving its end into a joist. The blades are bevelled on the same side so as to afford a bursting and not a shearing action.

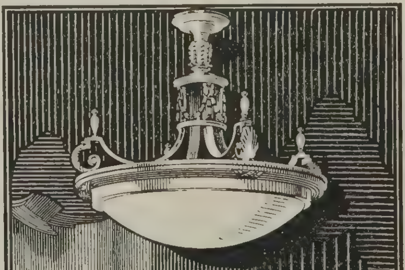
The above particulars are specially prepared by Messrs. Rayner & Co., registered patent agents, of 5 Chancery Lane, London, W.C.2, from whom readers of the JOURNAL may obtain all information free relating to patents, trade marks, and designs. Messrs. Rayner & Co. will obtain printed copies of the published specification and abstract only, and forward on post free for the price of 1/6 each.

Fiberlic
"THE WALLBOARD WITH A REPUTATION."
MACANDREWS & FORBES LIMITED, 65 SOUTH MOLTON STREET, LONDON, W.1.

SIMPLEX ELECTRIC LIGHTING FIXTURES

—a range of distinctive, mechanically sound fittings suitable for every class of installation. Their design and construction throughout exhibit a full knowledge and appreciation of individual purpose.

Catalogues, etc., immediately submitted on request. The services of the Company's designers are also freely available.



SIMPLEX CONDUITS LTD.
GARRISON LANE, BIRMINGHAM

Manufacturing Electrical Engineers producing every description of material for electric light or power installations. *Literature willingly sent on application.*

Also at London, Glasgow, Manchester, Bristol, Liverpool, Leeds, Newcastle, Cardiff, Swansea, Nottingham, Sheffield, Ipswich, Middlesbrough, Teeside, etc.

ednesday, December 5, 1923.

Vol. LVIII. No. 1509.

THE ARCHITECTS' JOURNAL & Architectural Engineer

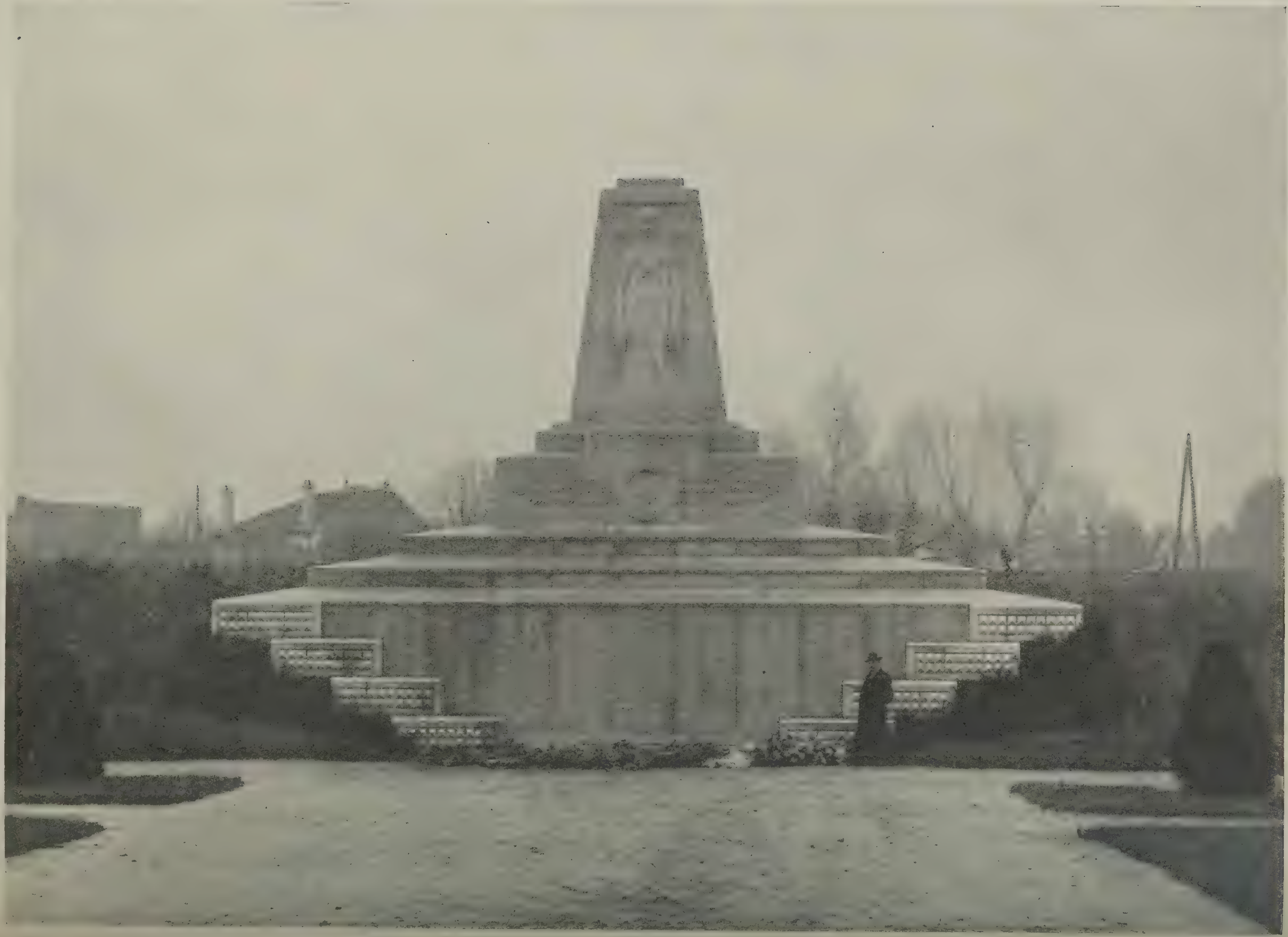
With which is incorporated "The Builders' Journal."

A DESIGN BY PERGOLESI.

27-29 Tothill Street, Westminster, S.W. 1.

War Memorials. 39.—St. Maur des Fosses

E. Dauphin and A. Lestang, Architects



This memorial is erected in one of the cemeteries reserved for the soldiers who lost their lives in the Great War. It is distinguished by unusual dignity of design and shows originality both in setting and general treatment.

THE
ARCHITECTS' JOURNAL
27-29 Tothill Street, Westminster, S.W.1.

ednesday, December 5, 1923

Volume LVIII. No. 1509

The Election, the Trade Unions, and the Building Industry

TO-MORROW the country decides its political future at the polls. Amid the excitement of a General Election, especially one such as the present, in which great principles of national ity are in the balance, the common affairs of everyday lose something of their significance. To these affairs, wever, whatever the result of the election, the country l have to return; indeed, these self-same everyday airs are the very pith and marrow of the predominant itical problems that inspire the politicians to their finest hts of oratory.

To turn from the abstract to the concrete, let us consider case of the building industry in relation to higher itics. Official statistics show that there are over a lion unemployed men in the country to-day. The mentary problem is to provide them with work. We n to the building trade and find that master builders are rywhere complaining that they cannot obtain sufficient led labour for work in hand. Work to be done and no to do it, in spite of a huge army of unemployed! Mr. esterton himself never conceived a more bewildering adox. Demand without supply is surely a new and midable complication in economic affairs.

The explanation of this extraordinary condition of things, ch would be preposterously farcical were it not so perately serious, is simple—and it is here that the clear- king section of the electorate must find itself in opposi- to the policy of the Labour Party. The explanation his: That the trade unions, which constitute the main ngth of the Labour Party, do not want work to be found the unemployed, nor do they want those who *are* em- ved to prosper to the full limit of their capacity. These strong statements, but they can be proved up to the . The policy of the trade unions is to hinder the smooth king of the industrial machine; otherwise we should find arbitrary regulations for the limitation of output ich, incidentally, means limitation of earning capacity the operative), unreasonable conditions with regard vertime, the embargo on the employment of non-union , the opposition to dilution, the limitation in the number pprentices, the imposition of the flat-rate system, and orth.

must not be assumed that because we criticize the e unions we are opposed to them. The trade unions done excellent work in the past; they have won for worker better conditions of employment and better s of pay. As an instrument of negotiation in matters ting general trade conditions they have been un- monly effective; their interference with the industrial hine and their excursions into the region of national ics have been attended by consequences little short of strous. It is no exaggeration to say that the building trade unions, from being a useful factor in the industrial organism, are, by their anti-social methods, becoming a positive menace to national prosperity and the wellbeing of society.

The restrictive regulations to which we have referred are reputedly designed to protect the worker—rather would we say the interests of a small ring of trade union workers; actually they have an exactly opposite effect. They foster unemployment. The one great fallacy of trade union theory is that limitation of output must provide a broader basis of employment. Nothing could be further from the truth. Limitation of output merely increases the cost of production, which in turn dries up the sources of enterprise. Obviously when prices are high, none will build except those who are forced to do so by stern necessity, or those to whom expense is no object. Reasonable and stable prices, on the contrary, mean confidence among building owners and work in abundance. These elementary facts are so plain to the understanding that it is almost incomprehensible that they should not have penetrated to the cerebellum of the trade union leaders. For it is the permanent officials who are the stumbling block; the men are, in the main, reasonable, clear-thinking fellows, by no means unconscious of the disastrous nature of the policy to which, under pressure of trade union intimidation, they have allowed themselves to be committed.

These, in brief, are the essential facts of the situation. What is the remedy? It is threefold: (1) Unity among the organized employers; (2) a strong policy on the part of their representatives; (3) Press publicity. The first two essentials cannot be properly effective without the help of the third.

The case from the employers' point of view is overwhelming in its logic, and we are convinced that the facts of the situation have only to be brought home to the public conscience to ensure a speedy improvement in the condition of the building industry, and a substantial reduction of unemployment. The public should be told that the restrictive policy of the trade unions is a serious hindrance to industry, raising prices and reducing the volume of work; that even now work is waiting ready to the hands of unemployed men, who are deliberately prevented by the trade unions from taking it; that, in consequence, not only is there a diminution of national prosperity, but the taxpayer is called upon to provide huge sums of money for unnecessary doles. These facts are incontrovertible, and, if clearly presented, they would appeal irresistibly to the common sense of the public. We hope that the organized employers may see the wisdom of taking action on these lines. Architects, we believe, would be entirely sympathetic towards such a policy, and, in so far as they could usefully assist, would give it their enthusiastic support.

Notes and Comments

Words and Emotions

IN the preface to the catalogue of the Van Gogh exhibition, which is now being held at the Leicester Galleries, it is said that the artist found utterance through line and colour for thoughts which lay beyond his power of words. This is probably true. Most people during an all too brief enjoyment of mortal consciousness have moments when they find themselves unable to express their feelings adequately in words. Lucky, you say, is the man who, like the artist, has some alternative means of self-expression. Yet there are some things that are better appreciated without recourse to any vehicle of articulate expression. Appreciation may sometimes be more eloquently expressed by silence or a significant gesture. There are moments when speech is an intolerable intrusion, breaking the golden spell that only silence can weave. The man who, after watching a sunset across the Atlantic, turns away with the observation, "Very fine!" has not really appreciated the sunset at all. It is surely one of man's most egotistical delusions that the universe has been created to give him an opportunity of passing critical and audible judgment upon it. Judgment of the creative efforts of one's fellow beings is another matter. But even in the case of architecture, the vocal expression of emotional reactions may conceivably be an impertinence. Words can do nothing to enhance an appreciation of the beauty of Ely or of Lincoln; on the contrary they may do much to destroy it—like a laugh at the wrong moment in a dramatic performance. Silence may not be, as Carlyle said, "the eternal duty of man," but at least it is occasionally an honourable obligation.

More Bridge Suggestions

We do not know what progress has been made with the proposal to rebuild Lambeth Bridge, but if it should be decided to erect a new and, as we think, unnecessary bridge in this desolate spot, the project should be made the subject of a public architectural competition. We hope that the idea may be abandoned, for it is the more easterly stretches of the river—notably, those between Westminster and Waterloo and between Waterloo and Blackfriars Bridges—that are most urgently in need of cross-river connection. Lately there has been some talk of widening Waterloo Bridge—a deplorable suggestion. Even if it were possible to do this—and the engineering difficulties would be considerable—it would still be undesirable, for Waterloo Bridge, as everybody knows, is perfect in its proportions, and any widening of it, however skilfully done, would ruin it for ever as a masterpiece of art. The London County Council could more profitably turn its attention to the claims of alternative schemes—the Charing Cross Bridge project, and the one for a new bridge between Waterloo and Blackfriars Bridges, as recently advocated by Mr. Lanchester. We have too many comparatively useless bridges in London already; it is time that we thought about building some where they are really wanted.

"Hideous" City Churches

Lord Hugh Cecil, by frankly stating that some of the City churches are "very hideous," has given a new turn to the controversy that rages around the threat to destroy them. Whether Wren and his followers were capable of designing anything that could be definitely described as "hideous" is a moot point that need not now be discussed. What matters is that a leading protagonist of the demolition party should make out a plea for the obliteration of these churches apart from the more conventional argument of sheer necessity. If ugliness is to be the criterion of the worth of a building we shall proceed forthwith to demolish about nine-tenths of the City of London. And what ugliness? Lord Hugh Cecil should be asked to give definition before he is allowed to apply his test to the Ci churches. Taste is notoriously divergent among individua and subject to great changes from age to age. The Goth that the eighteenth century regarded as vulgar is not regarded now, though at the same time there is no lack appreciation for the work of the eighteenth century. set up arbitrary principles of taste shows a lack of re intelligence and little appreciation of the lessons of histor If the City churches are ever demolished (and we mainta that it would be a crime to touch them), it will have to on some more convincing plea than "hideousness."

Non-Technical Terminology

Some there are who maintain that architecture ought n to be discussed or written about, except, perhaps, in t historico-sociological sense, and then only with a use esoteric language. It is a stimulating idea that to consid fully would need a volume. Whatever there may be reason in the claim, the fact remains that most people ha an irrepressible impulse to objective criticism. In th connection it is of some little interest to note the chang that are constantly taking place in the verbal currency expression. The emotional eloquence of Ruskin has, imagine, passed away for ever. To-day we are more matt of-fact, almost slangy, in our critical observations. O vocabulary, when we desert pure technicalities, is odd limited. "Jolly," "intriguing," "amusing," "fascinating" these are the adjectives (there are others of a condemnato kind that we dare not mention) that we apply indiscri nately to all classes of buildings and their numerous featur These catchwords are, in the inevitable order of thin catching; and in this respect we have made little progre since the days of the æsthetic craze, when Bunthorne cou boast that :—

> "Hey diddle diddle
> Will rank as an idyll
> If I pronounce it chaste."

The cheerful repetition of meaningless phrases does lit credit to our powers of imagination in the region of huma terminology, but it is not altogether a bad sign, for it sho that architects are at last becoming more like human bein and less like the unapproachable gods of Olympus.

Pleasure in Work

Architecture continues to claim the attention of popular Press. A most excellent article by Mr. John Blu appeared in an issue of "The Daily Mail" last week. was called "The Monuments of Civilization," and ga *inter alia*, the writer's impressions of the effect of n buildings not only upon people passing by, but upon t workmen themselves. "I have noticed," said Mr. Blu "that workmen putting the finishing touches to a gre building seemed to do so with a kind of lingering fondne as though they were glad to have been connected wi something that would long and worthily outlast them a would carry down to future ages the civilization of present day." Perhaps so, but a more plausible theory that the workmen were merely pleased with themsel at having done a satisfactory job, for the spirit of go craftsmanship is as much alive to-day as ever it was in t Middle Ages. Another explanation that offers itself is t pleasure that is given by the sense of touch. An archit of our acquaintance never passes Somerset House with caressing some of its accessible mouldings, much in t manner of a miser who runs his gold lovingly through fingers. The difference between the architect and the mi is the difference between public and hoarded wealth.

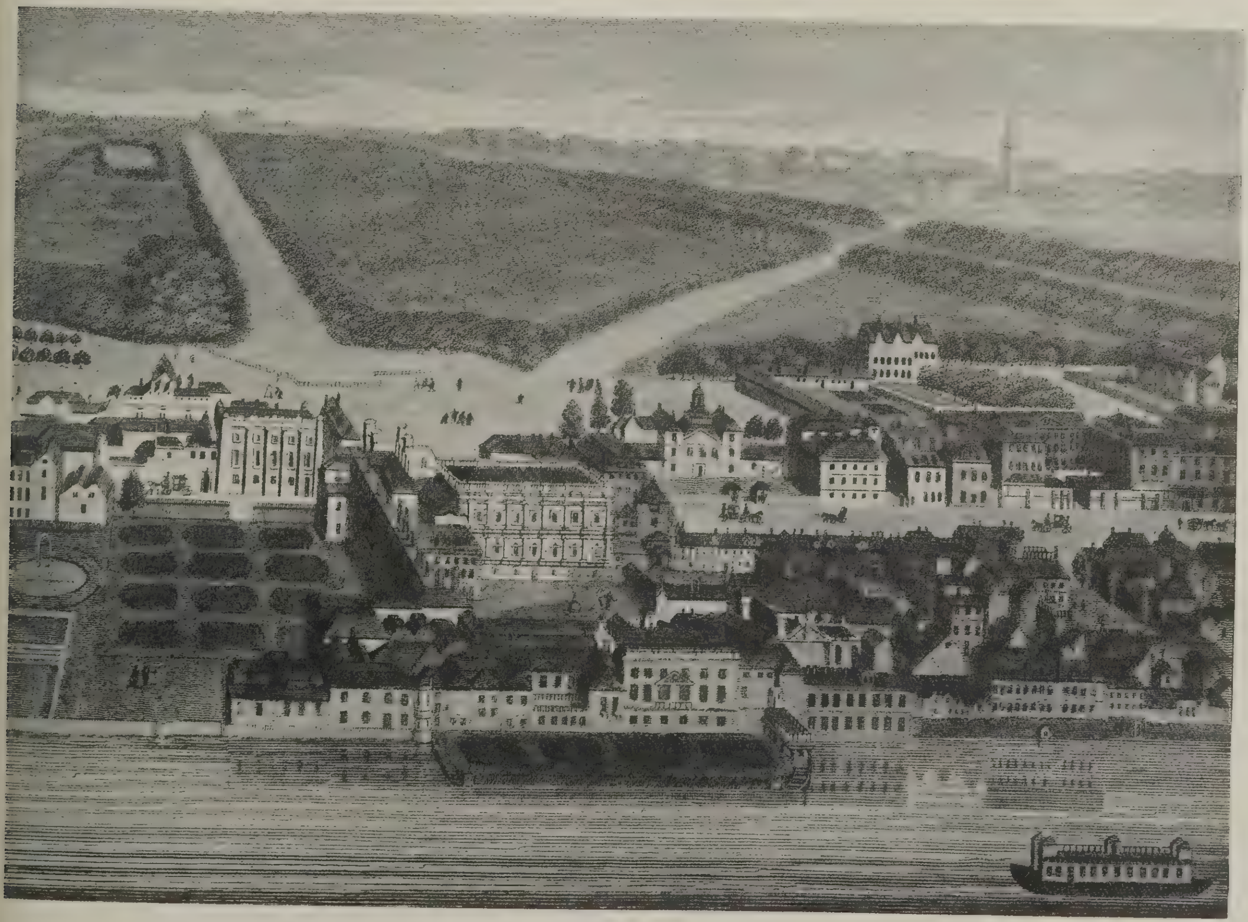
Royal Residences of London in the Past

By E. BERESFORD CHANCELLOR, M.A., F.S.A.

THE royal residences in London, about which I want to say something here, are not those which we, to-day, know as the royal palaces—Buckingham Palace, St. James's Palace, and Kensington alace; nor are they such royal residences as may be found York House or Clarence House, or in Portman Square. ney are, indeed, chiefly those of which two or three remain, though turned to alien uses, and those whose names are, some cases, hardly better remembered than the sites on hich they stood; for, like many of those once splendid ivate palaces concerning which I once wrote a book, they ve disappeared from off the face of London, and are only be known by written records or the records of the painter d engraver.

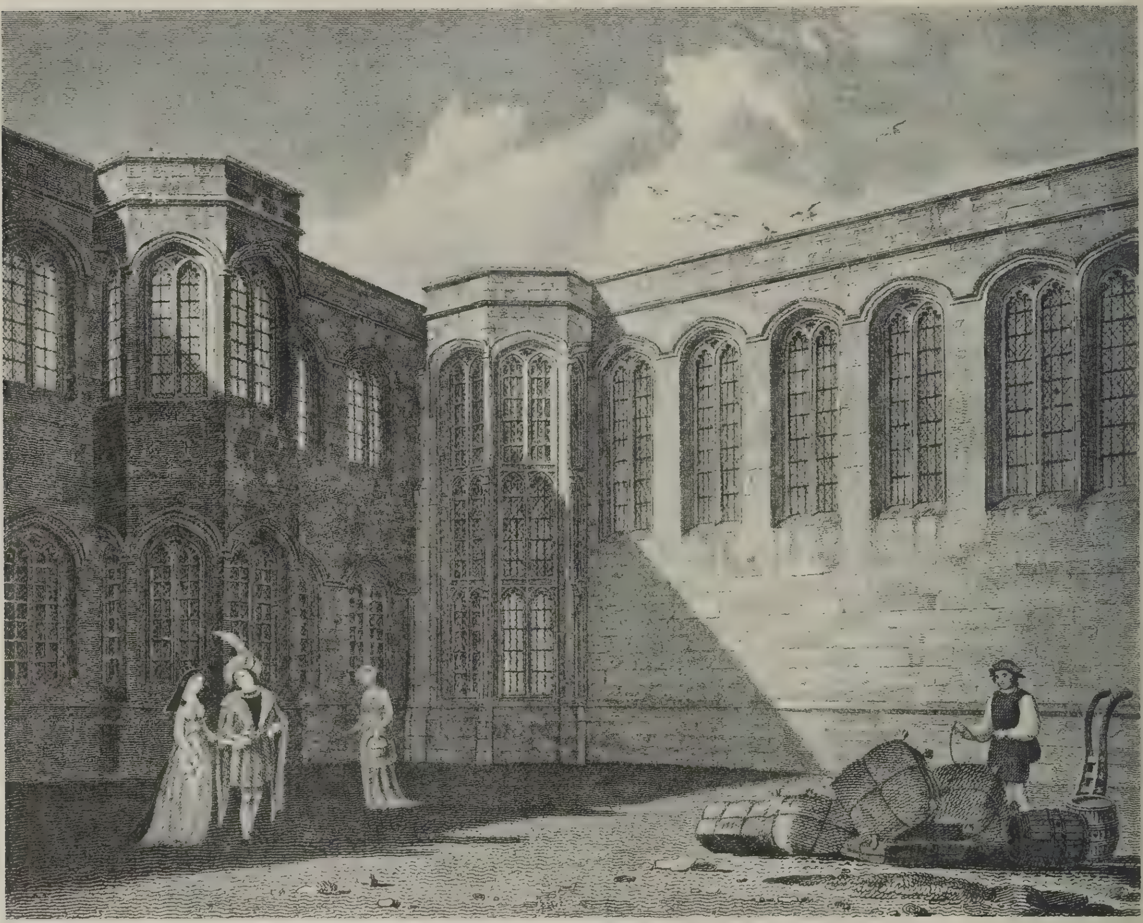
The only royal residence of the past, indeed, which tually remains in something like the condition of its rmer splendour, is the Tower of London; although other—Somerset House—stands, in its rebuilt form, remind us of the earlier erection; while a third prents us with but a fragment of what was projected by e genius of Inigo Jones—the Banqueting House of hitehall.

The Tower of London has become known to the majority Londoners as simply a splendid relic of Norman times, nparted about with the work of Wren, and chiefly table as a state prison in olden days, and as a "show" these times, dear to country cousins whose eyes are zzled by the regalia and the Beefeaters, and for whom e Traitors' Gate is the "sights self." It is too often fortten that from the days of William I to those of James I ery sovereign of this country resided there for longer or orter periods; that it was the only royal palace in London during remote times; and that, in addition to being a means of defence, it was also the seat of the government of the realm. Its history is too well known to require more than the briefest recapitulation here; indeed, anything approaching completeness in detailing its annals would be impossible. I may, however, remind the reader of what Stow says of it: "This Tower is a citadel to defend or command the city; a royal palace for assemblies or treaties; a prison of state for the most dangerous offenders; the only place of coinage for all England at this time; the armoury for warlike provisions; the treasury of the ornaments and jewels of the crown; and general conservor of the most records of the king's courts of justice at Westminster." The tradition that the earliest buildings here were erected by Julius Cæsar cannot be substantiated. Certainly no part of its structure is earlier than the time of William I, who built the White Tower, *circa* 1078; and the only basis for the statement that Julius Cæsar had anything to do with it, a statement repeated by Shakespeare in "Henry VIII," is that such a commanding and strategic position as it occupies might reasonably be supposed to have appealed to the military eye of the great Roman. Certainly excavations have exposed portions of very old walls, and have brought to light Roman coins; but such discoveries are not conclusive, and if we regard the Tower's career as starting with the Conqueror, we shall at least be giving it a sufficiently ancient lineage. The White Tower which William built presents a very different appearance from what it did in Norman days, for Sir Christopher Wren, among much other work here, faced the windows with stone, and otherwise Italianized the building which, in its pristine state, probably resembled, although on a larger scale, such more



THE PALACE OF WHITEHALL, AS IT APPEARED ABOUT THE REIGN OF JAMES II.

(*Reproduced from Wilkinson's "Londina Illustrata."*)



A SOUTH-WEST VIEW OF THE PRINCIPAL QUADRANGLE OF THE COURTYARD OF CROSBY HALL, RESTORED TO ITS ORIGINAL STATE.

(*Reproduced from Wilkinson's "Londina Illustrata."*)

or less contemporary piles as Rochester Castle and Castle Hedingham.

The lovely fragment of Inigo Jones's great project, which would have made Whitehall a fitting rival to the Louvre or the Escorial, represents merely a specimen of what was suggested. The actual Palace of Whitehall, as it existed till the disastrous fire of January, 1698, was a very different building—rather was it a collocation of buildings which had been, as it were, fortuitously thrown together; so that in the days of its greatest splendour—the days of Charles I and Charles II—it formed a sort of rabbit warren, where king and nobles of the court were lodged in anything but a royal manner. Extant plans of the palace sufficiently indicate its size and unregulated proportions, which stretched from the Thames to St. James's Park, with Scotland Yard as the north, and Cannon Row as the south boundary. The public thoroughfare (Whitehall) ran through it with an entrance—the Whitehall or Holbein's Gateway and the King's Street gateway at each end.

The place began its career as a royal palace under Henry VIII when a building in the familiar Tudor style, like Hampton Court, sufficiently imposing to cause Hentzner to term it "truly royal," arose. James I intended to rebuild it, and Inigo Jones furnished plans to that end, wonderful plans which may be studied to-day by those who wish to gain an idea of the size and magnificence of the architect's scheme. Nothing, however, materialized beyond the beautiful fragment which now houses the United Service Museum, whose treasures are looked down upon by Rubens's great painted ceiling. Poverty and the Civil War effectually stopped Charles I in prosecuting the scheme further, and no later sovereign found the time, inclination or money to add or reconstruct.

The other royal palace, whose successor remains one of London's finest buildings, is Somerset House. This "large and goodly house," as Stow terms it, was built by the Protector Somerset. To make way for it two inns (as the
were then called) belonging to the Sees of Worcester an
Lichfield were demolished, and stones for its constructio
were ravished from old St. Paul's and other churche
The place was unfinished at the time of Somerset's fal
the name of its architect is unknown (although there is
plan of the place in Thorpe's book of drawings); but tha
of the clerk of the works, Robert Lawes, has come down t
us. During Mary's reign Somerset Place was allotted as
residence to the Princess Elizabeth; and in that of James
it became the property of the queen, Anne of Denmar
its name, in 1616, being changed, in consequence, to Der
mark House. Similarly, Charles I granted the residenc
to Henrietta Maria, for whom a Romish chapel was de
signed by Inigo Jones and consecrated in 1635. Durin
the Commonwealth Oliver Cromwell's body here lay i
state, and after that event there was a project of sellin
the place (Ludlow states that the sale actually took place)
and there was an idea of the Quakers acquiring it, a schem
which George Fox, in his diary, says he "forbade," as h
"then foresaw the King's coming in again."

At the Restoration, Henrietta Maria again took up he
abode here; and on her departure from England, five year
later, the palace was assigned to Catherine of Braganz
Her tenancy brought the royal connection with Somerse
House to a close, as it was subsequently divided into apart
ments for royal pensioners, something on the lines obtainin
at Hampton Court to-day. It still, however, seems to hav
remained an appanage of the Queens consort until 177
when Buckingham House was assigned to Queen Charlott
instead; the present building being begun from Chambers'
designs in the following year.

Scattered about London are the sites which have lon
forgotten the day when they bore the burden of roya
residences. For instance, the Savoy Palace, perpetuate
only by a chapel and the name of a street and an hotel

hich dated from so early as 1245, when Peter, Earl of avoy, uncle to Eleanor, queen of Henry III, built it. e gave it to the ecclesiastical brotherhood of Montjoy, om whom it was purchased by Queen Eleanor, as a gift r her son, Edmund, Duke of Lancaster, in whose branch the royal family it remained till, in 1381 (it then belonging John of Gaunt, Earl of Lancaster), it was wholly deroyed during Wat Tyler's rebellion.

Durham House, close by, originally appertaining to the e of Durham, whose representative, Tunstall, made the ace over to Henry VIII (for which act of loyalty he was warded by a grant of Cold Harbour, in Upper Thames reet), has also a royal connection, in that Edward VI anted it to his half-sister, Princess Elizabeth, for her life, though Dudley, Duke of Northumberland, subsequently tained it (how is not very clear), and lived here during lward's reign, after which it was restored to its original ssessors. Nor should it be forgotten that Tower Royal, hose very name, according to old authorities, indicated at it had been a messuage pertaining to the Crown, was, Stow tells us, "of old the King's House. King Stephen is there lodged; but sithence called the Queen's Wardrobe. ie princess, mother to King Richard II, in the fourth ar of his reign, was lodged here; being forced to fly from e Tower of London, when the rebels possessed it." It is rious that although the place had this regal association, name is more probably deduced from that of a neighbourg street called Reole or Riole, which Riley says was ilt by the Merchants of the Vintry, who imported wine om the town of La Reole, near Bordeaux, although Stow ites that the reverse was the case, the street taking its me from the Tower. It stood in Watling Street, between idge Row and St. Paul's, but Watling Street has long ased to remember the days of its splendour.

In old times there was a narrow thoroughfare called ddle Lane (not to be confounded with the existing Addle reet) running from Carter Lane to Upper Thames Street. d anyone going down that exiguous thoroughfare would ve seen, any time between the days of William I d the Great Fire of London, "a most strong castle," as ow terms it, which had been built by one of the Baynards, o came over with the Conqueror, and which was, in fact, long famous Baynards' Castle. But the fortress known our earlier forbears was only the predecessor of the ond, which was erected close by, in 1428, by Humphrey, ke of Gloucester, on the banks of the river. When the ke was attainted the place passed into the possession he Crown, and Richard, Duke of York, was lodged here, hough its most outstanding memory is that here the wn was offered to Richard III. Its association with the rkists resulted in its being known for a time as York use; but its old name reverted to it when Henry VII onstructed it more on the lines of a palace than it had herto been. With the proclamation here of Queen ry, in 1553, the royal associations of the place cease, for zabeth granted it to the Earl of Pembroke, and the Great e practically obliterated it.

lightly to the west, at the south-east corner of what is lay Bridge Street, Blackfriars, but was formerly Bridel Dock and the Fleet Stream, stood the Palace of Bridel, that "stately and beautiful house" which Henry I caused to be erected for the reception of Charles V en that monarch came to England, in 1522. Shakespeare perpetuated the place as the scene of the trial of Queen therine, a fact supported by the authority of Stow. e palace was subsequently made over to the City of Lon, together with its manor, by Edward VI, so that its al association was not of long duration.

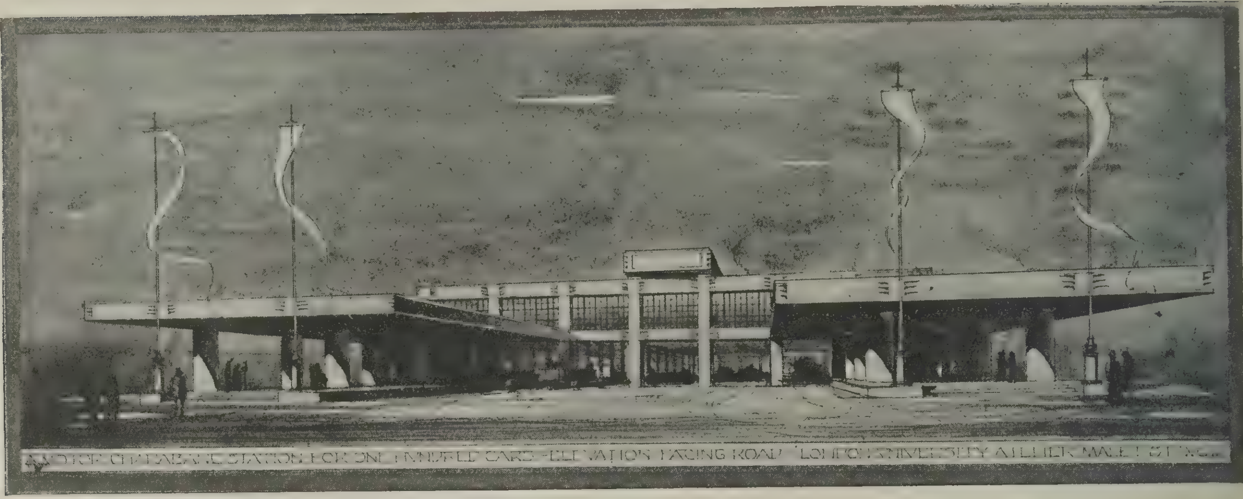
Ve have to come to later times to find other residences nected with members of the reigning family. One of se is Leicester House, which stood on the north side Leicester Square (then Leicester Fields), and took its ne from its builder, Robert Sidney, Earl of Leicester, whose connection with royalty has become its most resting feature, for here Charles I's children were ced under the care of the Earl and Countess of Leicester, while their father was a prisoner; here Charles's sister, the Queen of Bohemia, died in 1662; here George, Prince of Wales, having quarrelled with his father, George I, set up his opposition court; here *his* son, Frederick, Prince of Wales, did likewise under similar circumstances, for which reasons the house was nicknamed "The Pouting Place of Princes."

Then there was Carlton House, the red-brick predecessor of the later mansion of the same name, which came into royal possession when Frederick, Prince of Wales, purchased it from the Dowager Countess of Burlington. Here Prince Fritz gave his entertainments, within sight of his father's palace, although he continued to live in Leicester House, and here in 1772 his widow, the Princess Dowager of Wales, died. Having been encased in stone by Sir Robert Taylor, it was assigned to George, Prince of Wales, as a residence in 1783, Henry Holland being employed to reconstruct and improve it. It was at Carlton House that the Princess Charlotte (who lived, by the way, at Warwick House close by) was born, and the Regent resided, behind those pillars (now in front of the National Gallery), which Holland had added to the house, until the death of George III placed Buckingham Palace wholly at his disposal. A few years after this event Carlton House was demolished and the present terrace of great mansions formed part of Nash's development of its site.

A few other places connected with royalty remain to be mentioned, notably Crosby Hall, which, although still standing, does so in an alien spot far away in Chelsea, and the Bishopsgate Street of its glory knows it no more. Its one royal association is with Richard III, who was "lodged in this house" (Stow), a fact perpetuated by Shakespeare, and recorded by Sir Thomas More, who later owned the place and there wrote the life of its one-time tyrannical but able inhabitant.

Such lesser places as Devonshire House (still standing, although always threatened), where the Princess Anne once resided; and Craven House, Drury Lane, where Queen Anne of Bohemia was a tenant by the grace of her admirer, Lord Craven, during some of the sad days of her exile; and Gloucester House (now a block of flats) in Piccadilly, formerly the abode of the Duke of Gloucester, and in our own time of the late Duke of Cambridge, need not detain us. Nor is there space for more than a passing allusion to such mansions as still exist having a royal connection: The Albany, which became for a time the residence of the Duke of York (who began Stafford House, but had not the money to finish it, and who died in the Duke of Rutland's house in Arlington Street) through exchange with Lord Melbourne, of his former abode, Dover House, Whitehall; Kent House, Knightsbridge, once the home of the Duke of Kent, Queen Victoria's father, which was pulled down and rebuilt as we know it to-day; No. 23 Hanover Square (formerly No. 21), where the Duchess of Brunswick, the mother of George IV's queen, Caroline, and eldest daughter of Frederick, Prince of Wales, lived between 1807 and 1811, although, according to Croker, she died in 1813, in Spring Gardens. Nor is it necessary to do more than mention the fact of the Princess Royal's residence at 15 Portman Square, except to note that that royal lady is the only member of the reigning family residing in what old topographers are fond of calling "a quadrate."

Let me close with a word about Marlborough House, which has held, for so many years, not only a place in the annals of the country, but in the affections of the people. Everyone knows that it was built by Wren for the first Duke of Marlborough. Its royal association commences with Prince Leopold (afterwards King of the Belgians), the husband of Princess Charlotte. Later, Queen Adelaide, after William IV's death, lived here; later still (1861) it became the London residence of Edward, Prince of Wales; and to-day his widow, Queen Alexandra, as we are all aware, lives in the house she has graced for over sixty years, close by the York House where her grandson resides (when he resides anywhere), and the palace of which for ten regal years she was the beautiful chatelaine.


A MOTOR CHARABANC STATION FOR ONE HUNDRED CARS - ELEVATION FACING ROAD - LONDON UNIVERSITY ATELIER MALET ST W.C.

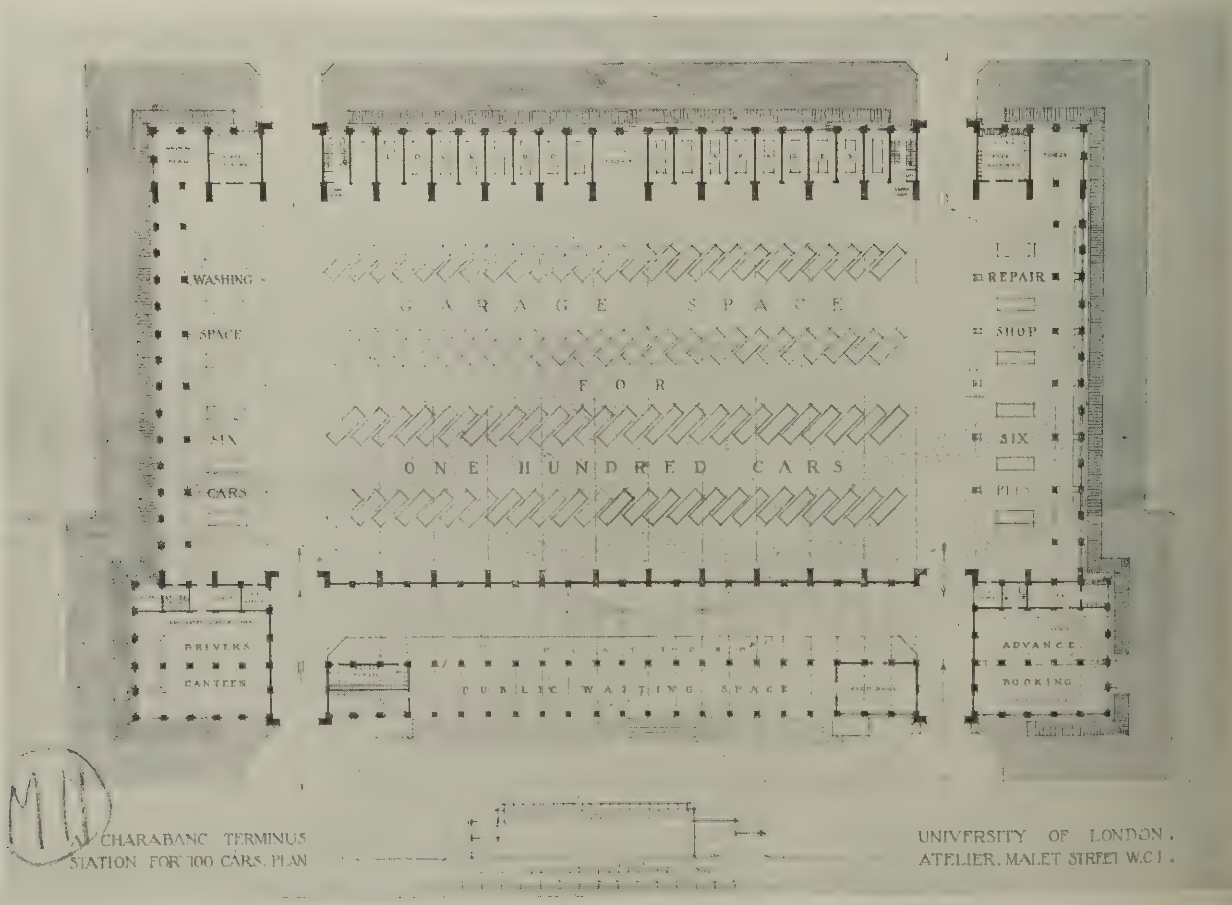
MAIN ELEVATION, WITH ARRIVAL AND DEPARTURE PLATFORMS. BY J. W. GREENIDGE.

Studies for a Charabanc Station

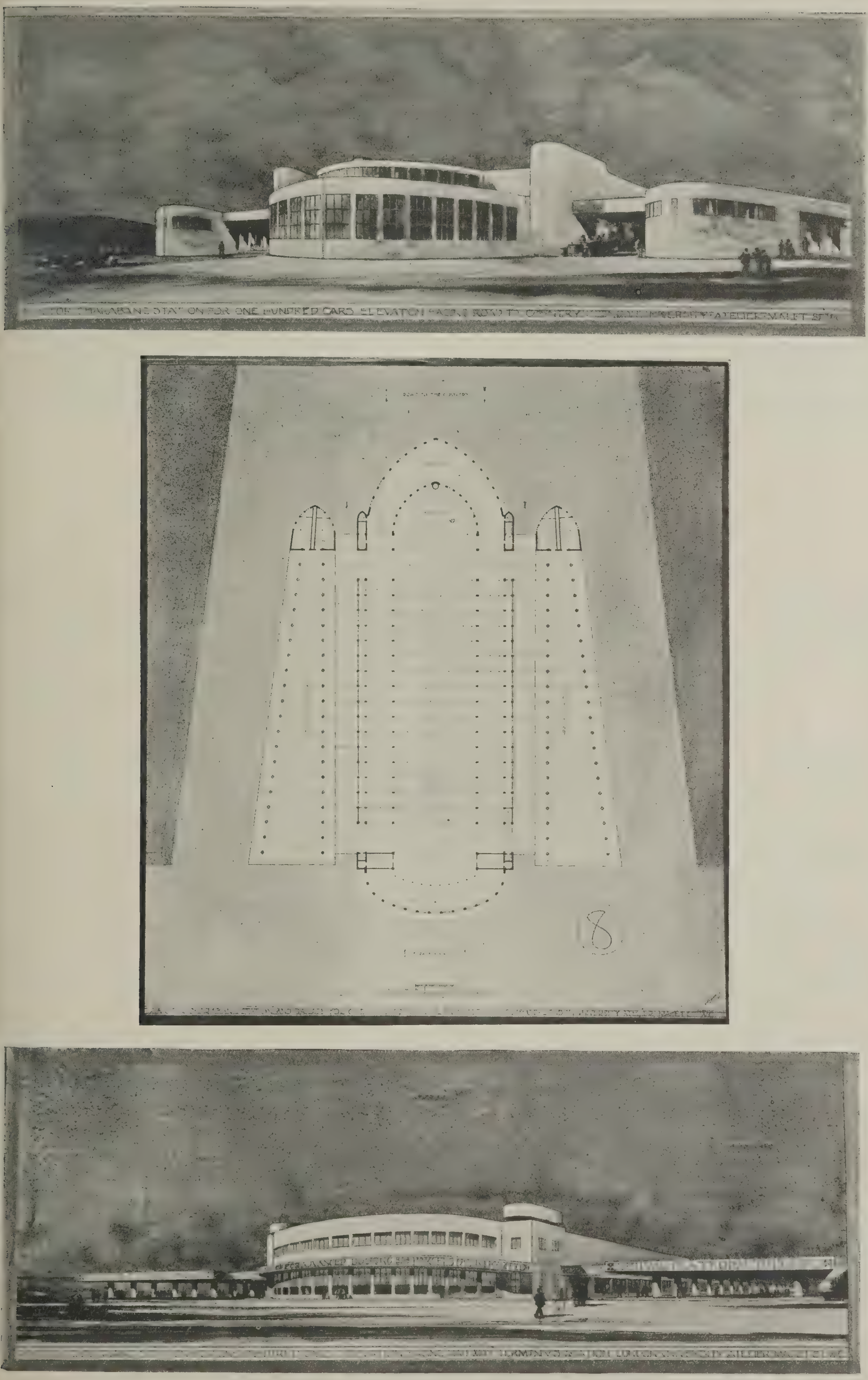
By THE LONDON UNIVERSITY ATELIER

A STATION and garage for one hundred charabancs is a problem distinctly arising from recent developments in transportation and commercialism. The freshness of its handling evidenced in the designs shown by the London University Atelier in the Town-Planning Section of the Motor Transport and Roads Development Exhibition is an encouraging sign of the times.

A charabanc station and a railway station have this in common, that both are conveniences for the boarding of vehicles. In other respects they are as dissimilar as a roa is dissimilar from a railway. While from habit or the deliberation of the event we have become accustomed to th formalities and obstacles which preface a journey by rail there is about charabanc riding an air of ease and casualnes more consistent with the search for pleasure. And experience has shown that pleasure—for those who find it such— is the main business of the charabanc. In the ease of thei public approaches and the avoidance of stairs and othe hindrances these designs here make concession to the fact.



A CHARABANC GARAGE AND STATION: PLAN. BY F. JENKINS.



STUDY FOR A CHARABANC STATION BY M. A. SISSON (LONDON UNIVERSITY ATELIER)

To say just a word of adverse and constructive criticism, the reading of the plans would have been much facilitated if the circulation of the cars had been clearly indicated. In some cases, though ample garage space is provided, this has not been sufficiently considered, notably in the plan by M. A. Sisson. In that instance the complication arising from parking the cars as shown would be avoided were they kept away from the side walls and facing in one direction only.

In other respects this plan is soundly arranged. It cleverly avoids a confusion of the pedestrians arriving from the railway terminus station and the charabancs leaving for, or returning from, the country. The receiving and delivery offices for parcels are conveniently placed, whilst the tapering platforms, diminishing with the stream of traffic, are eminently sensible.

The plans by F. Jenkins and A. M. Hargroves both show distinct merits. The former, with its easy circulation for cars and its ready access for the public, could not well be bettered in its simplicity. The latter design, which lack of space prevents our illustrating, achieves a strict economy of construction. The various services are well located, but the respective importance of the entrances to the garage and to the platforms should have been reversed.

In their elevational treatment these studies show, very rightly, a striving for the greatest effect with the simplest economy of means. The designs are dependent on the co-ordination of primary masses, themselves the direct outcome of a logical plan. Essentials are emphasized, irrelevant details are suppressed.

By careful grouping and an insistence on the necessities alone J. W. Greenidge achieves, in his principal elevation, a remarkably striking composition. It is interesting to note the good effect of the water-tank placed centrally above the washing space.

M. A. Sisson's "elevation facing railway terminus station" is both attractively reasonable and expressive. But the opposite elevation, "facing country," though the curved forms are justified by their relation to the roadways, strikes a note somewhat forced and unduly reminiscent of recent oddities of Dutch architecture.

But, putting minor criticisms aside, we have here, in these studies by the London University Atelier, evidence of thought which is unfettered but not unlettered, progressive though not aggressive, and some interesting suggestions for the solution of a problem which is essentially the outcome of recent developments.

Recent Regional Planning Activities

SEVERAL new joint town planning committees are in process of formation—inaugural conferences having been successfully held—including the following regions : Bath and Bristol and district (about 410,000 acres), Halifax and Huddersfield region (about 185,000 acres), Stoke-on-Trent and neighbours. The following have recently been established : The Midland Joint Town Planning Advisory Council, covering the region within from fifteen to twenty miles of the City of Birmingham, and the Nottingham and District Joint Town Planning Committee, comprising twelve authorities and approximately 174,379 acres.

The forward policy adopted by the Manchester and District Joint Town Planning Advisory Committee in appointing a chief surveyor and staff to prepare a regional plan continues to gain adherents, and the local authorities who have combined in the committee now number nearly ninety. The region has been divided into nine groups, which has stimulated interest and given more individual scope, and planning and research go on apace.

The Leeds and Bradford Joint Town Planning Committee held its first meeting on July 10 last, when a sub-committee was appointed to recommend a programme. At the next meeting the proposed programme, which recommends action on similar lines to that adopted by the Manchester and District Committee, will be considered.

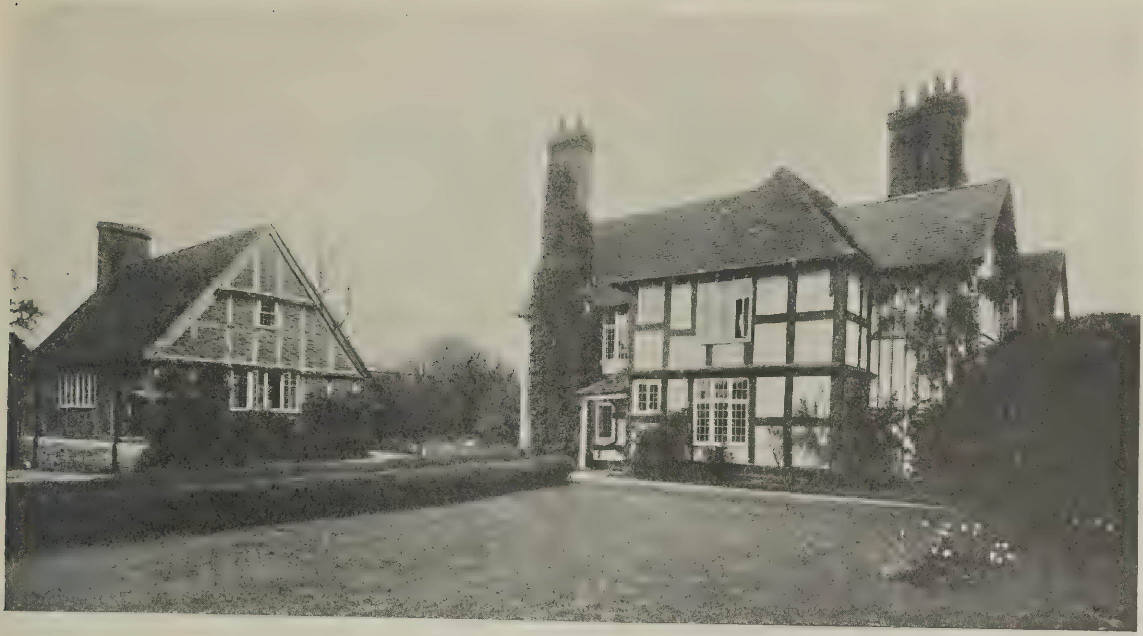
East Kent Joint Town Planning Committee.—The small group of authorities that first joined together for the purpose of regional planning has since been enlarged and now covers most of the coalfield and neighbouring seaside resorts. Representatives have also been co-opted from the Mineowners and Mineworkers Associations. At a meeting held at Canterbury on November 19, it was decided to appoint a specialist to prepare a regional survey, in order that the prime factors of the situation and the problems to be solved, and their interrelation, may be made plain and the possibilities of solution indicated.

Rotherham Region Joint Town Planning Committee.—An excellent contour model of this region has been prepared, and on it Mr. Davidge has indicated the routes of the principal new roads and improvements that he proposes, after consultation with the local surveyors. On November 20 the joint committee considered these proposals, and agreed the general principles, and the final report will now be printed in proof for ratification by the committee.

Tees-side.—A number of conferences, comprising representatives of the authorities on both sides of the Tees, have been held to consider the question of additional crossings of that river. A report was presented by an expert committee comprising the Divisional Road Engineer of the Ministry of Transport and the county engineers of Durham and the North Riding. This report recommended an additional crossing by a swing or bascule bridge, just west of Middlesbrough. At the last conference, held on November 21, the recommendation of the expert committee was adopted, and the Ministry of Transport were asked to suggest how the cost should be allocated. It was also resolved to ask the committee of experts to report on the possibilities of an additional crossing, east of Middlesbrough, nearer the mouth of the river. On the same day a meeting of the South Tees-side Joint Town Planning Committee was held in order to consider a report by the experts, Messrs. Abercrombie and Adshead, with a view to co-ordinating the sections that have been or are being put in hand of the arterial road that they recommended between Middlesbrough and Redcar. Part of the continuation of this road, beyond Redcar, has now been constructed and its point of entry into Saltburn was agreed.

Thames Valley Joint Town Planning Committee.—The interim report, comprising a regional survey, illustrated by maps and diagrams, of the experts, Messrs. Adams and Thompson, has been approved and will be published. One of the diagrams illustrates in most graphic fashion the novel statistics as to movements of population between their homes and work-places, recently issued by the Census Authorities.

North Midlands.—A large tract of this industrial region is now covered by joint town planning committees, actually constituted or in process of formation, including the following : Manchester and district (some 500,000 acres), Leeds and Bradford and districts (about 250,000 acres), Halifax and Huddersfield and districts (about 185,000 acres), Rotherham region (63,540 acres), Doncaster region (108,160 acres), Mansfield region (about 100,000 acres), Nottingham region (some 174,000 acres). Farther west there are the Wirral peninsula and the Deeside Joint Town Planning Committees. The suggestion has been made, and is being considered, that a liaison committee should be formed in order to keep these great regional committees in touch with each other.



THE ENTRANCE FRONT: A GENERAL VIEW.

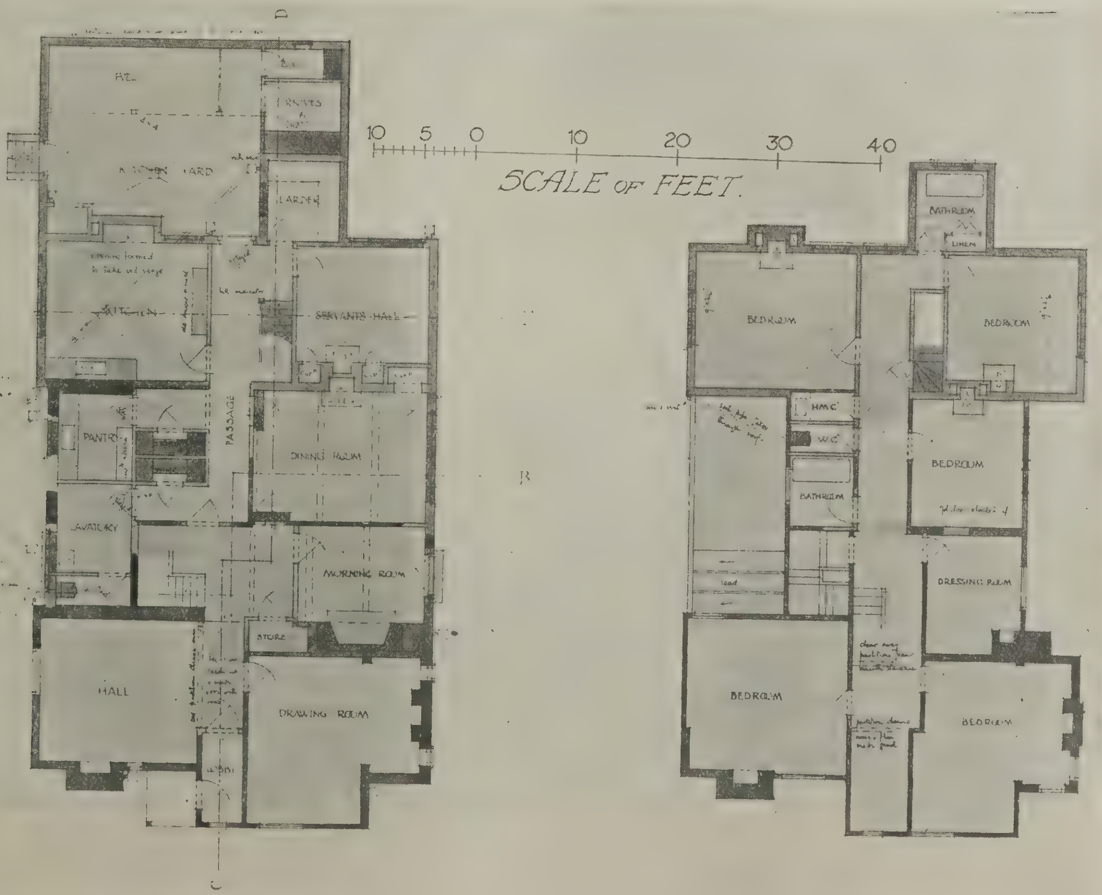
Brook House, Colwall

As altered by E. GUY DAWBER, F.R.I.B.A., Architect

THIS house has been altered, overhauled and added to. The walls of the new portions are shown on the accompanying plans in a lighter tint. In the gardens there was an old arn, which has also been renovated and converted into comfortable billiard room.

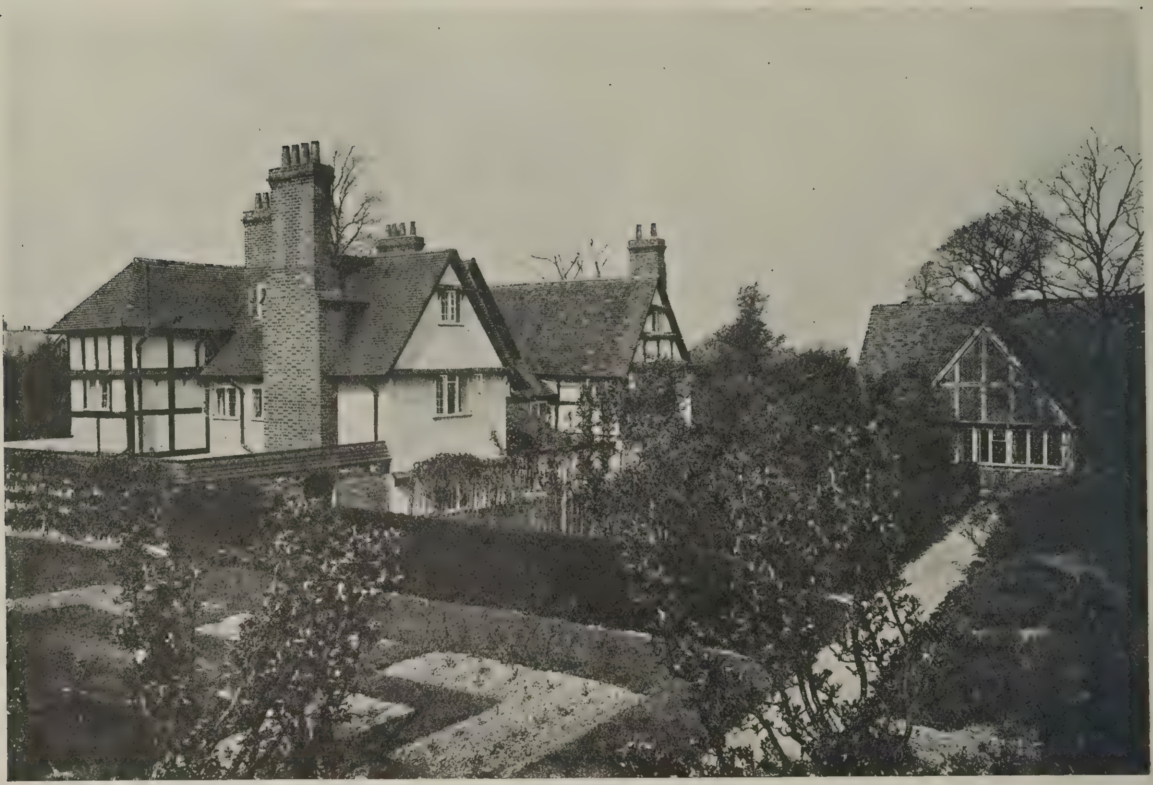
A stream runs through the grounds which, with the garden, was all schemed and fitted together when the house was done. A bridge has been built across the stream.

The house was just a simple Worcestershire farmhouse with a few local characteristics; now it is a very convenient and commodious dwelling.



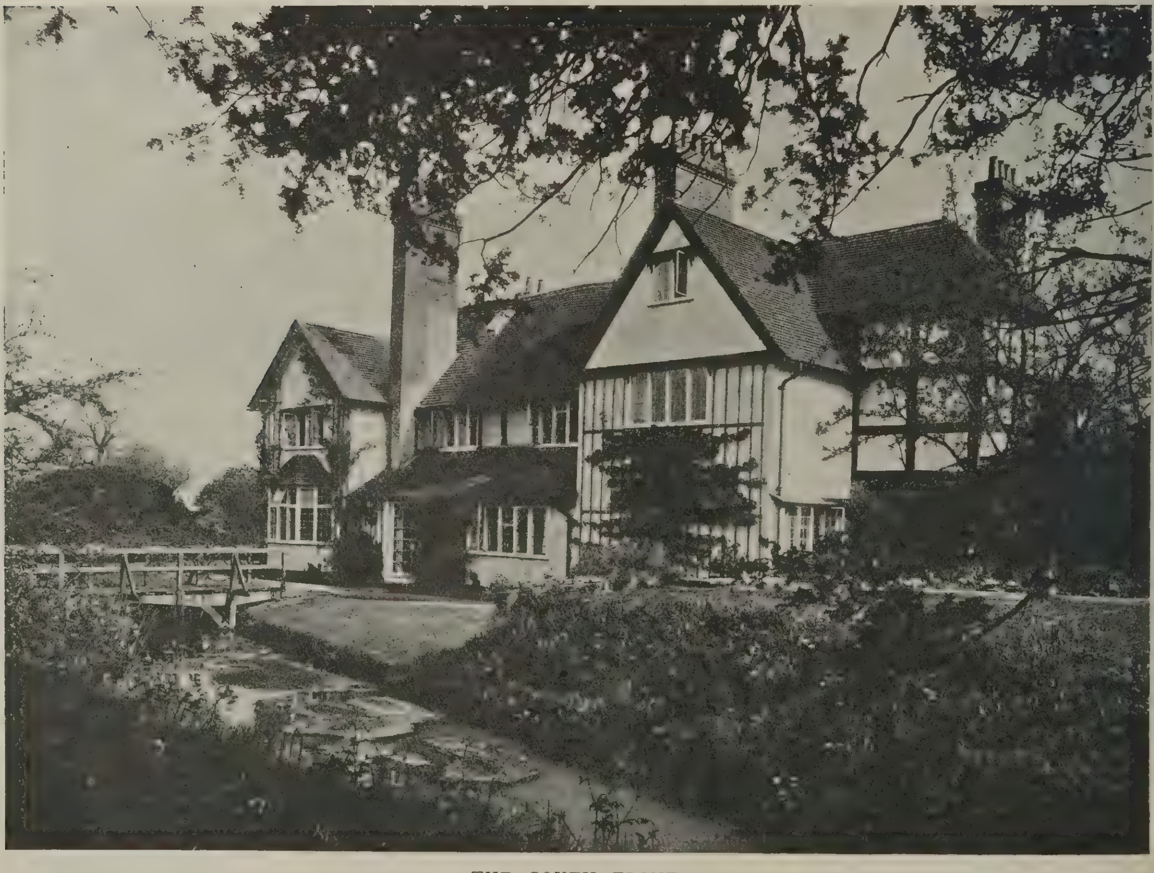
GROVND FLOOR PLAN

·FIRST FLOOR PLAN·



A VIEW FROM THE EAST.

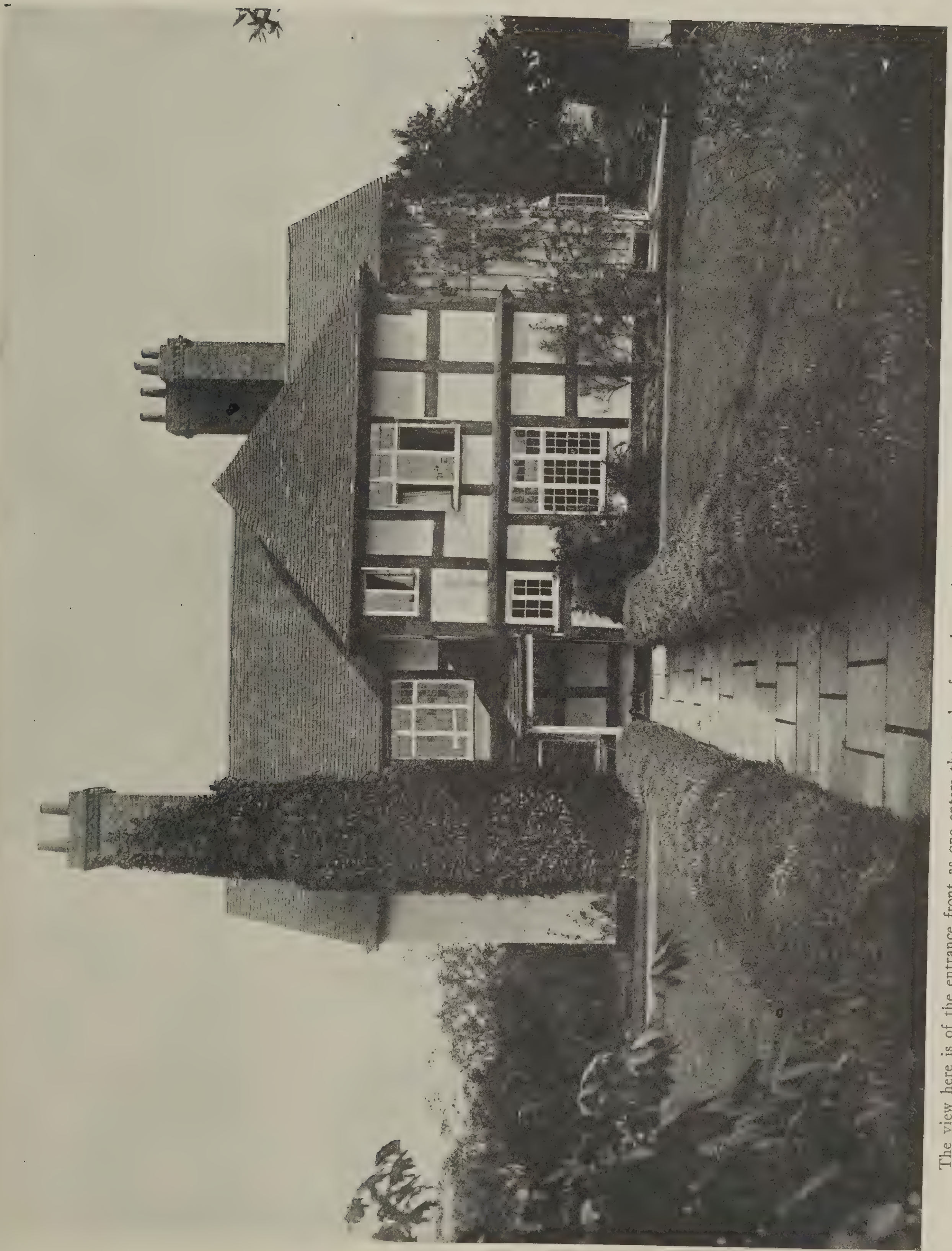
(The old barn converted into a billiard-room is on the right.)



THE SOUTH FRONT.

BROOK HOUSE, COLWALL. E. GUY DAWBER, F.R.I.B.A., ARCHITECT.

E. Guy Dawber, F.R.I.B.A., Architect

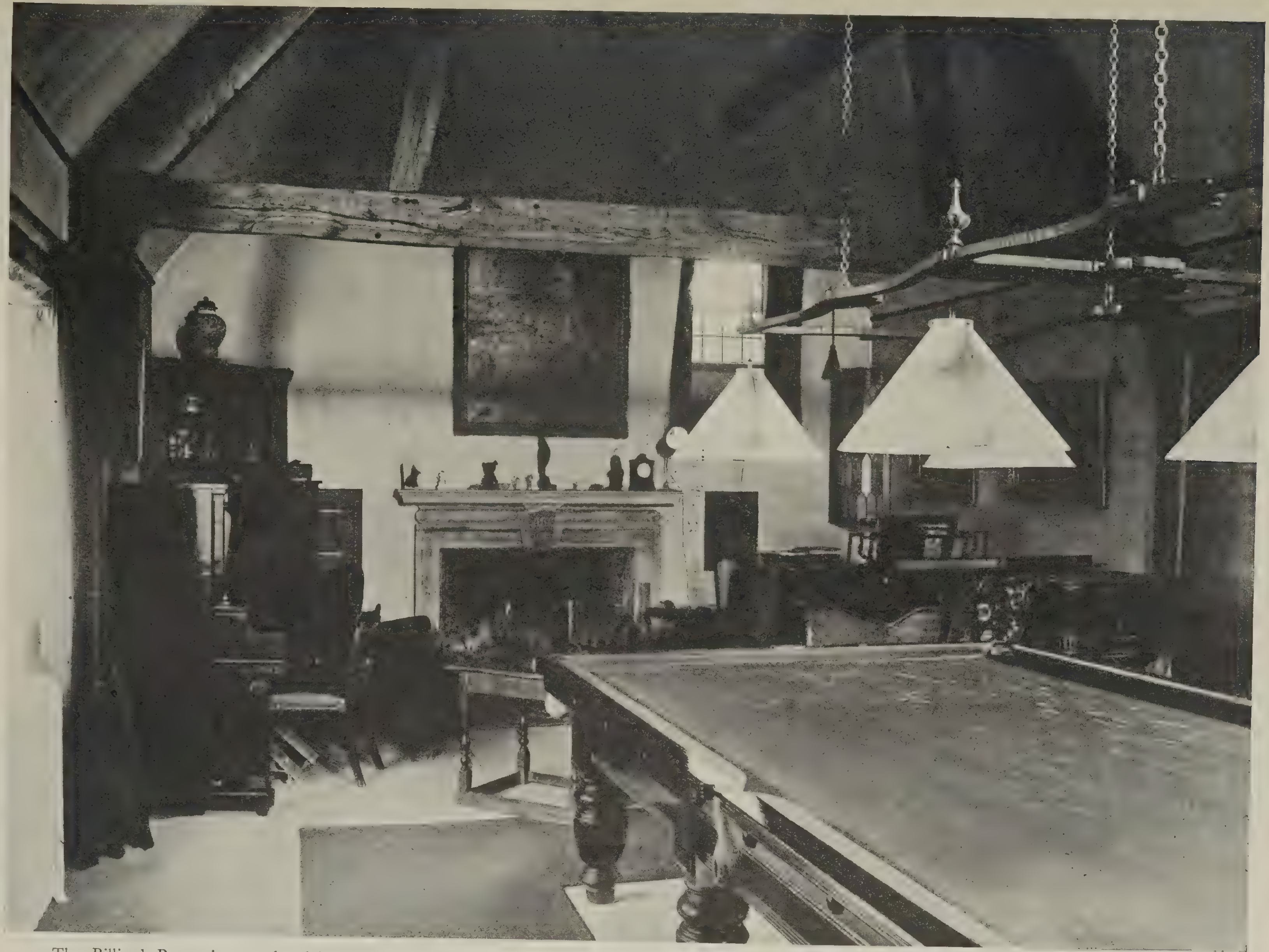


The view here is of the entrance front as one enters the garden from the road, and shows that part of the house which has not been altered.

THE LIBRARY
OF THE
UNIVERSITY OF ILLINOIS

Modern Domestic Architecture: 69.—Alterations to Brook House, Colwall : The Billiard Room

E. Guy Dawber, F.R.I.B.A., Architect



The Billiard Room is not placed in the house, but is in a converted barn on the north side of the house (the building to be seen to the left of the general view on page 829). Its size and shape lend admirably to the purpose of conversion.

THE LIBRARY
OF THE
UNIVERSITY OF ILLINOIS

Photo: *Judges Ltd.*

SHAKESPEARE'S BIRTHPLACE IN HENLEY STREET.

Stratford-upon-Avon

Its Preservation and Development

TOWNS resemble human beings in that, although classification may be convenient, intimacy invariably reveals the fact that each is a class unto itself. The more superficial the knowledge and acquaintance, the easier, the looser, and the less accurate, is the classification. With towns this attitude of mind is just now particularly undesirable, for if an attempt be made to town-plan a city or a district with the preconceived idea that it is a manufacturing town, a residential town, a recreational town or a town of historic interest and nothing more, and it be then dealt with on stereotyped lines, disaster will ensue.

Of all the towns in the United Kingdom, almost one is tempted to say in Europe, there is none bearing a more peculiar reverential interest than Stratford-upon-Avon. When, therefore, the question of its development is mooted there is a danger that a too-conservative attitude, on the one hand, will be adopted by those who appreciate the necessity of preserving the unique character of the town, and a too-iconoclastic attitude, on the other, by those who, so imbued with the commercial spirit of the day, think that no sentiment or consideration for the past should be allowed to check any possible money-making opportunities of the present. Actually, not only are both attitudes of mind undesirable, but also both, curiously enough, would defeat the object which they set out to achieve. Stratford-upon-Avon, if it ceased to develop, would become a dead archæological town. Whereas other towns have, for he most part, lost all visible contact—except here and there n isolated buildings—with the sixteenth and seventeenth entury, Stratford has preserved hers while still receiving ubsequent deposits, and while still preserving an active, vital, commercial life. Were the growth of Stratford to be nconditionally checked it would grow "into a fossilized r mummified relic of a bygone age: its inhabitants ucking a parasite sustenance out of Shakespeare's body." and thus the present character of the town would not be preserved but would change for the worse.

As for those who would develop Stratford industrially nd commercially, they would slay the goose that lays the olden eggs. Stratford's prosperity depends on its unique heritage. Part of that heritage lies in a fact which nothing can destroy, namely, Shakespeare's association with the town; but part of it lies in the visible and suggestive beauty of the town and the surrounding country (this latter is of almost equal importance) to-day—a beauty which is still redolent of Shakespeare's time. Commercial development would at once destroy this heritage, and although

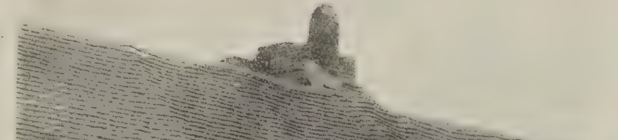


Photo: *J. J. Ward.*

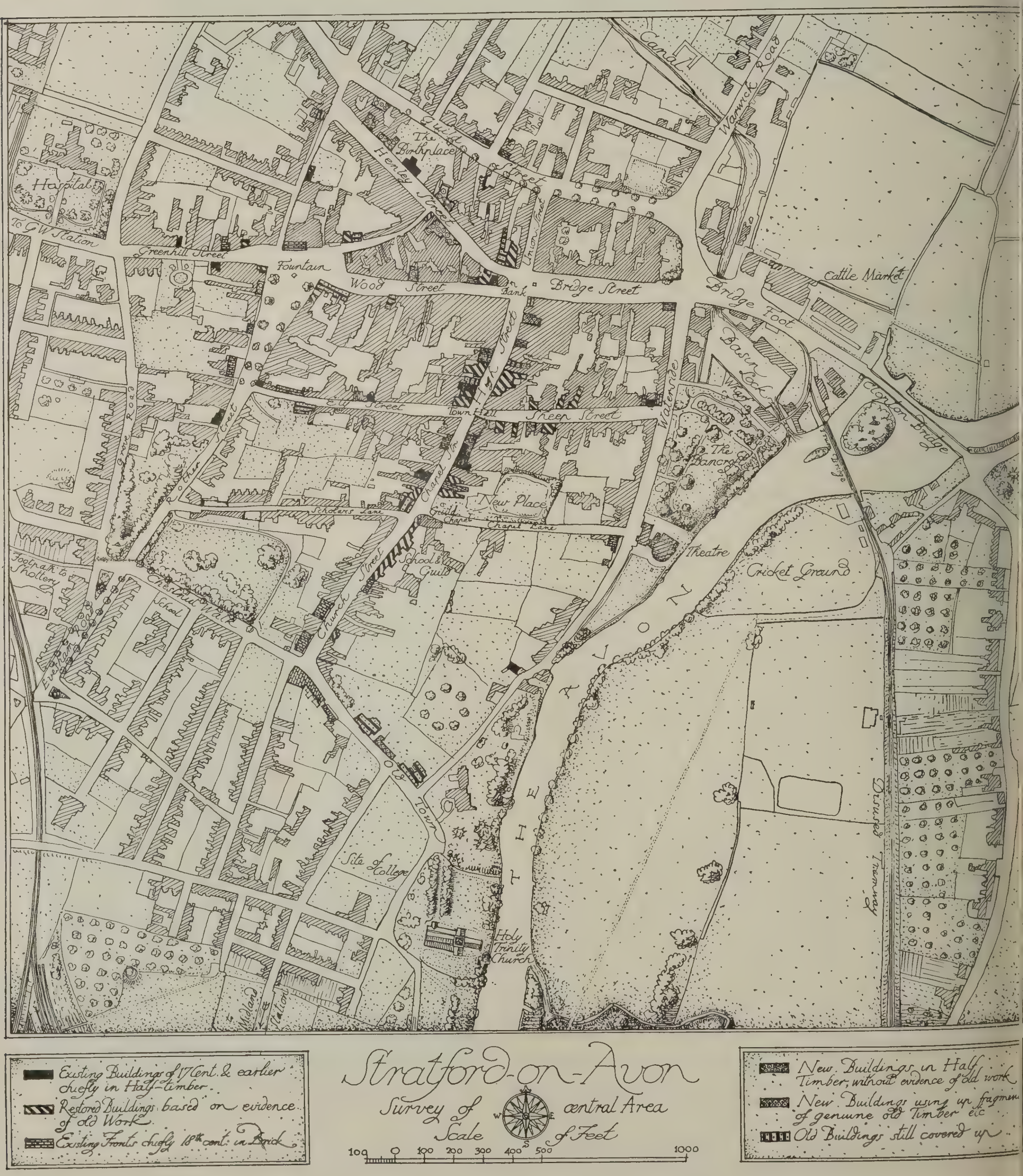
SHAKESPEARE'S BIRTHPLACE IN THE FIRST HALF OF THE NINETEENTH CENTURY.

" Stratford-upon-Avon: Report on Future Development." By Patrick and scelles Abercrombie. The University Press of Liverpool, Ltd.; Hodder and Stough- n, Ltd., London. Price 7s. 6d. net.

Stratford would still remain the object of a pilgrimage, it would be in the nature of a perfunctory duty rather than of a lingering and wonderful experience.

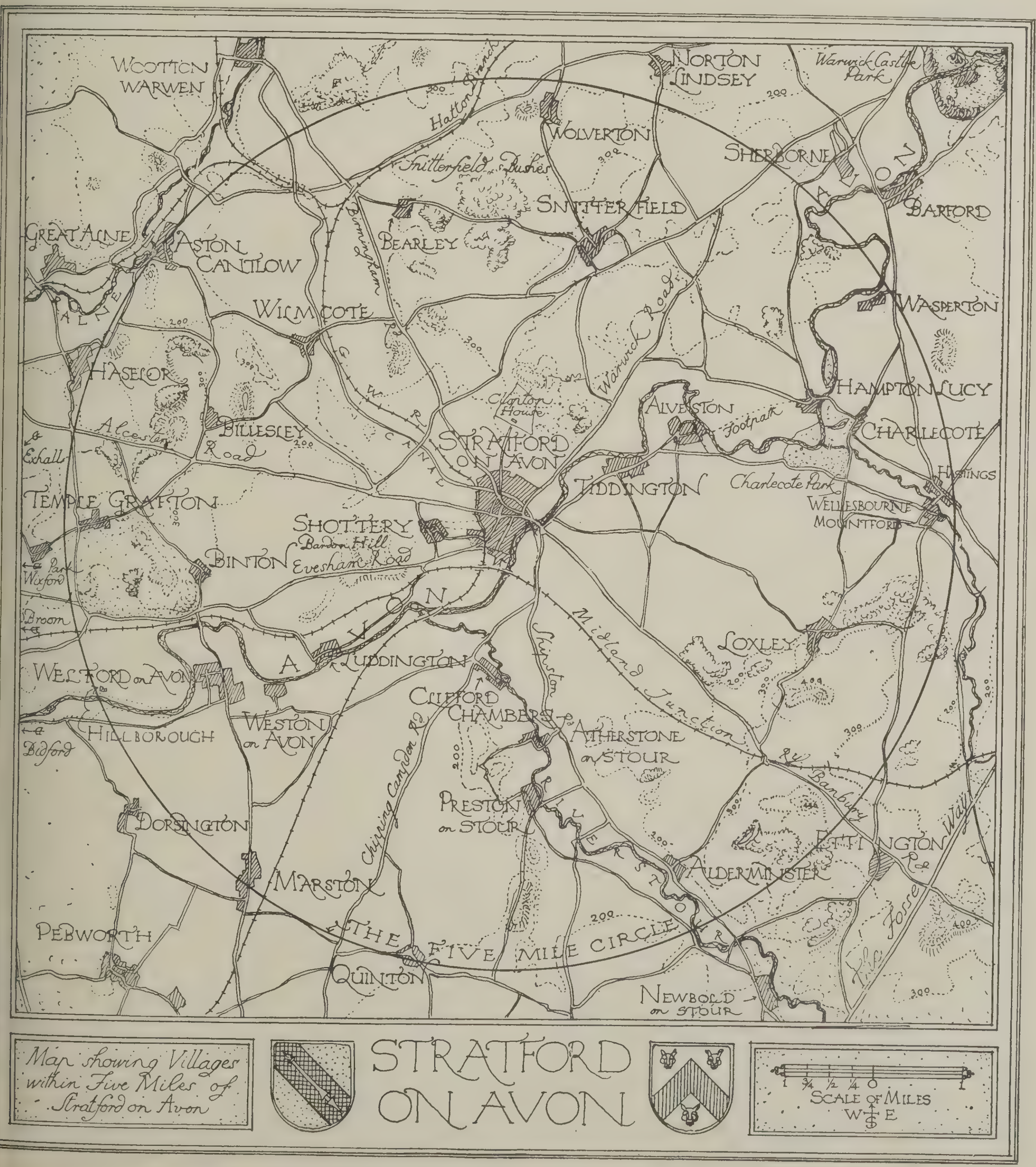
To steer a *via-media* between these two extremes calls for consummate tact, consummate skill, broad humanitarian interests, and specialized knowledge. It would seem that the authors of this report are collectively the possessors of these qualities. The collaboration of Professor Abercrombie with his brother Lascelles Abercrombie is a most happy one. It is rare enough, in these days of specialization, to find a poet who has a thorough and a comprehensive understanding of the various branches of art and of their relation to each other. Yet we know from his book, "Towards a Theory of Art," that Lascelles Abercrombie is the possessor of just such a broad and philosophic outlook. And these qualities, combined with the expert knowledg and wide sympathies of Professor Patrick Abercrombie, have produced a report which, if its conclusions be followed, will result both in the preservation and in the development of Stratford-upon-Avon along the lines which are most conducive to the best interests of posterity, in so far, at any rate, as it is possible from the knowledge of the past and of the present to ordain for the future. Dealing with Stratford-upon-Avon can be likened to handling some infinitely rare textile, for which both insight and delicacy of touch are essentials, for it has its warp and its woof, and each aspect and interest is bound up with the welfare of the whole.

The report was prepared at the instance of the Stratford-upon-Avon Preservation Committee, and the Corporation,



which had already inaugurated a town-planning scheme, has held this in abeyance until the publication of this report. This proposed town-planning scheme did not include, however, the centre of the town. Owing probably to the fact that it was, until the recent passing of the Housing No. 2 Bill, incumbent upon the authority to show just cause why built-up land should be included in a scheme, and, although there should have been no difficulty in proving this, the council may not have felt confident. However, there has now been introduced in the new act a clause which is designed to deal with precisely such conditions as those prevailing at Stratford; indeed, it is suggested that Stratford was the cause of its inclusion. Whether this be so or not, "special architectural, historic, or artistic interest attaching to a locality" is a just ground for its inclusion in a town-planning scheme.

It is obvious, however, that if the future of Stratford-upon-Avon is to be controlled, special precautions will be needed to see that the control is properly exercised. It is one thing to have the power to ordain that only such buildings as conform to, or do not interfere with, the precious character of the town may be built, but it is altogether another to determine when a building conforms to such conditions. And here we note with particular interest the authors' proposal to meet this difficulty, for it is one that has already frequently, and quite independently, been made in the columns of this Journal. It is for the formation of a Committee, on the lines of the Birmingham Civic Society, to which all matters shall be referred, and, although without statutory powers, a Committee by whose decisions the Corporation shall unquestioningly abide. This Committee should be composed of elected and co-opted members. The elected members representing the Corporation and the Trustees of the Birthplace, and the co-opted members being persons of authority connected with the arts.



Map showing Villages within Five Miles of Stratford on Avon

This report is, indeed, a masterpiece of tact and wisdom, and should be read by everyone who desires the preservation of one of the loveliest towns, and one of the loveliest districts in Europe, not only for their own sake, but also on account of those associations to which every civilised community in the world does homage.

Among the possible developments for the town, suggested in the report, is that of Home Industries, comprising, among others, that of printing. This volume is printed by the Shakespeare Head Press of Stratford-upon-Avon, and it sets a standard in typography which we may hope any subsequent industries will endeavour to equal in their various spheres. As for the plans that accompany the report, they are, with their delicate and unfaltering lines and their exquisite lettering, in themselves works of art.

H. J. B.

Who's Who in Architecture

The war upset the reference books badly; even the dictionaries had to be re-edited and supplemented with a list of "Words which came into use during the Great War," and such works as "Debrett" and "Burke" had to suffer complete revision. Not a page had they but which bore its omissions and recorded new names. "Crockford," the "Law List," the "Medical Directory," "Who's Who (both the layman's and the architects')—their editors gav up the unequal struggle of trying to keep pace with th many comings and goings, and could only wait until som sort of order should be settled once again. And now, a long last, the world is going about its business; the "Fiel Manuals," and other Army handbooks are laid aside, an we appreciate the usefulness of reference books once again

If a new and revised edition of "Who's Who in Architecture" has been a long time in appearing, now that it i published it is all the more complete. Here are recorde the names, addresses, qualifications, and works of nearl six thousand architects; their telephone numbers; and, i some cases, the date of birth. They are all here—fron A to Z.

The publication has been produced with the assistanc and the approval of the R.I.B.A., the Society of Architects and the Architectural Association, wherefore it possesse the authority essential to any book setting out to be guide and a directory to the architectural profession. Th work will take its place upon the shelves of every referenc library, and not only every architect should have a copy but all who have to do with him. The book is ably edite by Mr. Frederick Chatterton, F.R.I.B.A.

Who's Who in Architecture. London: The Architectural Press. Pric 25s. net.

Correspondence

The Cambridge Collegiate Buildings Competition

To the Editor of THE ARCHITECTS' JOURNAL.

SIR,—We should like the readers of your Journal to understand that we are not in any way associated with Messrs. Holt and Rees, of London, who were competitors in the above.

We never have written to the press to complain about the assessor's award in any competition we have entered, and we are entirely in sympathy with the opinion expressed in Professor Reilly's letter on this subject.

T. TALIESIN REES and RICHARD HOLT.

To the Editor of THE ARCHITECTS' JOURNAL.

SIR,—I know little or nothing about the above particular competition, but as one who has in the past been a competitor, occasionally successful, but much more frequently unsuccessful, and has also acted as assessor, I have been much interested in the letter of Messrs. Tait, Holt, and Rees in your issue for November 21. When I have been so fortunate as to be successful, I have taken it as a piece of good luck, and when otherwise, I have tried to accept it as fate.

Your correspondents' letter raises the whole principle of the competitive system, rather than any special points, although such are mentioned. It is for that reason that I am interested in the letter.

When a competition is started it implies, or should imply, a certain amount of confidence between the two parties thereto, the promoters and the competitors, and there are therefore two sides to the bargain.

The promoters, by employing a professional assessor and leaving the selection of the best design to his judgment, abdicate the rights of choice that they normally possess.

The competitors, often to the number of hundreds, or at least dozens, by dedicating to a competition the best fruits of their skill, industry, and enthusiasm enter upon a lottery, in which they give very weighty pledges of their intention to devote their best talents to the solution of a given problem. In this way both parties yield something. The promoters, in return for waiving their personal predilections, get the advantages of the skilled judgment of the assessor, and the cumulative results of the labours of many eager and strenuous aspirants to success. Human nature being what it is, the competitor puts forward, in his eagerness t succeed, probably a more strenuous effort than a privat commission would draw from him. On the other hand, h has not the advantage of intimate and careful consultatio with his client as to requirements. But once he enters competition he is entitled to the most scrupulous fairplay and the strictest adherence to the rules of the game, chie of which is the inviolability of the assessor's decision. Tha is his chief safeguard, that is the sheet-anchor on which h ventures perhaps months of endeavour.

But if he is entitled to that consideration, he must equall loyally accept the result, whether it be for or against him.

Before entering on the competition the competitor ha the conditions before him, he must be his own judge as t whether they are fair and practicable, he starts with hi eyes open. The name of the assessor is known to him, an he must be assumed to be perfectly satisfied as to the assessor's impartiality and fitness to select the best design.

Equally, the promoter should have no power to revise c override that decision.

The assessor is human, and so is liable to make mistake Both parties must accept these risks, and abide by them unless the assessor commits a sin so great as to betray partiality or incompetence of a grossly palpable characte If mere errors of judgment are to be questioned there mus be an end to the competition system, which, while far fror ideal, sometimes offers great advantages to both parties.

In the instance under consideration, the point, ofte made, is raised that the award has gone to a competite who has ignored a certain condition. What is an assesso to do? A certain condition is laid down, one competite perceives that by not adhering to it he can evolve a muc better scheme. He ignores it, and putting his faith to th test, works out the scheme. If the assessor takes a stric view he is ruled out, and so has no right to complain. H has taken his chance and lost. But, if he has brought a nev light to bear on the solution of the problem, and so produce the best plan, immeasurably superior to the others, is th assessor bound to decide against him? That is the rea issue in many competitions.

We have all met these things in our private practice Clients have imposed certain conditions, which on fu investigation we have found by no means essential, an with a little tact, we have usually been able to get ther dropped or modified. For instance, I was lately asked t lesign an addition to a certain building on a very circumcribed and difficult site. I was told that the light to certain vindows must be preserved; but on carefully investigating he circumstances I found that these windows were by no ieans essential, and could be dispensed with by breaking ut other lights. On explanation my clients realized this, nd I was enabled to produce a plan that I believe to have een a far better one than would have been possible had I trictly adhered to the exact letter of the instructions. low, if this had been a competition, ought I to have been isqualified and an inferior plan accepted and imposed upon ie promoters because it adhered more strictly to the exact etter?

I venture to say that every case must be judged on its wn merits, and that regard should be had to the true spirit, ather than the exact letter of the conditions, that is to say, their true intent and meaning. No promoter or assessor an in the preliminary stages size up all the factors in the ay that a capable competitor wrestling with the problem all its bearings can.

Therefore I suggest that some, indeed, a good deal, of titude must be left to the assessor if we are to get the est results out of the competition system, and that cometitors must be encouraged to take a certain amount of sk, and to display courage and initiative in interpreting ie conditions that ostensibly aim at securing the best lution of a given problem.

I by no means desire to encourage or defend the comtitor who deliberately ignores vital conditions. Where ie line is to be drawn must be left to the judgment of the sessor.

The adoption of the jury system would, of course, give ie parties the advantage of collective wisdom, but the ecision would have to be made all the same.

OLD COMPETITOR.

To the Editor of THE ARCHITECTS' JOURNAL.

SIR,—As an entirely disinterested party, and one who not acquainted with any of the competitors in the above mpetition, may I submit the following for the conleration of those gentlemen who gave vent to their traged feelings of professional propriety in your last ue?

When a design, which ignores or stretches a condition the competition, is awarded a prize, the promotors of at competition are guilty of obtaining all the rejected signs under false pretences. This has happened more an once in the past twelve months. Under these cumstances a losing competitor surely has the right to otest publicly.

Mr. Naseby Adams, and the anonymous party who ites under the *nom de plume* of "One who did not take rt," censure Messrs. Tait, Holt, and Rees for only otesting against the single assessor system after taking rt in the competition; but surely competitors can ite on the matter with greater authority if they protest er experience?

Professor Reilly is a great artist and an assessor of perience, honour, and sound judgment; but if he ever had eputation for logic in argument, his letter of last week stroyed it. He entirely ignores the points raised by ssrs. Tait, Holt, and Rees, and confines his remarks to iaughty and unreasoned disapproval of their opinions, l, indeed, of their expressing an opinion at all.

But the most astonishing portion of Professor Reilly's er is the concluding paragraph which actually suggests t for expressing a sincere and quite proper opinion ssrs. Tait, Holt, and Rees should be punished by the yal Institute. This despotic and unworthy suggestion to my mind, far more unsportsmanlike than anything three above-mentioned competitors have put forward.

nd, further, it seems to me that Professor Reilly's lic statement that "Questions of professional conduct here involved that would seem to demand the attention the Practice Standing Committee of the Institute," is an attempt to prejudice the action of that committee in the matter, which is itself decidedly irregular.

EDGAR LUCAS.

The Architectural Shilling

To the Editor of THE ARCHITECTS' JOURNAL.

SIR,—The leading article in your last issue on "The Architectural Shilling" raises the point as to whether an architect is hampered by restrictions in his dealings with the layman in comparison with others who make a living directly or indirectly from the building of houses.

Recently, in a court action, an estate company claimed to act as builder, estate agent, surveyor and architect. No claim was made to act also as advertising expert, this being obvious to anyone glancing at the business columns of the daily press. Dealings with such an estate company must naturally appeal to the layman, as owing to the company owning the land, designing the houses and building them, he can at once be quoted an exact price for any design built complete, inclusive of the land on which it stands and all fees. Further, he may usually pay an instalment, obtain possession, and pay off the balance as rent. What an attractive business proposition!

The architect is rarely in a position to quote the client a lump sum for all these services at the first interview, and, therefore, is not in such a favourable position to deal with the prospective house owner should that gentleman or lady have gone to the necessary trouble of digging him out in his shy and retiring office with its small brass or copper plate.

Again, the estate company is in a position to illustrate his designs in the advertisement columns of the daily press, to broadcast booklets dealing with the attractive features of the estate, and to set out the merits of the financial proposition. In other words the estate company adopts up-to-date selling methods, produces the goods, and draws the shillings and also the pounds.

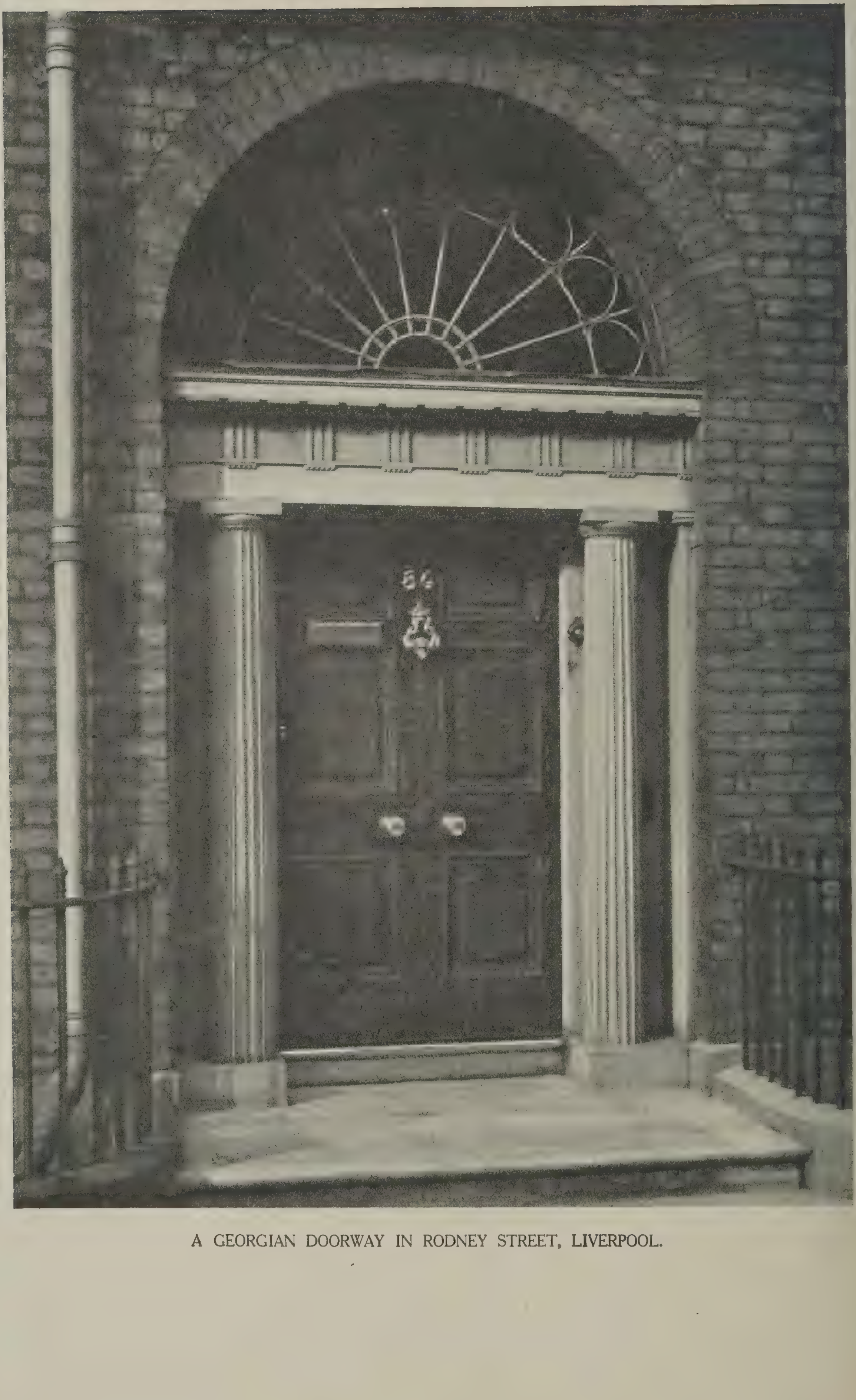
What can the architect do to bring his services into the limelight so that they may be seen by the layman and eventually be paid for? He may get his small houses illustrated in the technical journals, which are read by very few of his prospective clients. He may obtain press publicity indirectly, but usually his business address is not mentioned. He may mix socially with his fellows, hoping to get a stranglehold on some client at the seventh bunker or the club-house bar. As regards direct methods, such as advertising on the front page of "The Daily Mail" or back page of "The Times" he is barred if a member of the Institute or Society; further, he may not even act and draw fees as an estate and advertising agent, so that his publicity efforts are greatly curtailed.

The leading lights of the profession are fairly well known to the public as architects of monumental works and large stores. Even they, however, are but little known compared with the big estate agents. However, the man who wants an £800 house would in many cases feel diffident, say, in approaching the architect of Bush House with such a modest commission. One does not go to Bond Street to buy a packet of "woodbines."

It is, therefore, no wonder that the estate companies—astute business people—draw not only the estate and building pounds, but also the architects' shillings where middle-class houses are concerned, leaving the younger members of the profession merely the pennies and half-pennies, or even compelling them from sheer penury to take positions as "architectural assistants" to some building company or public authority, where in some cases the architectural "shilling" is less than the amount handed to the girl shorthand-typist.

Whilst young auctioneers and estate agents prosper as a result of their up-to-date methods of selling their services to the public, it may truthfully be said of young architects, as a class, that "chill penury repressed their noble rage and froze the genial current of the soul."

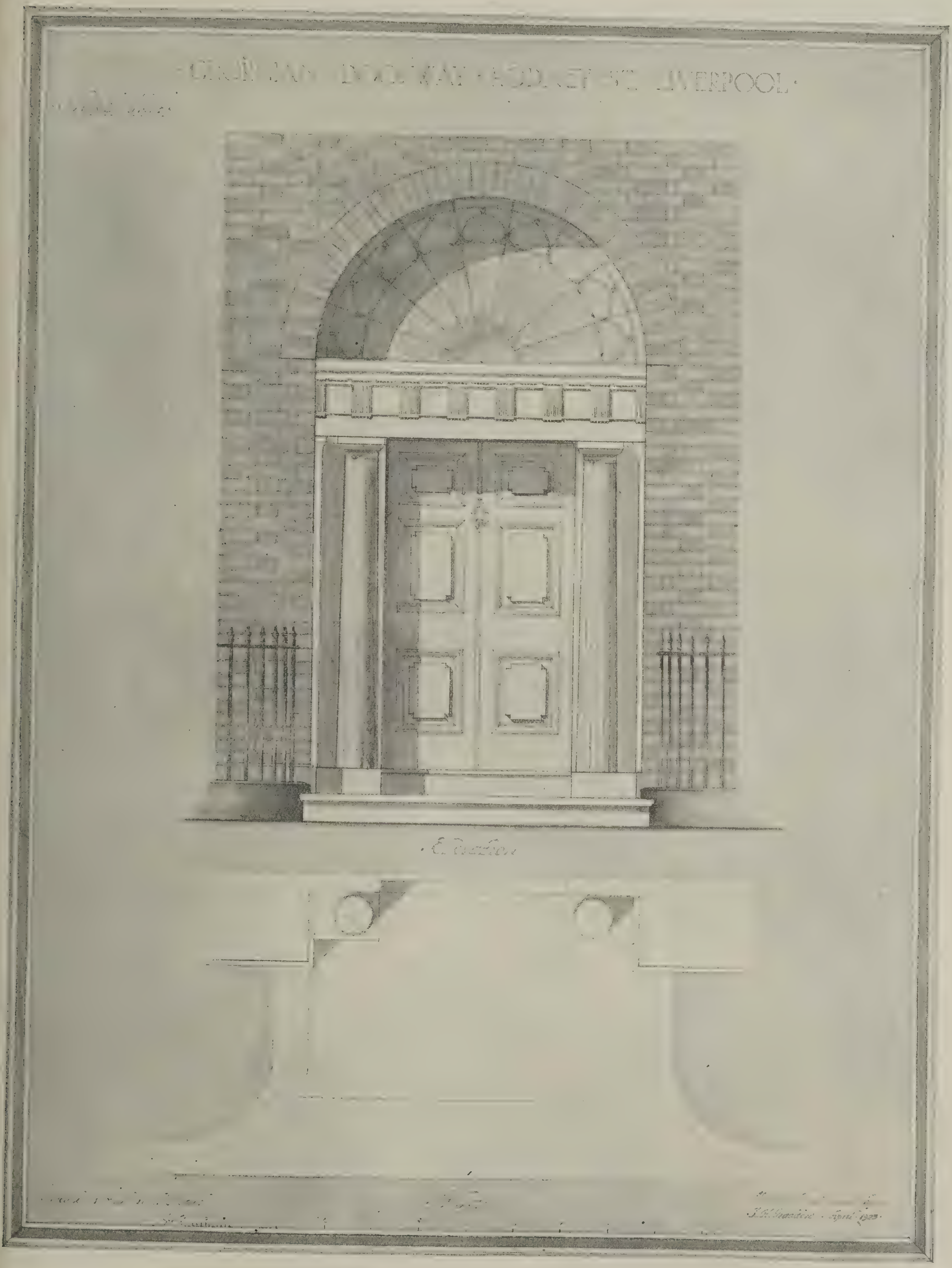
C. F. OVERY, M.S.A.



A GEORGIAN DOORWAY IN RODNEY STREET, LIVERPOOL.

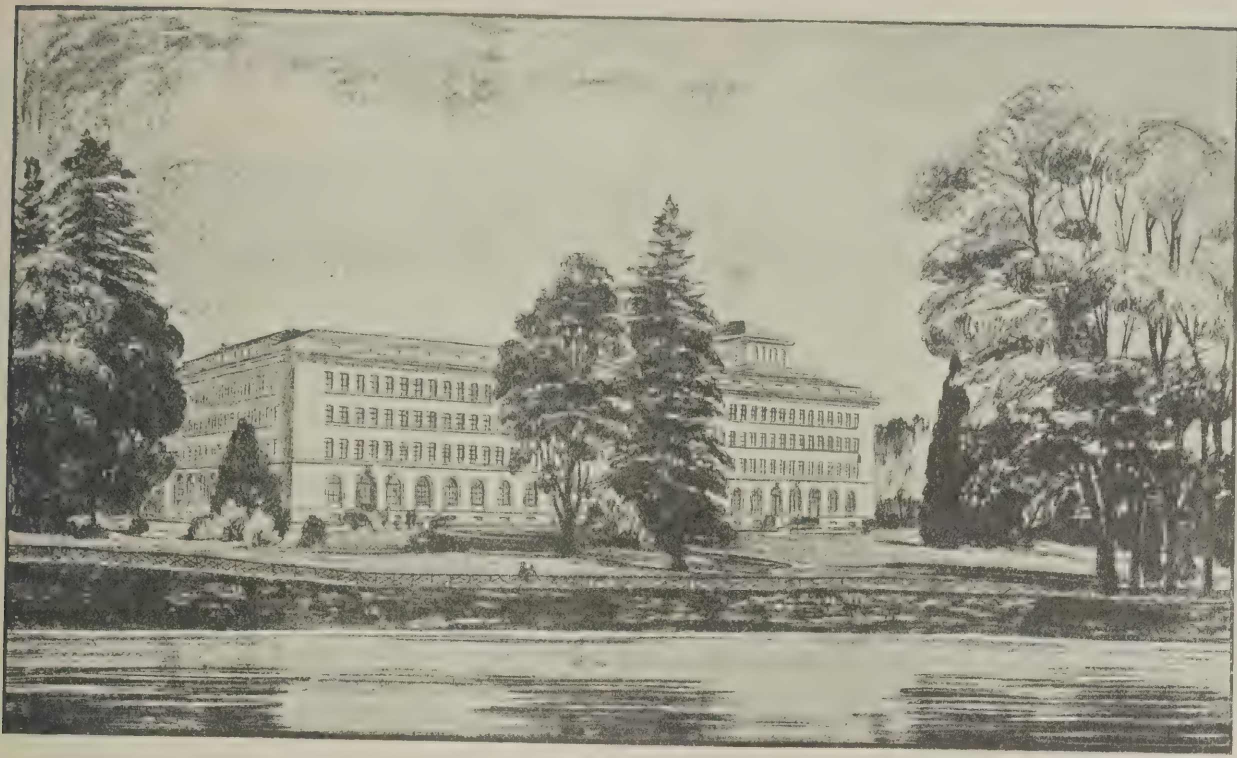
Measured Drawings. 44.—A Georgian Doorway in Rodney Street, Liverpool

Measured and Drawn by R. H. Graddon


·GEORGIAN DOORWAY·RODNEY ST. LIVERPOOL·
· Elevation ·
R.H. Graddon · April 1923 ·

This old doorway is of the Late Georgian period, having been executed in the latter half of the eighteenth century. It is entirely of timber construction set in a plain brickfaced building, and being finished in white forms a strong contrast with its background.

THE LIBRARY
OF THE
UNIVERSITY OF ILLINOIS



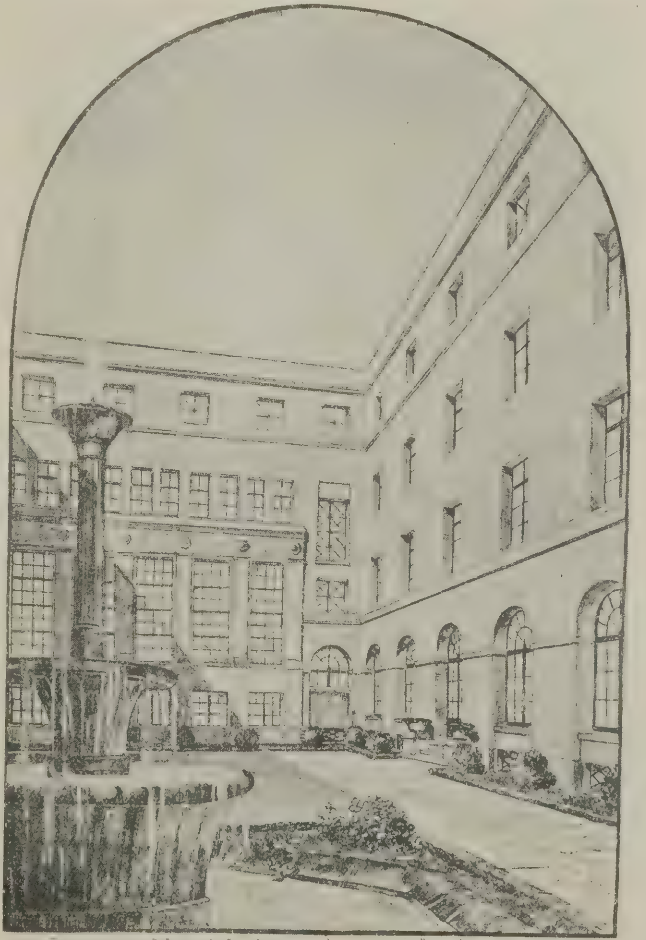
A GENERAL VIEW.

The International Labour Office, Geneva

M. EPITAUX, Architect

ON this and the following pages we illustrate the design by M. Epitaux, of Lausanne, for the proposed new building at Geneva for the International Labour Office. The building is now being erected, subject to certain alterations in plan. The design was awarded first place in the recent competition promoted by the International Labour Office of the League of Nations. The competition was open to Swiss architects and those of "allied nationality" who had practised in Switzerland for at least ten years, and the jury of assessors was as follows: A representative of the promoters, M. Fontaine, president of the Council of the International Labour Office; of the Swiss Federal Government, M. Usteri; of the I.L.O., Assistant-director of the International Labour Office; and four architects — MM. M. Brincourt, Société Centrale (France), A. Guyonnet and M. Turrettini, Société Suisse des Ingenieurs et Architectes (Switzerland), and Mr. E. P. Warren, F.R.I.B.A. (Great Britain).

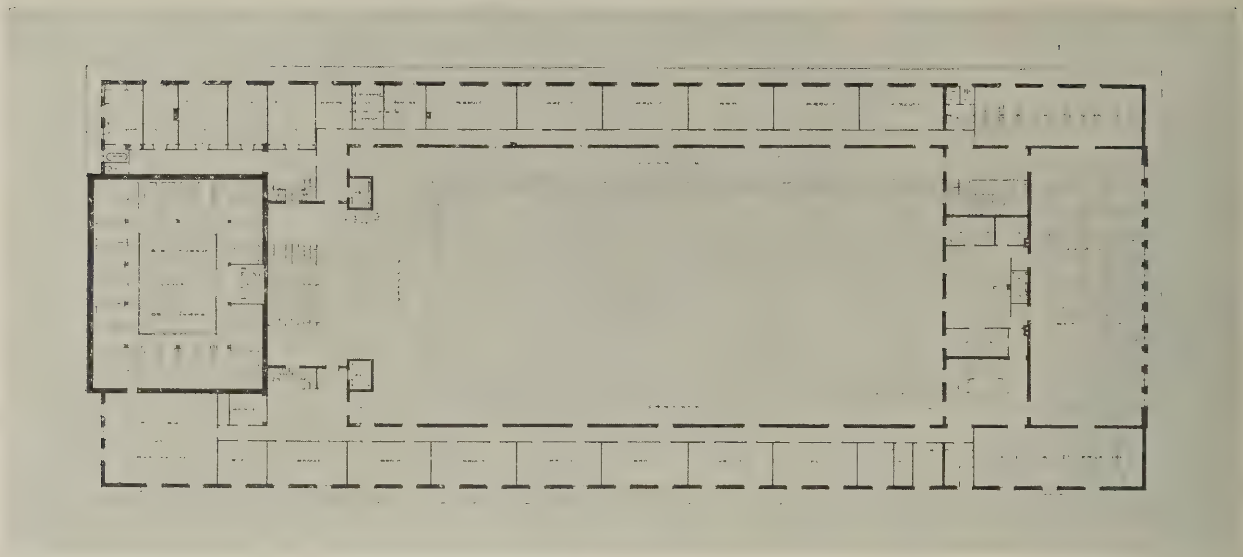
In its report the jury state that the unsymmetrical plan of the winning design is original, but presents certain difficulties in detail. It possesses the advantage of giving nearly all the offices a share of sunlight. The general dispositions of the plan are clear. The principal staircase is too important, and its connections with the secondary staircases are not happy. The grouping of the administration offices on the right and those of the Council, director, and the library on the left is an advantage. Certain details are defective. The president's room is too small and badly proportioned, and the lighting of a part of the library by a lantern is perhaps not sufficient, and the same criticism applies in the case of ventilation. The façades are simple and well proportioned. Architectural features on the front facing the lake add importance to the two garden entrances, and add interest to this too monotonous façade. This design is in accordance with the conditions of the programme, and has an advantage in cubical contents.



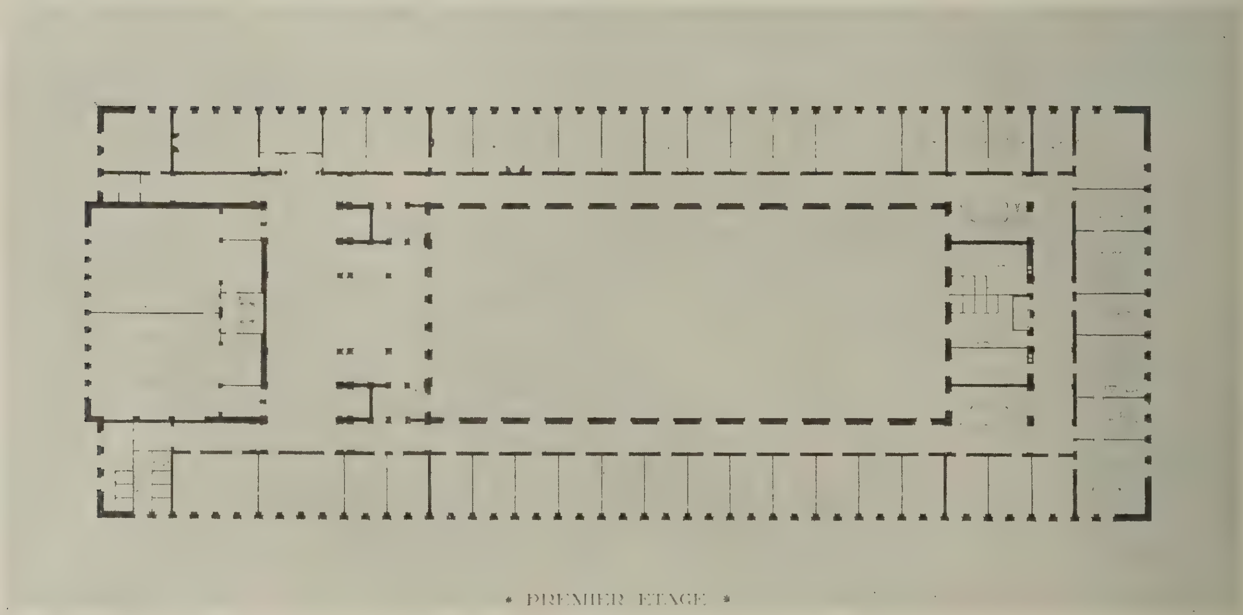
A VIEW IN THE COURTYARD

The jury came to the decision that none of the designs could be recommended for the erection of the proposed building without modification.

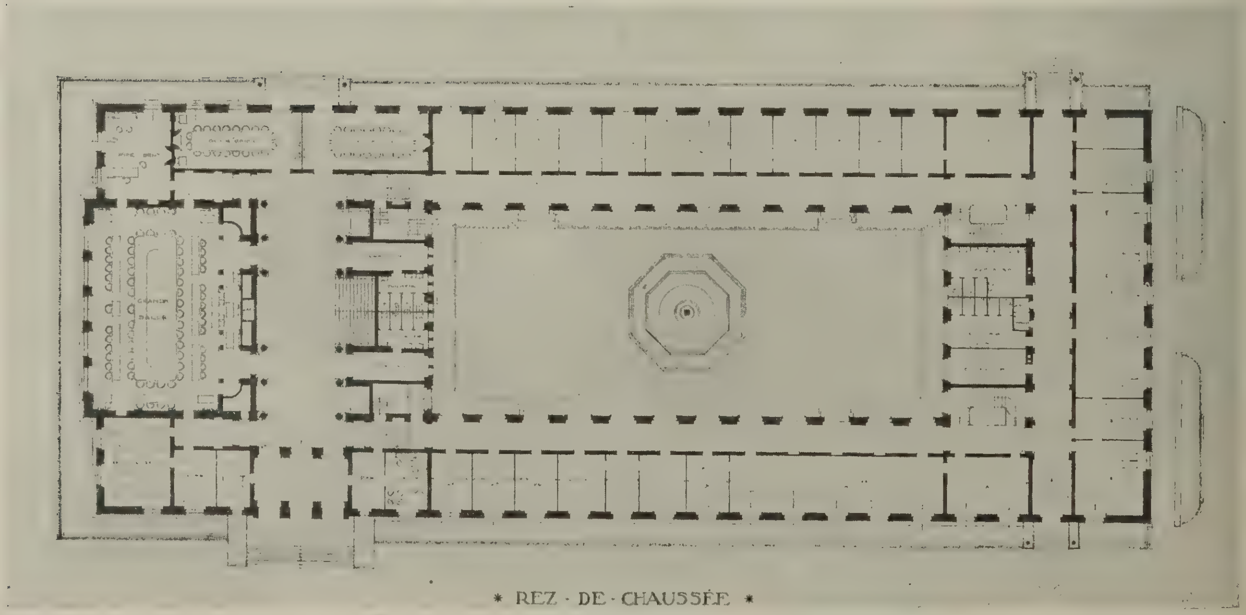
The estimated cost of the building is equivalent to about £100,000. At present the International Labour Office is housed in a school.



TOP FLOOR PLAN.

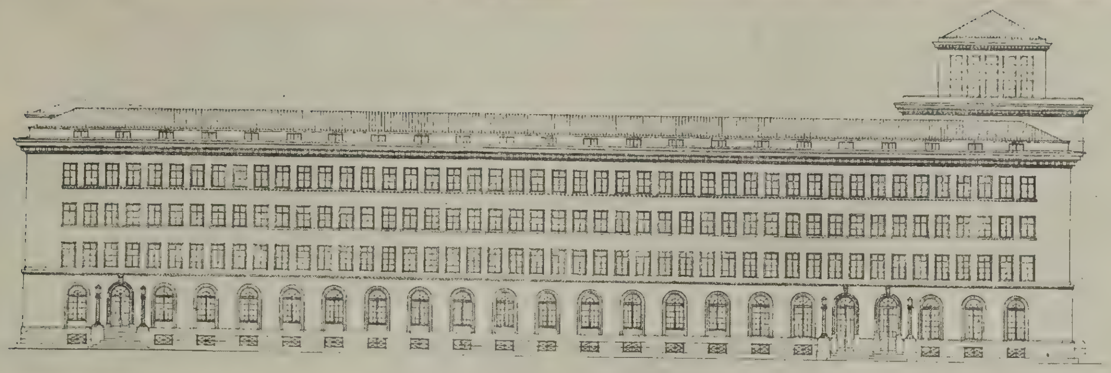


FIRST FLOOR PLAN.

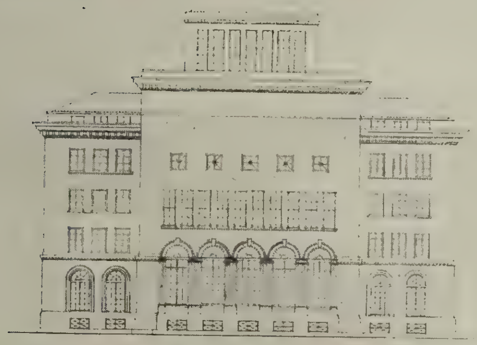


GROUND FLOOR PLAN.

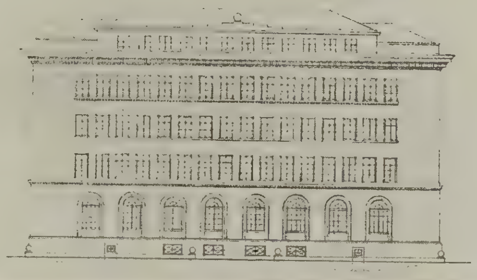
THE INTERNATIONAL LABOUR OFFICE, GENEVA. M. EPITAUX, ARCHITECT.



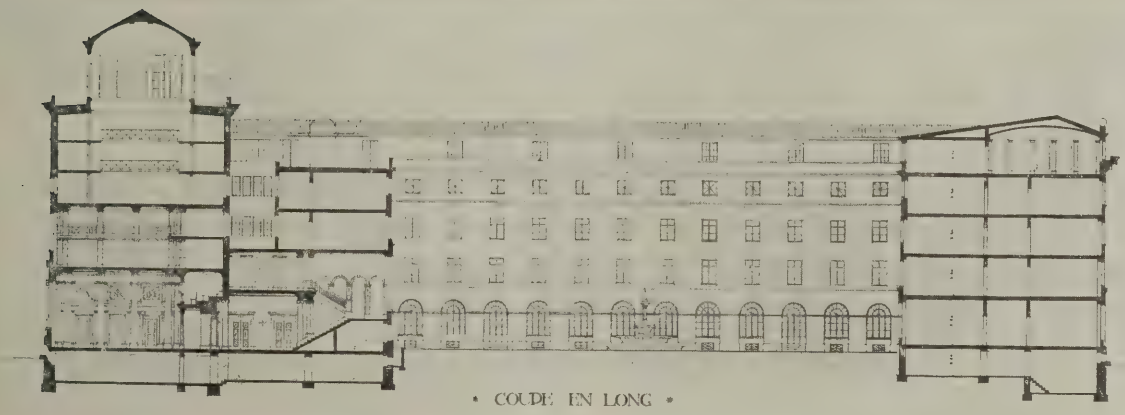
EAST ELEVATION.



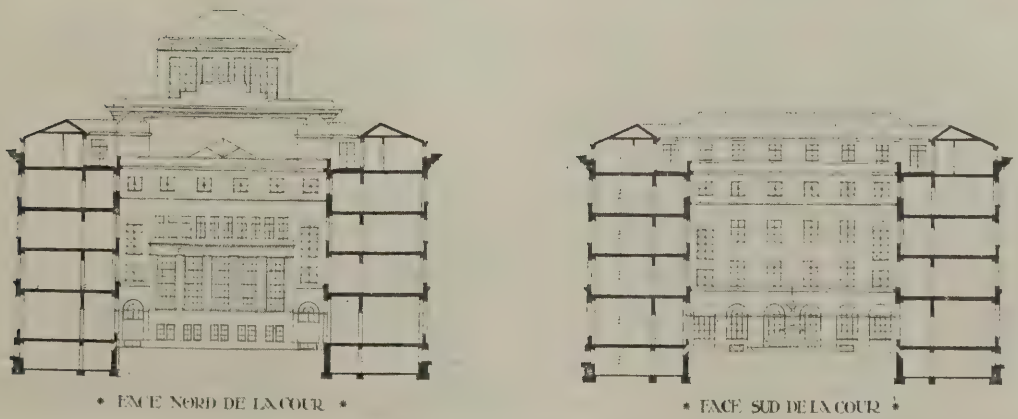
NORTH ELEVATION.



SOUTH ELEVATION.



LONGITUDINAL SECTION.



• FACE NORD DE LA COUR •

• FACE SUD DE LA COUR •

CROSS SECTIONS.

THE INTERNATIONAL LABOUR OFFICE, GENEVA. M. EPITAUX, ARCHITECT.

Enquiries Answered

Enquiries from readers on points of architectural, constructional, and legal interest, etc., are cordially invited. They will be dealt with by a staff of experts, whose services are specially retained for this purpose. If desired, answers will be sent direct through the post. In no case is any charge made for this service.

The Separation of Rainwater

"F" writes: "Can you give me any information about an automatic appliance for rejecting the first rainwater from a roof before it enters a storage tank? Is it efficient? I cannot find it in any catalogue, and it may not have been made since the war."

—The apparatus referred to is "Roberts' Rainwater Separator," which allows the earlier part of the product of any rainfall to pass to waste, and automatically diverts the flow to storage after the (presumably) dirty roof washings have passed off. The apparatus is based on simple principles and is reported efficient. Roberts' rainwater separator is still obtainable from the inventor, Mr. Roberts, of Haslemere, Surrey. E.

An Alleged Party Wall

"J" writes: "The owner of the house adjoining mine has painted out certain lettering I had written on a fillet on the wall dividing the two houses. He contends that I have no right to place an advertisement or other writing on this wall. I regard this wall as my own. It rises approximately 12 ft. above my neighbour's house, and he has never contributed towards the cost of building the wall above his property or to the upkeep of same. He has, however, offered me a lump sum towards the cost of the wall, but this is quite inadequate, even if he is right in his claim to it."

—We think it very important to see what the original deeds state or imply upon the subject of the boundaries. Probably these contain sufficient matter to make the point clear. But on the evidence before us, with some hesitation, we conclude that the wall is a party wall. The deeds should be taken to a solicitor and his view asked as to the advisability of county court proceedings to recover a small sum, say thirty shillings, for the injury done in painting out the two words from the fillet. S.

Tarry Deposit in Chimneys

"T" writes: "Two serious fires have taken place in the vents or chimney flues of a large country mansion four stories high. Since the year 1915 wood has been very largely burned in all the fires in the house with only a little coal being used. The wood blocks have been composed of both hard wood and coniferous timber, but mainly the former. The flues are swept regularly by a trustworthy man, and he now reports that, owing to the continuous burning of wood, the inside of the flues are encrusted with a hard, tarry, sooty material which cannot be removed.

1. Does wood cause a tarry coating to gather on chimneys where it is burned?

2. Is there any difference in this respect between the use of hard and coniferous wood?

3. A coating or deposit of some kind having gathered on the inside of the flue all the way up, how can this be removed? It comes off in pieces some inches thick, and is like a tarry briquette.

4. Would any particular kind of hard wire brush be sufficient, or are there any chemicals which might be burned in the fire?

In each case the fires burned very fiercely for many hours and have severely racked the chimneys, smoke finding its way through the cracks into several of the rooms, books and straps being scorched and singed. The main problem is how to clear the chimneys so that they will not catch fire."

—1. Yes, and this is recognized in an increased area which should be allowed to flues where wood is to be the chief fuel. 2. A resinous wood will result in the greater deposit. 3. If access can be gained from the top of the chimneys it is possible that a weighted grapnel lowered on a chain or wire rope would dislodge the deposit in parts and permit it to be more effectively attacked by other means. 4. A hard boiler flue brush might continue the process. Any chemical combustive would probably result in ignition of the coating. E.

Tudor and "Perpendicular" Period Parapets

"B. S.," in his enquiry as to whether battlements in the "Perpendicular" and Tudor periods should be shown pierced (published in your issue for November 14, page 738), refers to Fletcher's "History of Architecture on the Comparative Method" as showing an unpierced example. This is evidently the fifth edition, but on reference to the sixth edition he will find his point clearly explained, for there are three "Perpendicular" parapets shown (page 416, D, E, F), all pierced. Bond's "Gothic Architecture in England" tells us (pages 359–397) that pierced parapets became customary from the fourteenth century onwards, and implies that solid ones grew rarer during that century and went out of use. As regards the second period your correspondent mentions—"Tudor," i.e., early sixteenth-century work—the pierced parapet was still in favour, as shown by the examples at St. George, Windsor (illustrated in Power's "Mediæval Architecture," vol. 2, page 315); King's College Chapel, Cambridge (Bond, page 199); and other churches. The pierced type, therefore, was decidedly in the majority in both periods. H. V. M. R.

Construction of Bedroom in Roof

"B" writes: "I wish to convert the roof of an old farmhouse into a bedroom. The roof is covered with old tiles laid on battens (split like laths not sawn) fixed direct to the rafters. The roof is quite rainproof, but lets in the wind and a certain amount of snow. Is there any way by which the roof can be rendered weatherproof without stripping it and laying boarding and felt. There is a staircase up to the roof, and but for this difficulty the whole job could be done for a few pounds. The job will certainly not stand the cost of stripping the roof. Is there any means of pugging between the tiles and a ceiling of matchboarding, compoboard, or lath and plaster?"

—If the battens are sound the roof can be "torched" internally to exclude draught and snow, and a ceiling then formed either with matchlining or one of the fibre boards. Lath and plaster is not recommended, as the nailing up of lathing is almost certain to dislodge some of the tiling—the alternative materials could be fixed with screws. E.

"Dry Rot" in a Church Roof

Architect writes: "I have been consulted about a serious case of 'dry rot' in timber, in the roof of a very large church. It is about ninety-five years old. The roof consists of a series of massive trusses carrying purlins supporting rafters in the usual way. Underneath are rough grounds carrying very elaborate plaster groining and ribs. It may be safely said that there is not a single timber in the entire roof that has entirely escaped, although some are much worse than others. Dry rot in the main beams has not gone in deeply, but it is there all the same, to the depth of an inch or two. The obvious course would be to put on a new roof, but as the slating, leadwork, and the plaster groining are perfect, this seems a very drastic course, and would only be accepted in the last resort. Besides which, as the building is very large, the expense would be beyond my client's resources. I do not see any immediate danger of collapse, and if another twenty to forty years' lease of life could be given the roof it would be very acceptable. I shall be grateful for any suggestion on the subject. (1) Are any of the proprietary preparations advertised as preventatives of dry rot really efficacious in stopping or even retarding further decay? (2) Would the expense of strengthening the roof by steelwork, after the manner of Westminster Hall, be justified in a roof of no special historic or artistic value? (3) What is the average life of a deal roof?"

—This is certainly a difficult problem and, taking it as proved that the decay is really due to dry rot (shown by the *mycelium* of *Merulius lachrymans*) it seems that the only really safe course will be to renew the roof, taking care to ventilate the space between groining and roof so as to prevent a recurrence of the trouble. (1) I have found Solignum and Peterlineum both absolutely destructive to any vegetative or fungoid growths with which they are brought in contact, but there must be points in such a structure where application would be impossible, and it may be doubted whether it would be practicable to preserve a roof once so thoroughly infected by such means. The application of a corrosive sublimate solution with a Vermoral sprayer might be more likely to reach all points, but an inspection could alone decide this. (2) The work of strengthening Westminster Hall roof by steelwork was certainly not devised as an economy, but for preservation of this unique structure. (3) Many of the roofs designed by Sir C. Wren are of fir or pine, and are as good as the day they were finished. The average life would depend on suitable design and circumstances.

G.

Law Reports

Housing and Town Planning Act—Orders to Close

The King v. *Poole Corporation—ex parte Nailmaking Machines, Ltd.*

November 8. King's Bench Division. Before the Lord Chief Justice and Justices Lush and Sankey.

This was a case in which the Poole Corporation appeared o answer a rule nisi obtained by Nailmaking Machines, Ltd., f Poole, calling on them to show cause why they should ot serve upon the occupiers of two dwelling-houses at Poole a closing order in respect thereto in accordance with section 28 of the Housing and Town Planning Act, 1909.

Mr. Trapnell, for the Corporation, explained that Nailmaking Machines, Ltd., acquired the property in the early part of 1922, and in May the Corporation's surveyor sent hem a notice to repair the cottages so that they might be easonably fit for habitation. The order was not obeyed, s the owners denied that the repairs could be done without econstruction, so they asked the Corporation to make an rder for closing and demolition of the property. This he Corporation refused to do, but gave the owners two months in which to obey the order to repair. It was rgued for the Corporation that if the owners desired the oint whether the houses could be repaired without reconstruction to be settled they could apply to the Ministry of Health.

The owners contended that if the repairs were not done he Corporation must order the demolition of the property.

The Court discharged the rule with costs.

The Lord Chief Justice said it was obvious that the company that owned the cottages wanted possession of them, ut could not get it because of the Rent Restrictions Act. he real issue between the Corporation and the owners as whether the houses could be repaired, and obviously he question was one for determination by the Ministry of ealth. He was satisfied that the Corporation had not nally refused the application for a demolition order, but they had they had a discretion. In consequence the rule r mandamus could not be allowed to proceed, and the ourt discharged it with costs.

Contemporary Art

Grosvenor Galleries.

This winter show is chiefly remarkable for the imaginative pictures of Glyn Philpot and Charles Ricketts. "The Repose on the Flight into Egypt" of the former is conceived in a less archaic spirit and executed less cumbrously than most of the subjects treated by this fine artist of late years, and "The Return of Eurydice" of the latter offers fine colour with intriguing anecdote. Among the portraits are two by Ambrose McEvoy and one by Gerald Brockhurst that give distinction to the exhibition, and Grace Wheatley's "Drowsy Child" is exquisitely rendered. Another arresting piece by a lady is the still life of Isabel Codrington. C. R. W. Nevinson's view, "From the New Jersey Ferry," is one of his good American studies, but the most brilliant view is Fairlie Harmar's "Mullins' Pond, Thruxton." There are some clever drawings of buildings; one by William Monk, "Building a Skyscraper: New York," is startling; Horace Mann Livens's "George Street, Hanover Square," Hilda Harvey's "Old Houses, Rouen," and Job Nixon's "Ghent," are sound, while Muirhead Bone's "Theatre of Marcellus" is one of his finest things.

Two New Galleries.

At 17 Coventry Street there is an astonishing show by Gabriel Atkin of some seventy drawings in water-colour and pen and ink. The former are seen very simply and recorded without effort. The latter are filled with distance and detail without any signs of labour. Moreover, in not a few of the drawings there is an insouciant sense of humour of the most charming and disarming description. It is impossible to describe it, it must be seen and enjoyed.

The other new art rooms are called The Panton Gallery, at the corner of Panton Street and Leicester Square, and here a young sculptor, Ruth Morley, shows how interesting sculpture can be without being vulgar. She has the true plastic touch and the true spirit of research for she exhibits a laughing "Boy's Head" in pinkish St. Augustine marble from Algeria, fifteen bronzes by the lost wax process, portrait busts, and portraits of horses, cats and dogs, in plaster, marble, terra cotta; a varied but homogeneous exposition of a most promising talent. Edith M. Fry, who writes the note to the catalogue, relates the history of the exhibitors, and herself shows some interesting paintings. These pictures and pieces of sculpture are by a group of English artists who live and work in Paris, and it is very satisfactory to be able to welcome them in London.

Other Galleries.

At Walker's there are three new shows of water-colour drawings; pleasant records of Sussex by D. N. Morgan, which give a warm and grateful sensing of the beautiful county and some nice views of cottages, villages, and bridges. Lady Jephson's drawings are largely of Italy, Belgium, and the Riviera, and they have an air of their own. Certain ruins, temples, and streets are broadly treated. The drawings by Hilda M. Sides are largely architectural and she, too, is concerned with temples, which she renders well. Her subjects have been found in Palestine and Syria as also in India and England.

At the Redfern Gallery there was a miscellaneous collection of small pictures and drawings, and among the latter Colin Gill contributed some really interesting things. Randolph Schwabe and Ambrose McEvoy also exhibited, and there were some excellent architectural studies by Maresco Pearce, George J. Charlton, and Henry Rushbury.

Pottery and drawings by Bernard Leach at the Cotswold Gallery prove how scholarship can help craft. The artist was born in the Far East, and returned and spent fourteen years there. Now he makes pots in Cornwall which have the authority of his training without sacrificing any of his individuality. They are simple and unostentatious pieces that you can live with and that provide a definite decorative note in a simple house.

KINETON PARKES.

The Architecture of To-day and To-morrow

By ERIC MORLEY, F.R.I.B.A., F.S.I.

DEVASTATING as the effects of the European war have been, and in spite of the trying times we have had to face, we cannot surely do other than express relief that the hiatus in building, which accompanied it, has proved, now it is over, a great help to us. The sudden developments have been phenomenal, and the general outlook, as affecting building, has been so stimulated and improved that our relations are to-day, for the most, with a new type of building owner altogether. In other words, our clients are no longer content, as in the old days, simply to "jog along," but have realized to the full that only the most modern and progressive methods will suffice for them, as these only will ensure the successful conduct of their present-day business ventures. Progress has been almost too rapid, and, for this reason, we should take due warning to be well and fully prepared for the sudden reaction which must follow. Especially, then, let us take care that those we are here to serve do not overreach themselves, so that this same reaction, inevitable as it may be, is at least reduced to a minimum.

The different housing proposals, indicating as they do the exact nature of the pitfalls most to be avoided, should provide at least one lesson for our careful consideration. For if, as we are told, the standard of life within these islands is to be determined, not by what is desirable, not even by what is reasonable, but by what world prices inexorably decree, is it too much to predict that these same houses, built for a standard of life described by politicians as "fit for heroes," may actually prove, in the end, beyond the economic capacity of those for whom they were intended. That some form of reaction may be looked for from the present grandiose proposals would appear then, to me at any rate, to be inevitable, but that the progress finally maintained will help to justify the present chaos, is, we cannot doubt, as certain as it is gratifying. A similar reaction, I think, may be looked for from that other idyllic solution of the housing problem—the bungalow. Time alone will prove the usefulness or otherwise of this type of dwelling-house, but few of us would predict for it anything but a very hazardous future, as soon as normal times are again restored. But if, amongst ourselves, these dangers of reaction are realized, the lessons of this abnormal period, empirical as they may now appear, should prove most helpful to us, and the many vital changes, which have been brought to light as a result of the war, should set a permanent new standard for architects and clients alike. The old conservatism has been dispelled, and those who build are now able to contemplate their requirements in two distinct aspects, "as they were" and "as they are."

The increased and uncompromising demands of the retail trade are at least one indication of this same newly acquired faculty. Few of us can walk down Regent Street, where the work of the great John Nash, so long the admiration of us all, is now being gradually demolished, without being arrested by the revolutionary changes which are there taking place. The supremacy of the shopkeepers, now definitely and permanently assured by the power of the multiple stores, is changing the streets of London, even as it is those of our provincial cities, for all time. Nothing has affected so vitally the street architecture of this country as the crying demand for glazed acres of shop windows. It is the shopkeepers' one essential for successful trading, and even the most conservative of architects have been compelled to modernize their ideas, and to modify the scale of their elevations, to provide it.

This has been achieved by the shopkeepers, but the shortage of office accommodation, calling equally for attention, is surely another example of these suddenly apparent and devastating troubles. In Bradford it has been considerable, though it is true that at the moment things are easier, because of the state of trade. But they are worse there than in Leeds, partly because of thei having to restrict the really valuable part of the city to the small flat area in its centre, but partly also because Leeds had a larger share of modern office buildings to utilize.

The only possible solution, and, in spite of what I have just said, it applies in both cities almost equally, is highe buildings. I am not advocating sky-scrapers 600 ft. high but buildings of from six to eight stories. A great deal has already been said on this subject, both for and against, bu it appears to me that in Leeds and Bradford, at any rate expansion in an upward direction is both desirable and inevitable. Any town with a limited central area, with a limited number of streets suitable for offices (and by that mean near the important centres of civic and industria life), has its business locality finally restricted or confined so as to make lateral extension, except on the very smalles scale, almost impossible. The width of our streets is, o course, a governing factor, but as Mr. Delissa Joseph pointed out some time ago, the recent case of Charle Semon & Co., Ltd. *v.* Bradford Corporation has established one fact for our guidance: that a building half a high again as the width of the street will still leave a sufficiency of light for the opposite owner.

There is little doubt that since the war the number o clients who incline to this desire for higher buildings ha increased, but here again a note of caution in dealing with them is essential. It is not usually feasible to erect such buildings on small sites, for the reason that the proportion of area required for lifts and staircases is often too grea to ensure a sound financial undertaking. Sites must be sufficiently large to provide these necessities with economy and the interests of a city are better served by one owne selling to, or sharing with, his neighbour, than by eithe covering his own small site with a building not really suitable for the position it occupies.

So much, then, may be said of the demand for shops and offices, but the modern mill and factory owner also has hi problems, and, even in his case, a new set of condition have now presented themselves. Light and air are hailed as proved aids to efficiency, and welfare work, including th building of canteens, sports pavilions, and the like, is now recognized as indispensable in every really large and up-to-date works. But perhaps the most marked change of all amongst these magnates of industry, is their readiness to look to the future, to visualize a completed factory even though a small building only is at the moment proposed.

One of our difficulties in the past has been to obtain a really clear idea of our clients' ultimate intentions, causing regrets for which we were blamed, but not responsible This new type of client will simplify the work we undertak for him considerably, and we must thank the war and th trade boom which followed it for the helpful advance tha has been made. These are but a few of the newly-grasped conditions and requirements in modern building, but to fulfil them with distinction we architects of the province are better equipped than ever before in our history. Th whole of the present-day resources of the building trad are known to us—our reward for granting interviews to th long line of specialist representatives who have waited on us since building recommenced—and all are at ou disposal. The steel-framed building, with its specia adaptability to the modern demands; the improvemen in builders' tackle, facilitating speed in erection; th various types of reinforced concrete, including tubular floors of either concrete or brick; the use of metalwork in so many attractive forms, for shop fronts, doors, and windows; the modern methods of electric lighting; the introduction of electricity in mills; and the multiplicity of wall and floor coverings for every position and purpose.

With present-day requirements so defined, and with modern methods to our hand, we have nothing to fear. My own view is that we have proved our capacity in housing schemes. Though it may not be generally recognized, there was no architectural problem in these schemes which was not more than adequately solved by the architects of this country. Professors of economics, the majority of us are not, nor are we politicians, but if the Government's various housing proposals have so far failed, it is surely on one of these grounds only, and not from any lack of skill on the part of the architects or builders who tried to carry them out.

There seems no reason, then, why architects, even in the West Riding, should ever again look back. The men who will follow us in the profession, the students, have better facilities for developing their art, and more increased opportunities for study, than ever were available for us, or at least the great majority of us, at the time, now longer ago than we care to think, when our own training was in progress.

The above extracts are from Mr. Morley's presidential address to the Leeds and West Yorkshire Architectural Society.

The Japanese Earthquake

Types of Buildings that Withstood the Shock

FROM a report on the "condition of engineering structures after the earthquake and fire which destroyed portions of Yokohama, Tokyo, and other small municipalities of Japan on September 1," submitted to the Secretary of State, Washington, D.C., by Messrs. John W. Doty, president, and W. W. Johnston, ngineer, the Foundation Company, New York, it may be mplied that fire caused more damage than the earthquake, hat modern steel and reinforced concrete structures seemed o resist the shock, and that proper bracing of buildings is an dvantage. When the earthquake occurred the authors of he report were aboard ship in Yokohama harbour, and on eptember 3 they began an inspection of its effect on arious types of structures in Yokohama and Tokyo. Extracts from their joint diary are reprinted in the "Engineering News Record," from which we take the following:—

We walked along the Bund where all the buildings were ompletely destroyed. A large reinforced concrete building f some six stories facing the end of that street had been ompletely burned, but the concrete frame and floors ppeared to be undamaged by either the earthquake or he fire. We passed the Chamber of Commerce, a brick uilding of three or four stories with a clock tower 100 ft. igh. This buildings was destroyed by fire, but the walls nd tower were standing.

The Yokohama Specie Bank, a three-story structure oo ft. square, equipped with steel fire doors and shutters hich had been closed prior to the fire from the outside, ppeared to be the only building in this part of the city hich was intact. It was subsequently rumoured that the uilding had been destroyed inside by fire which had gained ccess through the roof. This we were not able to verify.

We passed along the main street where most of the structures were of older type with brick walls and probably ooden floors and partitions. All these buildings were tally destroyed and most of them appeared to have llapsed prior to the fire, and no wood or other burnable aterial was to be found amongst the wreckage. This ould indicate the tremendous heat of the fire. There were wo small buildings of modern reinforced concrete construc- on whose general framework seemed to be intact, but the ntents had been totally destroyed by fire.

Proceeding along the main road to the Yokohama station was remarkable that the only two buildings remaining tact, a modern type reinforced concrete and an oldshioned brick building, are side by side and show no dication of having been damaged by either earthquake fire, although they are surrounded by complete destruc- on by both.

The buildings which existed in Tokyo can be classified der five heads: (1) Native frame houses constructed prin- pally of pine; (2) small structures with brick walls and oden interiors; (3) larger Government and office buildings heavy exterior and interior brick walls, with wooden floors; (4) modern buildings of four to eight stories with structural steel frames and fireproof or slow-burning walls and floors; (5) reinforced concrete buildings of from two to eight stories with concrete floors, exterior walls of concrete, or veneered with masonry or stone. Probably at least 80 per cent. of the buildings in the city were of frame construction, 15 per cent. of brick and frame, and 5 per cent. of the remaining three types referred to above. Buildings are limited by law to a height of 100 ft.

In the area totally destroyed by the earthquake and fire all the buildings, irrespective of classification, were destroyed, the framework only of a few isolated reinforced concrete buildings remaining standing. In a small unburned area from the Government buildings near Hibiya Park to the Marunouchi district, with comparatively wide streets and a number of open spaces, containing principally massive or modern buildings of substantial construction, practically all the structures were more or less damaged by the earthquake, but only a few of them collapsed, although a number of them were burned. This area was saved from the general conflagration principally by a change in the direction of the wind, which caused the fire to turn back just before it reached this district.

Our observation of some of the buildings which remained standing was in general as follows:

Imperial Hotel.—The building was standing practically uninjured. Following the moat toward the Marunouchi district from the Imperial Hotel, the Life Insurance Co.'s office building, a modern structure, was not damaged by the earthquake and fire, although directly behind it a large three-story frame structure had burned.

Police Headquarters.—This heavy governmental type of structure had withstood the earthquake, but had been gutted by fire some time later.

Imperial Theatre.—The roof of this building, a modern structure of its type, collapsed on the first shock, and fire, which started from within, burned the whole interior, but most of the exterior walls are standing. This example shows the necessity, in earthquake zones, of strongly buttressing the side walls and practically bridging the roofs in theatres or similar structures with large roof spans. If a large number of people had been in the theatre at the time of the earthquake probably none would have escaped.

The Kaikwan.—This structure, known as the Palace Restaurant, next beyond the Imperial Theatre, was a modern steel-frame structure of six stories. The shock of the earthquake caused the outside walls and the interior partitions of the third story only to shatter and fall, leaving every steel column on that floor exposed. The lower two stories and the upper three stories appeared to be only slightly damaged. The exposed steel columns of the third floor were bent out of plumb, however, and the upper three stories were thrown on an offset of approximately 15 in. from the line of the lower two stories. The building had not been damaged by fire.

There were a number of structures beyond the Kaikwan which were only slightly damaged by the earthquake and fire. These were principally three or four stories in height, of ordinary brick construction. Nearby, the structural steel framework for a new building which was being erected had collapsed and carried down with it some 200 workmen. In erecting steelwork where earthquakes are liable to occur each floor should be riveted and sufficient sway-bracing should be embodied in the design to make the frame of the building independently strong.

N. Y. K. Building.—A new, modern, six-story structure, which had just been opened, was of structural steel with very heavy masonry and brick walls. The exterior walls enclosing the second story were fractured by the earthquake, and cracks in the wall formed a distinct X in each panel running diagonally from top to bottom. The first story and the stories above the second appeared uninjured.

Marunouchi Building.—A modern steel-frame building of six or seven stories occupied an entire block. Although the building stood, some of the outside veneer was fractured or had fallen off. Across a wide plaza from the Marunouchi Building the Tokyo Central Station and Hotel, a massive brick-and-steel structure of four stories, was not seriously damaged by either the fire or the earthquake. The Kaijo Building was a modern six or seven story office building, having structural steel frame and brick exterio walls. The walls of this building were shattered throughout, and in places had fallen to the ground, exposing the steel work. This building did not take fire. The Industrial Bank Building, probably the most modern building of its type in Tokyo, which had just been completed, the frame being either of reinforced concrete o steel (our impression is reinforced concrete) seemed to withstand the earthquake without any damage whatsoever even the large windows being unbroken.

Bank of Japan.—This structure, outside the Marunouchi district and across the canal, is of old type, wit heavy masonry walls. The fire doors and shutters were closed and most of this building seemed to be undamage by either the earthquake or fire. It is the only building of importance in the totally burned zone that is now standing in usable condition. All other structures in its vicinity including the Mitsui Building and the Mitsukoshi Department Store, were burned, but the frames of a number o modern structures of reinforced concrete type remaine standing, although the buildings had been gutted by fir and, in many cases, the exterior walls thrown down. I the greater portion of the 30 square miles of the totall destroyed area, however, few frames or walls of any description remain standing.

Fire Inquiries and Inquests

Should the City of London System be Extended ?

UNDER Fire Inquiries in the "Report of the Royal Commission on Fire Brigades and Fire Prevention, 1923, and Minutes of Evidence," reference is made to the practice in the City of London where fire inquiries are held by the coroner, Dr. F. J. Waldo, M.A., M.D., Barrister at Law, J.P. It is pointed out that it certainly seems somewhat anomalous that Dr. Waldo should be empowered at his discretion to investigate any fire occurring in the City, but should have no similar power in Southwark, where he holds the same office. (Dr. Waldo has, for several years past, suggested in his annual reports the extension of the special, local, unique City of London Fire Inquests Act, to Southwark.) The Commission cannot recommend that the coroner's functions should be extended to the holding of fire inquiries where no fatality has occurred, but that such inquiries should be conducted by persons possessing special technical qualifications in building construction, engineering, fire extinction, etc., and that for this purpose a panel of persons with such qualifications and experience, and resident, so far as possible, in convenient centres throughout the country, should be drawn up by the Secretary of State, and that the individual to hold any particular inquiry should be chosen from this panel as occasion requires. Further, that the authorities to be responsible for the initiation of the inquiry should be "(1) The Secretary of State in any case where it appears to him from information reaching him from any source that such an inquiry would be in the public interest, and (2) the county councils and the councils of county boroughs should also have power to initiate an inquiry into any fire occurring within their respective areas."

In a reservation made by the chairman, the Honourable Sir Perceval Maitland Laurence, K.C.M.G., to which Sir Maurice Fitzmaurice, C.M.G., F.R.S., consulting engineer, and formerly chief engineer to the L.C.C., agreed, it is stated: "That in cases where there is suspicion of incendiarism, promptitude of investigation is obviously of the first importance, and the powers conferred on the coroner by the City of London Act, combined with the inherent powers of his office, seem well calculated to serve that purpose. The majority of my colleagues, after full discussion, considered that as in many cases other matters—such as building materials, structural conditions, the provision of means of escape, etc.—would have to be investigated, it would be desirable to appoint an officer having special qualifications which the local coroner in many cases would not possess. In such cases, however, should there have been any fatality, the coroner would still be required to hold an inquest. In suitable cases he might be empowered to take the evidence of experts or receive the assistance, if deemed advisable, of a technical assessor. In the larger centres, at all events, he would presumably be man of general competence, good professional standing an wide experience, and something may be said in favour of th view of the majority of the Departmental Committee of 190 that it might be advisable in the first instance to pass a adoptive act, enabling any county or borough council to mak the provisions of the City of London Act operative in its ow district. The experience thus gained in the larger centre would doubtless be diffused at the periodic meetings of th Coroners' Association, and would furnish useful guidance i districts where such investigations were less frequently require

"If, on the other hand, an *ad hoc* tribunal should be constituted, and the initiation of proceedings were to depend o the discretion of the local authority, cases would occur fro time to time in which the discretion or administrative actio of the local authority itself—e.g., in granting a licence for a hotel or theatre, in providing for means of escape from factories or other buildings, in the equipment and organizatio of the fire service, or in other respects—might be called i question, and in which, therefore, there might be some disinclination to initiate an inquiry into the circumstances of th fire. Directions for such an inquiry might doubtless be give by the Secretary of State, but only on information receive which—when we bear in mind that everybody's business i nobody's business—might seldom be forthcoming; in an case, the setting up of a tribunal in such cases would probabl entail considerable and regretable delay.

"It has been proposed that every county coroner should b a full-time officer, that the small borough and franchis coroners' districts should be abolished, that the coroner shoul be a lawyer by profession, and, if possible, also possess medical qualification, and that his jurisdiction should includ inquests into non-fatal fires, and also inquiries into the cause of non-fatal road-vehicle accidents. It is on lines such as thes that, after full consideration, I have come to the conclusio that reform in this direction should proceed and the existin machinery be improved with a view to its efficient utilizatio for purposes of this nature."

Dr. Waldo stated in his evidence that the following bodies among others, were in favour of an extension of fire inquir as carried out in the City of London during the past thirty-tw years: (1) The Home Office Departmental Committee in thei report published in 1909; (2) the Coroners' Society of Englan and Wales; (3) the Associated Chamber of Commerce; (4 the Association of Professional Fire Brigade Officers; (5) th Borough of Portsmouth in one of their (General Powers) Bills (6) the Association of Municipal Corporations; and (7) th Insurance Institute of London.

Coming Events

Wednesday, December 5.

L.C.C. Central School of Arts and Crafts, Southampton Row, W.C.1.—Lecture V. "Origin and Evolution of the Ionic Order." 6 p.m.

Reading Society of Architects, University College, Reading. —"The Renaissance and Modern Point of View." By Mr. Vernon Crompton, F.R.I.B.A. 8 p.m.

Chadwick Public Lectures, Kensington Town Hall.—"Housing Standards—How they can be Raised." By Mr. A. K. Chalmers, M.F., D.P.H. (Camb.). 5.30 p.m.

Leeds and West Yorkshire Architectural Society, Park Row, Leeds.—Lecture by Professor Reilly. "New Buildings in Regent Street and the Strand." 7 p.m.

Thursday, December 6.

British Museum.—"Mediterranean Civilization," etc. By Miss Claire Gaudet. 4.30 p.m.

Northern Polytechnic, N.7.—"The Painting and Preservation of Metals." By Mr. J. Newton Friend, D.S.C.

Friday, December 7.

Art Workers' Guild, 6 Queen Square, W.C.1.—"Pinturicchio." 8 p.m.

Tuesday, December 11.

The British Society of Master Glass Painters.—Meeting at 3.30 p.m. in the Lecture Hall of the Victoria and Albert Museum —"The Eton Wall Paintings: their relation to Stained Glass and other forms of Art." By Dr. Montague R. James, Provost of Eton. The chair will be taken by the Earl of Crawford and Balcarres, K.T., P.C., President of the Society.

The Illuminating Engineering Society.—Meeting at the Royal Society of Arts (John Street, Adelphi, London) at 8 p.m. Discussion on "Some Applications of Illuminating Engineering in Practice" to be opened by Mr. Geo. Herbert and Mr. R. A. Ives.

The Architectural Association

An ordinary general meeting of the Architectural Association was held on November 26, at 35 Bedford Square, when a lecture was given by Mr. J. Alfred Gotch, P.R.I.B.A., on "The Value of Study of Old Buildings." The President, Mr. Stanley Hall, F.R.I.B.A., presided.

Mr. Gotch in his lecture, which was illustrated by lantern slides, emphasized the importance and value of measuring and sketching buildings, and incidentally the pleasure to be gained thereby. He advised everyone to do as much as they could, maintaining that what you find out for yourself remains more permanently in your mind than what you find out from books. He believed that there was nothing more useful in designing buildings than to see a model, and in ancient buildings you had most admirable models.

The series of slides shown were confined to the old buildings of this country, and were all examples which Mr. Gotch urged would be easy to sketch and measure.

At the conclusion of the lecture a vote of thanks was proposed by the President, and seconded by Mr. Arthur Keen. In the discussion that followed Mr. A. E. Willets and Mr. Lawrence Gotch spoke. Mr. Philip Tilden suggested that the City churches should be measured before they were pulled down and said that he was furiously indignant that in these enlightened times there were houses such as "Sutton Carsdale" being pulled down.

Among the forthcoming events of the Architectural Association there is a Conversazione on December 13, a student's Pantomine on December 20 and 21 (tickets for which may be obtained from the Hon. Secretary, Lyric Club), and on January 14, 1924, a lecture will be given by Professor A. E. Richardson, F.R.I.B.A.

The Institution of Structural Engineers

The Institution of Structural Engineers have moved to Abbey House, 2–8 Victoria Street, S.W.1. Telephone: Victoria 2112. Telegraphic address: "Coninst," Sowest, London.

Competition News

Proposed New Buildings for Manchester Grammar School.

The President of the R.I.B.A. has nominated Dr. Percy S. Worthington, F.R.I.B.A., as assessor in this competition.

Leeds and West Yorkshire Architectural Society.

Following are the results of the competition of the Leeds and West Yorkshire Architectural Society:—

Silver Medal for Measured Drawings.—G. A. Burnett.

Design 1.—F. Chippendale.

Design 2.—George W. Alderson.

Halden Essay Prize.—F. Chippendale.

The Society's Travelling Studentship, 1923.—F. Chippendale.

The Masonic Peace Memorial.

The special committee appointed by the Grand Lodge of England to carry out the scheme for the erection of a great Masonic temple, at a cost of £1,000,000, for the use of members of the craft throughout the country, have prepared an important report for consideration at the coming quarterly communication. The committee recommend that architects should be invited to submit in competition designs and plans for the new building. This competition is to be open to all architects, and conducted in two stages. Not fewer than ten designs will be selected from those submitted in the first competition. From these a further selection will be made of six designs, the authors of which will be invited to submit detailed plans and designs in the second or final competition. Each of the six architects submitting a bona-fide design in the final competition—in accordance with the instructions and conditions drawn up by the assessors—will receive an honorarium of 300 guineas. Three assessors will be appointed: an architect to be nominated by the president of the R.I.B.A.; an architect who is a Freemason, to be nominated by the special committee; and the grand superintendent of works for the time being. It is proposed to treat the whole of the property of Grand Lodge in and about Great Queen Street as a cleared site.

List of Competitions Open

Date of Delivery.	COMPETITION.
Dec. 10	Designs for a dining-room and bedroom furnished in the style of 1924, to form part of the applied art section of the Palace of Arts at the British Empire Exhibition at Wembley next year. Prizes to the value of £400 have been offered by "Country Life" for the best designs submitted. The Palace of Arts will include among its other interesting features a series of six decorated rooms illustrating the progress of decorative art since 1750. Two of these rooms will be designed and be furnished in the styles of the Georgian and Regency periods covering the years 1750 and 1815: two more will illustrate the standard of interior decorative art, attained respectively in 1851 and 1880. The modern rooms will demonstrate the remarkable advances made in this sphere of applied art since those dates. Competitors must be of British birth or of British parentage, and all manufactured goods to be provided must have been manufactured within the British Empire. The designs are to be considered by a special Jury of Award, consisting of: Sir Edwin Lutyens, R.A., Miss Ellen G. Woolrich, Mr. P. Morley Horder, and Mr. Norman Wilkinson. The Exhibition is to arrange for the carrying out of the prize designs under the supervision of the successful competitors.
Dec. 10	The War Memorial Committee of the Burgh of Coatbridge invite designs for the erection of a War Memorial on a site in the West End Park. The estimated cost of the work amounts to £3,000, and premiums of £75, £50, and £25 are offered for designs placed first, second, and third respectively. Assessor, Mr. James Lochhead, F.R.I.B.A., Hamilton. Apply Town Clerk. Deposit £1 1s.
Jan. 1	The Imperial War Graves Commission invite architects who served during the war as members of the Military, Naval, or Air Forces raised in any part of the British Empire to send in their names for admission to a competition for the designing of memorials to the missing to be erected by the Imperial War Graves Commission at Bethune, Armentières, Cambrai, and Soissons. Applications for particulars of premiums and other regulations from those desiring to compete are to be addressed to the Secretary (Works Branch), Imperial War Graves Commission, 82 Baker Street, London, W.1, and must be received there not later than January 1, 1924, and must be accompanied by a statement giving particulars of the war service and professional career of the applicant and clearly stating which of the memorials it is desired to compete for. Deposit, two guineas for each set of plans. The Assessor is Sir Aston Webb, K.C.V.O., P.R.A.
Jan. 5	Memorial Building and Tower, Dudley. The Council of the County Borough of Dudley invite Competitive Designs from duly qualified Architects for the "Brooke Robinson Memorial" Building and War Memorial Tower comprising a public hall, coroner's court, small museum, and a new sessions court. Premiums £300, £200, and £100. Mr. W. Curtis Green, A.R.A., F.R.I.B.A., Assessor. Conditions of competition, together with a copy of the site plan, can be obtained on application to Mr. E. W. Tame, Town Clerk, Town Clerk's Office, Dudley, with deposit of £2 2s.
Feb. 1	Proposed Concert Hall and Public Baths for Newcastle-upon-Tyne. Premiums £750, £250, and £100 respectively are offered, the first premium to merge into the commission or other payment to be made to the author of the successful design. Assessor, Mr. Alfred W. S. Cross, M.A. Apply, with deposit of £2 2s., to Mr. A. M. Oliver, Town Clerk, Town Hall, Newcastle-upon-Tyne.

R.I.B.A. Council Meeting

Appended are extracts from the minutes of the last Council meeting of the R.I.B.A. :—

Town Planning.—It was decided to circulate a memorandum on the subject of architects and town planning to all Members and Licentiates and to the allied societies, with a request to the latter that they should use their influence to bring it to the notice of the local authorities in their districts.

Housing Fees.—A committee was appointed to draft a new scale of charges applicable to housing work under the Housing (No. 2) Act, 1923.

The R.I.B.A. Library.—A committee was appointed to consider and report on the question of better and safer accommodation for the R.I.B.A. library.

Appointment.—Mr. Digby L. Solomon, F.R.I.B.A., was appointed to represent the R.I.B.A. on the Sectional Committee on Cement of the British Engineering Standards Association.

Professional Conduct.—A member was censured and suspended for six months for quoting fees lower than those prescribed by the R.I.B.A. scale when applying for appointment as architect to a public authority.

The Franco-British Union of Architects.—It was decided to make an annual grant of £20 to meet the expenses of the British section of the Franco-British Union of Architects.

Membership.—The applications of four candidates for the Fellowship and two candidates for the Associateship were approved.

Reading Society of Architects

The third of the course of four lectures on architecture arranged by the Reading Society of Architects in conjunction with the Reading branch of the Workers' Educational Association was given before an appreciative audience in the large hall at University College, Reading, last week.

The chair was taken by Mr. W. Galt Millar, F.S.I., the chairman of the executive of the Reading Society of Architects.

The lecture, which was on the Mediæval Point of View, was illustrated by lantern slides.

The lecturer, Major H. C. Corlette, O.B.E., R.B.C., F.R.I.B.A., began his address by referring to the evidence of a continually developing tradition of building through all periods of history. It was to be seen in the relationship of Greek and Roman ideas of design to one another, and of both to earlier Egyptian forms. He then showed that all mediæval building was related to Roman work either by direct influence or through the work of the Byzantine builders. But the mediæval point of view grew rapidly away from both these influences and moved on to the use of new methods unknown before. It was not apparently a conscious view but rather an attitude of mind, an instinct of freedom that enabled them to make discoveries. They were practical hard-working men not moved by weak emotions, but stirred by energy of mind and body to overcome new problems of structure by every and any scientific device they could use. But in this spirit of enterprise, of experiment, they attacked all questions whether of government, of administration, or of building. By doing so they discovered the practical superiority of the pointed arch over other forms as a means by which to solve the special difficulties presented to them. In the result they produced all the wonderful varieties of Gothic architecture. But this Gothic work, which in itself was an expression of their sense of freedom, of liberty, was used under organized and approved restraints. In the northern parts of Europe they built as the climate required and the materials available allowed, and in the south they allowed the same considerations of sense to influence them in their work. Geography left its impression on their architecture. They never copied others who had built before them, and they never imitated their own successes.

The influence of the mediæval point of view was not confined to a period from, say, the tenth to the fifteenth century; it extended especially in England, till the end of the sixteenth century and later, and during the latter part of this period the Gothic mind was at work experimenting, with wonderful success, on the new and more modern problems of planning and design. Gothic architecture was not a thing of religious impulse or feudal demands, not a thing of traceries and cusps, or any other particular details. It was more an attitude of mind that attacked questions of building with sound sense, converting all difficulties of plan or construction into something usefully beautiful. Tradition among the craftsmen was its backbone, co-operation among them gave it power. The craft guilds were a school of workers. They were, in fact, a workers' educational association, and they lived and learned, not only by books and words, but by the things they could touch and see, always searching for ideas of perfection by means of action and adventure, experiment, and enterprise. The mediæval point of view produced achievements which have never been equalled in beauty nor surpassed in brilliance of intellectual power.

The Master Carvers' Association

The annual general meeting of the Master Carvers' Association was held on the 23rd inst. at the studios of Mr. W. Aumonier. The president, Mr. W. D. Gough, having occupied his position for three years, vacated the chair, as per rules, and Mr. Lawrence A. Turner was elected in his place. The following were the results of the other elections: Vice-President, W. D. Gough; hon. sec., W. Aumonier; assistant hon. sec., W. Whitworth Aumonier; hon. treasurer, J. D. Daymond; committee, Messrs. Bentham, Bradford, Broadbent, Frith, Hook, Morton, Southwick.

The hon. sec. read the report for the year, and the hon. treasurer presented the audited accounts.

Complimentary speeches were made by the retiring president and the president elect, and a vote of thanks to the officers and committee terminated the proceedings.

The Master Carvers' Association, though naturally only a small body, is representative of the principal employers of carvers in London, and the harmonious relationship between the masters and the men is highly creditable to both parties. Any employer of stone carvers who is not already a member of this association is invited to apply to the hon. sec., Mr. W. Aumonier, 84 Charlotte Street, Fitzroy Square, London, W.1.

It cannot be impressed too much on employers that they have obligations to these associations. It is through these trade organizations that all negotiations with the men are conducted, and it must be to the employers' benefit that their interests should be co-ordinated under one standard. We may justly say the employers are proud of the friendly fellowship that has always existed between them and their assistant craftsmen. The master carvers are holding their annual dinner on February 7, 1924, particulars of which can be obtained from the hon. sec.

The Late Mr. C. E. Clayton

Mr. C. E. Clayton, who died at the age of seventy years, at his country residence at Edburton, on November 27, was senior partner in the firm of Clayton and Black, architects, of Brighton, with which town he had been associated for over half a century. He designed the ornate buildings for the famous casino scheme formulated by the late Sir Joseph Lyons in connection with Sir William Forbes and the late Lord Bessborough. He was also consulted by the Town Council in the preparation of the plans for a grand opera house on the site of the Aquarium, and he was engaged in a similar capacity by the promoters of last year's scheme for the conversion of the property into a motor-coach garage with roof garden. The concert hall on the West Pier is another example of his architectural work. Mr. Clayton was a magistrate, and took a personal interest in social movements.

The Week's News

Mansfield Housing.

During the next three months the Mansfield Urban District Council will commence to build 100 houses.

Proposed New Bridge for Hull.

Hull Corporation propose to build a new North Bridge over the River Hull at a cost of £214,000.

More Houses for Wrexham.

The Wrexham Town Council have decided to apply to the Minister of Health for permission to erect fifty houses.

The First Paris Skyscraper.

A skyscraper is to be built to be used for dwellings on the Rue des Vignes and the Rue des Marronniers.

More Houses for Norwich.

The City Council have instructed the Housing Committee to prepare and submit plans for the building of 1,000 houses.

Sheringham Town Hall Scheme.

The Sheringham Urban District Council are to consider the question of erecting a town hall and reading room.

A New Skyscraper for New York.

A new type of skyscraper will shortly be erected in New York City. Eighty stories high, it will reach 1,100 ft. into the air.

Death of Two Dutch Architects.

Mr. De Bazel, a young and promising Dutch architect, died suddenly on November 28 while in the train on the way to the funeral of his friend, the Dutch architect, De Klerk.

The late Mr. H. Lloyd.

The death took place at Leamington on November 26 of Mr. Hawley Lloyd, a well-known Midland architect. He was seventy-four years of age.

A New Dock for Seaham.

A new dock, costing £160,000 (a large part of which will be spent in wages), is to be built at Seaham, by the Seaham Harbour Dock Company.

New Offices for Westminster.

On a site in Artillery-row, Westminster, close to the Army and Navy Stores, a building containing modern offices, which will cost nearly £100,000, is to be erected.

The Condition of the Church of All Hallows.

Cracks have appeared in the City Church of All Hallows, London Wall. The vestry of the church, semi-circular in form, is built upon one of the bastions of the Roman Wall of London.

Swinton Housing.

The Swinton Urban District Council have received the sanction of the Ministry of Health to the erection of another fifty houses, and also to a loan of £5,000 for the £100 per house subsidy.

Keswick Improvements.

Keswick Urban District Council have decided to erect a new public lavatory at an estimated cost of £1,494, and to apply for a loan of £5,000 for the erection of additional Council houses.

Middlesex Arterial Roads.

Middlesex County Council have received the consent of the Ministry of Health to borrow £566,513 for a period of five years in order to continue the arterial road works in the county.

No Widening of Waterloo Bridge.

At the last meeting of the London County Council, Mr. E. L. Meinertzhagen, chairman of the Improvements Committee, said they could not widen Waterloo Bridge as the load on the foundations could not be increased.

New Bridge for Sunderland.

For rebuilding Wearmouth Bridge, over the River Wear, in the centre of the town of Sunderland, the Corporation have approved plans at an estimated cost of £300,000. It will have a single span of 300 ft., and be 90 ft. wide.

Town Planning in Japan.

It is understood to be the intention of the Japanese Government to put up temporary buildings to house the people of Tokyo and Yokohama and to prepare at leisure for the actual rebuilding by working out a great scheme of town planning.

Proposed New Baths for Bromley.

The Bromley Town Council have decided to have detailed plans prepared of a new open-air swimming bath. The bath will be 150 ft. long and 60 ft. wide, 46 dressing boxes will be provided for males, 37 for females, and 8 for children. The cost is estimated at £8,680.

Wortley Housing.

The Wortley Rural District Council have decided to spend £2,000 on additional land at Ecclesfield for housing. Sanction has been received to borrow £14,700 in order to erect 36 additional houses in the area—22 at Mortomley, 10 at Ecclesfield, and four at Tankersley.

Proposed New Baths for Wrexham.

A public inquiry was held at Wrexham by the Ministry of Health into the application by the Corporation for sanction to borrow £5,870 for the purposes of an open-air swimming bath and eight additional slipper baths. Dr. Edwards, the Medical Officer of Health, said it was highly essential to provide these proposed additions, as he calculated that 70 per cent. of the houses in Wrexham were without baths.

Fleetwood's Foreshore Improvement Scheme.

The Fleetwood Urban District Council have decided to go forward with the foreshore developments, which include an open-air bath scheme. There will be seating accommodation round the bath for about 1,300 people. Six more grass tennis courts will be put down in the new area, and a ladies' bowling green. The cost for carrying out the scheme is estimated at about £38,000.

No. 223 Regent Street, London.

All the locks, floor springs, and silver oxidized door furniture used in the new premises, No. 223 Regent Street, London, for "Isobel," the well-known dressmaker, were supplied by Messrs. Charles Smith, Sons & Co., Ltd., of Birmingham and London, to the special design of the architects—Messrs. Yates, Cook, and Darbyshire. The shop-front was illustrated in our issue for November 21.

The Mansion House Window Discovery.

A little while ago, during repairs at the Egyptian Hall of the Mansion House, it was discovered that behind a mirror rather a fine window existed, looking in the direction of Walbrook. It was decided to dispose of the mirror in order to get more light into the hall, which is now used to a greater extent than formerly for afternoon meetings, and the City Corporation are now proposing to fill the window with stained glass.

A Sowerby Bridge Improvement.

Mr. W. H. Collin, Inspector for the Ministry of Health, held an inquiry at Sowerby Bridge respecting the petition of the Sowerby Bridge Council for sanction to carry out two improvement schemes. They are seeking to clear Stansfield Court and district, also Old Causeway and district, of some forty houses, including a beerhouse, the Pear Tree Inn, on the ground that they are unhealthy areas. They also seek power to erect forty new houses, the whole scheme to cost £20,000.

London Improvement Schemes.

Among new schemes for improving London are the following:—The Strand: Purchase of premises to permit road widening. Cost, £178,000. Paddington: £100,000 for new swimming baths in Queen's Road. Greenwich: £86,000 new plant at generating station. Southwark: £22,000 pump machinery to remedy periodical flooding. The Transport Ministry proposes to construct by-pass roads round West Wickham and Farnborough, and a new road to link Shooters Hill with the Dartford by-pass road. The work will cost £850,000.

A "Garden City" for Bradford.

A miniature "garden city" at Four Lane Ends is in prospect under the house-building scheme of the Bradford Council of Social Service. The plans for the first 104 houses have been completed, the lay-out has been approved by the Corporation, and it is hoped that all these houses will be completed by the end of next June. If the scheme is carried out in its entirety about 350 houses will be erected. The first part of the scheme, providing for the 104 houses, involves an estimated expenditure of about £50,000. Mr. William Illingworth is the architect.

A New Hertfordshire Residential Area.

Situated in the heart of the Hertfordshire uplands, Brookmans Park Estate, which has an area of some 1,000 acres, will soon become one of London's residential quarters. Only 13 miles from King's Cross, the district is well served by rail, and is bounded on one side by the Great North road. It is expected that 3,000 private houses will be built, but it is proposed as far as possible to preserve the natural beauties of the site. Recreation grounds and a golf course will be laid out. The houses will, on an average, have a frontage of approximately 40 ft.

New Baths for Paddington.

The foundation stone of Paddington's new public baths at Queen's Road was laid by the Mayor of Paddington, Alderman H. V. Kenyon. Alderman W. G. Perring (chairman of the Baths and Washhouses Committee) stated that the site was purchased in 1913 for £20,000, but the war interfered with the scheme. Work was commenced in May of this year. The scheme provided for two swimming baths, sixty-two slipper baths, a public laundry, and clubrooms. On the eastern frontage a public hall would be built. The total cost of the scheme would be over £100,000.

The British Empire Exhibition.

The hours of opening and closing the British Empire Exhibition, which starts at Wembley next April, have now been fixed. The exhibition grounds will be open from 10 a.m. to 11 p.m. except Sundays, and exhibits will be on view from 10 a.m. to 10 p.m. No exhibitor will be required to keep any machinery moving or full staff in attendance at stalls after 8.30 p.m. from Mondays to Fridays inclusive, or after 9.30 p.m. on Saturdays, but otherwise exhibitors will be expected to keep their exhibits fully on show between 10 a.m. and 10 p.m. In regard to sales, exhibitors will be permitted to arrange their own hours between 10 a.m. and 10 p.m. subject to the provisions of the Shop Hours Act.

The Ware Street Area.

Writing to the Shoreditch Borough Council, the London County Council state that great difficulty is experienced in the clearance of the Ware street area and other insanitary properties owing to the prevailing house shortage, and some alternative accommodation will be required before active operations can be commenced. Seventy-two cottage flats are being specially prepared for this purpose on the Council's housing estate at Tottenham, and as soon as possession can be obtained of the premises the Ware street site will be cleared and tenders obtained for the building. The Office of Works has notified the acceptance of a tender of £10,285 8s. 10d. for the erection of flats in Pritchard's Road, to complete the Teale Street housing scheme. The tender provides for the building of nine 3-roomed flats and eleven 4-roomed flats, giving accommodation for 100 persons, on a site from which seven houses are to be removed.

Extension of the Redhill Police Orphanage.

The new chapel and Victory Memorial School of the Provincial Police Orphanage, Redhill, opened recently by the Prince of Wales, was erected from the designs of Mr. J. A. Souttar, architect. The new chapel takes the place of the old prayer room—a temporary structure burned down in 1922—and is of plain design to be in keeping with the surrounding buildings. It has been placed on the west side of the main buildings, and will form what is in effect the west side of a quadrangle. A bronze tablet has been erected at one side of the platform to the memory of the "Old Boys" who gave their lives in the great war. The Victory Memorial School, known as "Frenches," was taken over from the War Department, and has been remodelled, the plans being first approved of by the Education Department. The ground floor contains a large hall, from which access is obtained to five good class rooms, master's room, cloak room, etc. The basement floor contains a cooking instruction room, scullery, pantry, cellars, cloak rooms, etc. On the first floor there is the master's house, and on the second floor further class rooms, &c.

A World-Famous Monument.

Sir Banister Fletcher, in a lecture on the Parthenon, Athens, at the Central School of Arts and Crafts, reviewed the historical events and the final victories of the Greeks over the Persians, 480 B.C., which led to the building of this world-famous temple. Pericles, the great administrator, determined to give material expression to the national exultation by erecting a votive temple to the champion goddess, Athens, who had given them the victory, and architecture and sculpture were called to the service of the State. The Acropolis rock at Athens no longer wanted as a military fortress, became the enclosure sacred to the gods. Sir Banister referred to the fine crystal marble, from which it was possible to call forth the delicate and exact forms so specially characteristic of this marvellous of all Doric temples. Thus could architects and sculptors create the harmony and symmetry of design in column and architrave, roof, and pediment, moulding and ornament, frieze and metope, colour and sculpture, which go to the making of the Parthenon. By the aid of lantern views the lecturer described the details of the delicately-carved frieze of the Panathenaic procession, which vibrated with Athenian life. Knights and musicians, priests and youths, matrons and maids, cavalry and chariots, magistrates and gods, all took part in presenting the new "peplos" or robe to the maiden goddess, guardian of their city—a ceremony vividly brought to mind by this sculptured panorama, which gave added value to the building, now in ruins, which spoke but dimly of its former glory.

The Doric Order.

Sir Banister Fletcher's lecture on the origin and evolution of the Doric Order of Greek architecture, was a tale in terms of architecture of the colonizing activities of the Greeks in the sixth and fifth centuries. Sir Banister discussed the probabilities as to the origin of the Doric Order. Had it a lithic or a wooden prototype? Was it to be referred to the Egyptian rock-cut tombs of Beni-Hazan or to the producers of the wooden hut? All we knew was that the builders found certain forms which suited their ideas and needs, and that they used them in combination and in one common material, the result being a perfection of form which was still recognized as a thing of beauty and a joy for ever.

The Garden City.

In his seventh town planning lecture at Birmingham University Mr. William Haywood, F.R.I.B.A., said that Mr. Ebenezer Howard's conception of the modern garden city was in the same class of ideals as Plato's "Republic," St. Augustine's "City of God," More's "Utopia," and such projects for social reformation as those of Andreæ and Swift in the seventeenth and eighteenth centuries, and Bellamy, Butler, Morris, and Buckingham in the nineteenth century. It differed from all those, however, in having surmounted the difficulties of practical demonstration; an achievement greatly aided by the pioneer work of Mr. George Cadbury at Bourneville, and of Lord Leverhulme at Port Sunlight; both of which communities were initiated about 1887–8. The first garden city of Letchworth was inaugurated in 1903.

The term "garden city" he said has been much misunderstood by the public; which appeared still to be unaware that towns like Letchworth and Welwyn—true "garden cities"—were self contained and fully independent; standing upon land owned jointly by their citizens (or held in trust for purchase by them at their convenience); that these cities were artificially limited to an ultimate population of between 30,000 and 50,000 inhabitants, and that they were restricted in area by a permanent zone of open country, forming an agricultural belt for the health and mutual convenience of the grower and buyer of market produce. The term "garden city" therefore stood for a policy rather than for a type of planning. A policy designed to oppose the evils of overcrowding, the exploitation of land values, and the growth of great cities, by substituting fully-detached, self-supporting, and healthy communities as satellites of great towns, or as independent cities.

A garden suburb, unlike a garden city, was an integral part of a larger community, and therefore subject to control by those outside its boundaries. It was also more or less dependent on this larger community for certain social, educational, and occupative facilities; it might be simply a residential or dormitory area for the parent city, as in the case of Hampstead, or it might be practically self supporting, as at Bournville, which, save in the matter of separate administration of the Letchworth type, approached the garden city condition very closely.

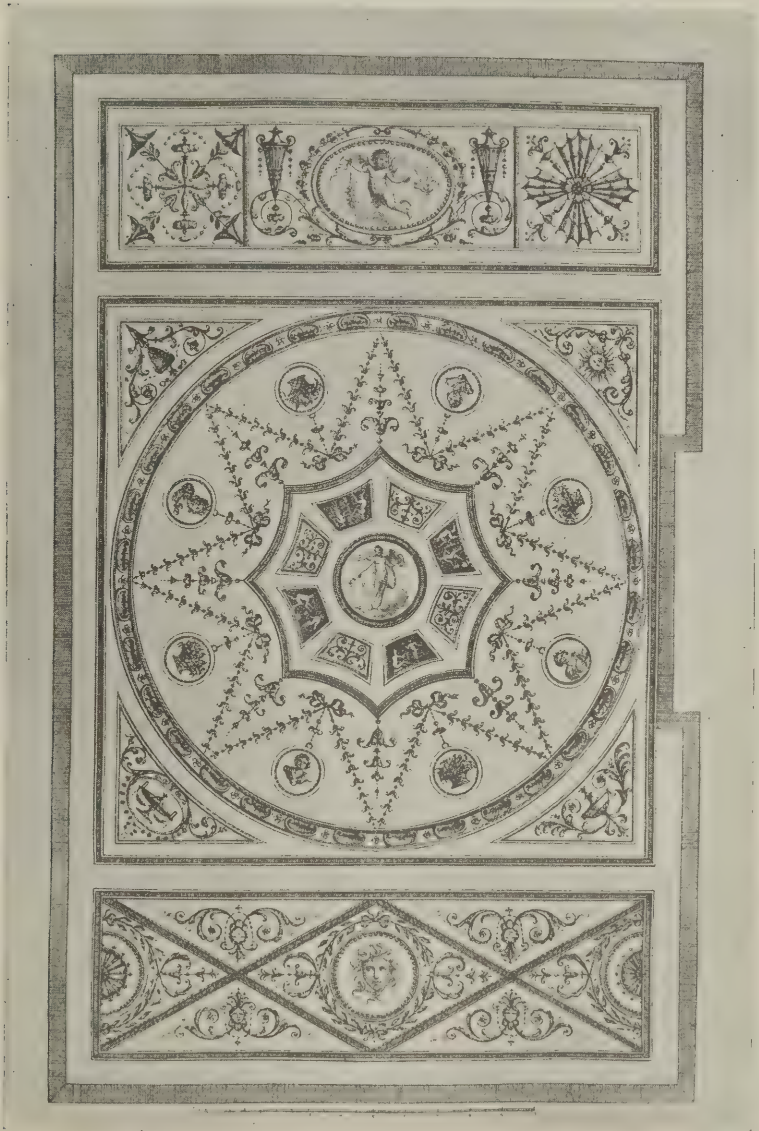
A resemblance between the two kinds of town growth described above, he said, which was apt to mislead the public, was the method of planning for houses and roads which was common to both; this method was now common to all town planning schemes. The special quality distinguishing true garden cities lay in the adoption of Mr. Ebenezer Howard's policy of administration.

Wednesday, December 12, 1923.

Vol. LVIII. No. 1510.

THE ARCHITECTS' JOURNAL & Architectural Engineer

With which is incorporated "The Builders' Journal."

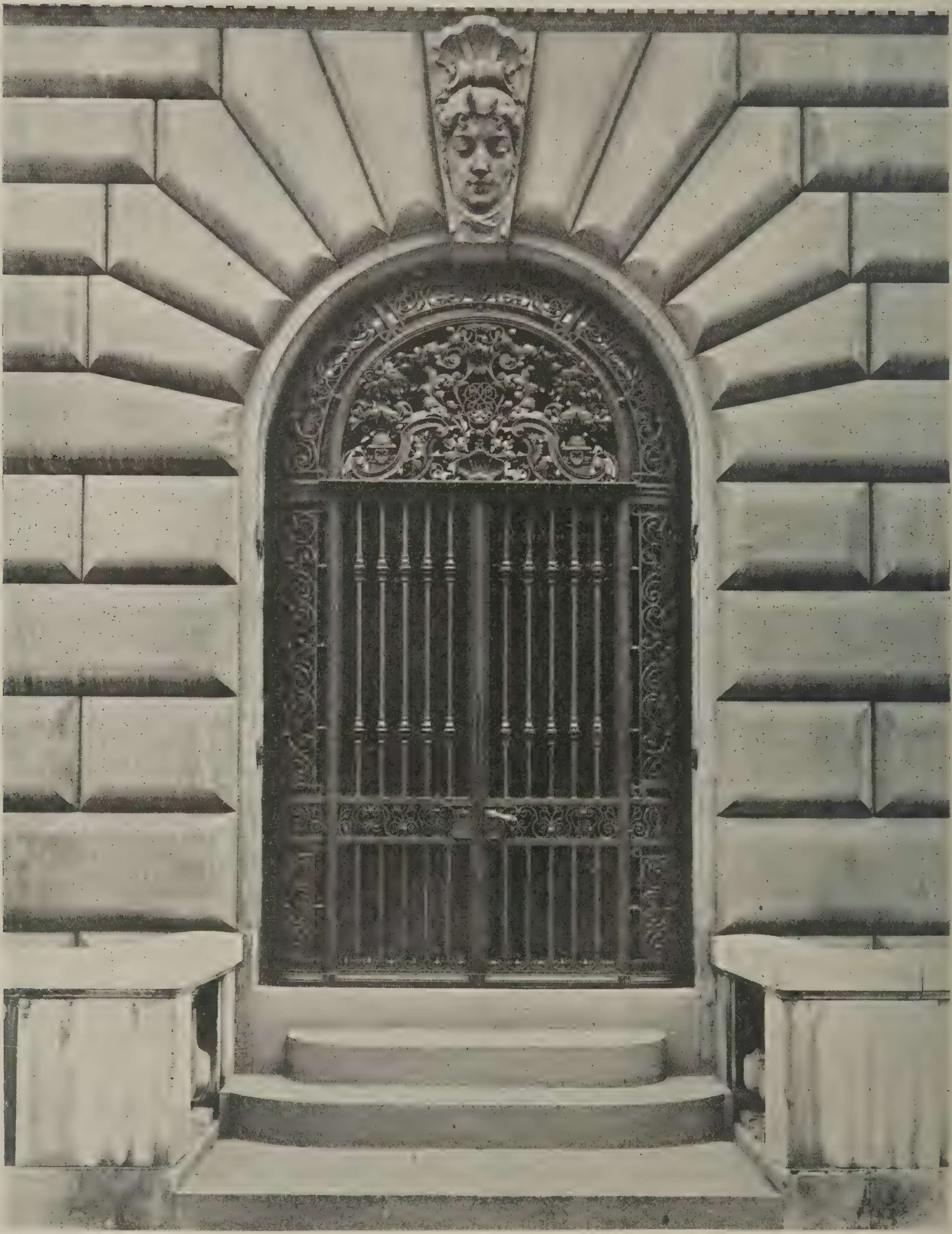


A DESIGN BY PERGOLESI.

27-29 Tothill Street, Westminster, S.W.1.

Current Architecture. 212.—The American Women's Club: Detail of Entrance

Detmar Blow and Fernand Billerey, Architects



Number 46 in Grosvenor Street is the Headquarters of the American Women's Club, their premises embodying parts of three previous houses on the same site. Other illustrations appear on page 863 and onwards.

THE

ARCHITECTS' JOURNAL

27-29 Tothill Street, Westminster, S.W.1.

Wednesday, December 12, 1923

Volume LVIII. No. 1510

The Lesson of Stratford-upon-Avon

If ever there were a town which demanded careful treatment on account of precious associations that town is Stratford-upon-Avon. Indeed, it is doubtful if there be any other town in Europe which has become so completely consecrated to the memory of one man. The nearest approach is to be found at Bayreuth and Weimar, but neither Wagner's nor Goethe's associations with these towns have transformed them into quite the same centres of world-wide interest, except on certain specific festival occasions. Stratford is, therefore, a perfect specimen of that particular type of town.

For some time past there have been vague and disquieting rumours of unpleasant development in and around Stratford, and a thorough investigation and report on the situation has been overdue. At last it has appeared, and it is an extremely interesting and instructive document; as, however, a review of this report was published in our columns last week, we do not propose to deal with it in detail here. It may, however, be instructive to consider the particular requirements of towns of this nature.

It must be remembered that this interest in Stratford-upon-Avon is a comparatively recent development. Fortunately, in the intervening years very little change had come over the town which still, for the most part, remained seventeenth century in character. But both the two succeeding centuries have left their slight deposits, and as both were utterly unselfconscious, these deposits have shown no consideration for the prevailing character of the town. Fortunately the work of the eighteenth century, although entirely different in character, is, nevertheless, so reticent that its proximity to the older work does not offend; not so the nineteenth century. Had, however, the town possessed different physical characteristics, it is extremely probable that all traces of its sixteenth and seventeenth century existence would have been obliterated as, indeed, they are nearly everywhere else. Little by little, then, additions and developments have taken place in Stratford, and in the natural course of events would continue to take place without any particular regard for what has gone before. But within the last few years a change has occurred, brought about largely by the more rapid dissemination of knowledge and by increased facilities for travel, and Stratford has become definitely associated with Shakespeare; and with this has come about the realization that its contemporary character should not only be preserved, but also, here and there, judiciously restored. Yet, nevertheless, Stratford is a living town, and cannot be content to remain a kind of perpetual mausoleum to the memory of Shakespeare. This, then, is the problem which must occur in Stratford and similar towns. How to unite, with a preservation of the unique association with the past, the quite justifiable demands of a continually progressive contemporary activity

A little contemplation will show that not only has the problem arisen recently in Stratford, but it is in itself an essentially modern problem; that is to say, that although similar conditions have always prevailed, there has never before been any attempt to preserve the past for the sake of an association. Such an idea, in fact, seems never to have been entertained. The whole subject has a very interesting philosophical aspect. In the past man acted in perfect confidence and, as it were, without hesitancy; although he was the outcome of all that had gone before, he did not consciously dwell on this fact, and he did not consciously revere or respect the past. It is the custom to hold Gastrell, of Stratford, up to obloquy for his destruction of New Place, yet this is hardly just; for even so recently as 1759 the idea of respecting the past, or of permitting its remains to interfere with a present enterprise, was never entertained. During the last few years an entire change has come over our outlook in such matters. The prevalent habit of period decoration, the preference for antique furniture, when our own age can, and does, produce furniture every bit as good, is all part of this same attitude.

It is no use, then, looking for guidance in the past to help in the solution of the difficulty. If the problem is new, so, too, must be the solution. One of the results of this study and respect of the past is a capacity for superficial imitation of it, and thus a suggestion is frequently made that any new buildings in Stratford should imitate, at least externally, the existing work of Shakespeare's time. This, however, represents too violent a swing of the pendulum—from ignoring the past to imitating it. The aim should rather be to ensure that new buildings shall be carefully designed to harmonize with their surroundings, just as—to take a recent and well-known architectural example—the Middlesex Guildhall is designed to harmonize with Westminster Abbey, while yet fulfilling modern requirements, and without being imitative. The need for that kind of treatment in a small town like Stratford with its very peculiar flavour is far more urgent than in Westminster.

But a disruption of the Shakespearean atmosphere will come about not only as a result of inharmonious treatment of new buildings, but from the erection of the wrong kind of new buildings. In a town of this kind, therefore, there is a particular need for zoning. Fortunately the recent impetus given to town planning has acquainted most people with the desirability of zoning generally. As has already been pointed out, the fact that Stratford did not develop during the last century is an indication of its unsuitability for factory purposes. There would be little likelihood of any town, which had for so long been immune, becoming suddenly commercialized. A slight development in this direction, however, is to be expected, and this must obviously be most strictly controlled. We hear so much nowadays of the claims of trade and commerce for prime consideration that we are apt to lose our sense of values. Here is, without doubt, a case where commercial enterprise must be kept in its place, for it is not of the first import.

Uncontrolled residential development, however, would be nearly as disastrous as uncontrolled commercial development. After a lapse of nearly a century the road is once more becoming the main means of entering a town, and first impressions, which during the interval have been gleaned on emerging from the railway station, are now obtained from the approach roads, and it therefore becomes important to make town approaches dignified and attractive. To permit a town to be enclosed by a wide belt of either monotonously similar or of ill-assorted villas is a sure way to destroy all beauty in its approach. This, too, should be prevented. Apart from such main considerations, there are a host of minor matters now generally referred to as town amenities; these, too, require strict control. How is this control to be ensured and how exercised? It can be ensured by including the town in a town-planning scheme, and fortunately, under the latest Housing Act, it is now possible to include the built-up portions of a town to which special architectural, historic or artistic interest attaches. And it can be exercised by the formation of a local committee which, acting in collaboration with the town council, shall carefully examine every proposal which affects the town, such a committee to include men of distinction in the arts; in fact, by a method of control similar to that which has frequently been urged in these columns. This is the lesson of Stratford-upon-Avon.

The Condition of Waterloo Bridge

A few weeks ago we called attention to the condition of Waterloo Bridge. During the past few days the subsidence of one of the piers has become so noticeable that the London County Council has undertaken an immediate inspection, for which purpose scaffolding has now been suspended over the side. The public will receive with relief the assurance of the Council's Chief Engineer that the bridge is safe. It is of course well known that settlement has been going on for years; the only cause for immediate disquietude is that the process should have suddenly quickened up. The result of the present effort to ascertain the cause of this settlement will be awaited with profound interest by architects and engineers alike. The condition of the bridge lends extra weight to the demand, made in various authoritative quarters, for more bridges across the Thames. Waterloo Bridge may be safe for years, but the possibility of its becoming unsafe at some unascertained moment in the future cannot be regarded with any feeling but that of grave concern. Suppose, for the sake of argument, that Waterloo Bridge had to be closed. The great volume of traffic that crosses it would be at once diverted to its nearest neighbours, which are Westminster and Blackfriars Bridges. This would mean that the whole of central London would be without direct cross-river communication. Chaos and congestion would inevitably result, and upon Westminster and Blackfriars Bridges would be flung a weight of traffic that they ought not to be called upon to bear. Such a contingency ought to be removed from the sphere of even remote possibility, and the only way to do it is to build more bridges.

Sir Edwin Lutyens's Bridge Suggestion

Sir William Bull, in a recent letter to "The Daily Telegraph" on the subject of the proposed rebuilding of Lambeth Bridge, mentions the difficulty of getting a bridge that would satisfy the Thames Conservancy in respect of the height and width of arches above high-water level and yet not be too steep in its approach gradients. To make an easy ascent from dead level would mean starting a long way back on either side. In the case of Lambeth Bridge the adoption of such an expedient would mean, on the practical side, a circuitous approach for traffic, and, on the æsthetic side, the blotting out of the view of Lambeth Palace from the west. Sir William recalls that he put this little problem to Sir Edwin Lutyens who, with characteristic quickness, said: "Why need you make the bridge straight across? Why not make it a curve? It will lessen the length, ease the gradients, and leave Lambeth Palace untouched. I can see in my mind's eye a bridge that will be a semi-circular background to, and enhance the beauty of, the range of buildings on either side, viz., the Houses of Parliament, St. Thomas's Hospital, and Lambeth Palace." It is an idea that is full of novel architectural possibilities, and, if Lambeth Bridge is to be rebuilt, it might well be considered as a practical solution of the problem. "A semi-circular bridge across the Thames at Lambeth, with easy gradients from the Embankment Roadways." What a stimulating "programme" for architectural students!

The R.I.B.A. and Building Trade Unemployment

Mr. Arthur Keen, in a letter to "The Times," calls attention to the dearth of skilled men in the building industry. The situation is a very peculiar one. While as many as 112,000 building trade workers are stated to be out of employment, there is, as Mr. Keen points out, and as we stated in our leading article last week, a very serious shortage of skilled workers. "Bricklayers, carpenters, and masons are scarce," says Mr. Keen, "and I have just heard of a large contract in the London area for which plasterers are actually being picked up here and there in Scotland and brought to London." Mr. Keen deduces from these facts that unemployment must be mainly among labourers, though some of it is explained by lack of skill in the mechanics. In other words, large numbers of men, among them many who, through the war, were deprived of the opportunity of learning a trade, are without any skilled equipment for earning a living. It is a very serious state of affairs, socially and industrially, and the stubborn attitude of the trade unions towards the problem does nothing to alleviate it. We are glad to learn from Mr. Keen's letter that the R.I.B.A. has set up a committee to study the matter. Architects and builders in co-operation should be able to devise means of curing what is admittedly the building trade's greatest disability.

A Song of the City Churches

Mr. Squire has, in the current number of "The London Mercury," a poem on the City churches, entitled "A New Song of the Bishop of London." It consists of four verses, each with a rollicking chorus. Here are the first verse and chorus:—

Sir Christopher Wren looked out on the dire
Remains of the fire,
Ashes and mire:
And he said: "I feel a distinct desire
  To build it all again.
A town has gone and a town shall rise
Noble and strong for our children's eyes,
A whole new beautiful London lies
  In my very inventive brain."
He said: "It's a job I must not shirk.
But work
Like a Turk
Till I've built a kirk,
Wherever an ancient kirk did lurk
  Before the fire began."
So he stood them up a score
Or more
(Not knowing the Bishop would think him a bore),
Wherever a church had stood before,
  According to his plan.

Chorus.

But the Bishop of London will pull them down,
Pull them down, pull them down,
For he isn't a sentimentalist,
But a practical business chap.
He will roll up his sleeves and tuck up his gown,
Put pulley and pick to Wren's renown,
And cart the churches out of the town
  And sell them all for scrap.

Modern Craftsmanship. 5.–Thatch

By ALFRED H. POWELL

"Romuleoque recens horrebat regia culmo."
Virg. Æn., Bk. viii, *l.* 654.

THE thatched roof, together with the wattled fence and the mud wall, are three of the most ancient building survivals. It was from thatch that the form of covering of the early Lycian ombs was derived. It appears on Trajan's column repreenting Dacian dwellings, and reed huts appear in primitive Egyptian drawings, so that we may think of it as having been commonly used "everywhere" from Iceland to Egypt. Astonishing as its discovery must once have been, it still erves many purposes; a permanent, if humble, witness to he great originators of building craft. But however humble in material, the "stroo-dak," or straw thatch, hould have a high place in our estimation as having given us the noblest type of the steep northern roof. For thatch, if it is to endure, must be able to rid itself quickly of snow or rain, and it was only by pitching it steep that its perishable strength could be made use of to take serviceable part n permanent building. The understanding and skill that o early in the history of building saw the possibility of hatch and learnt how to use it belongs to the workers, and t is not the least on the long list of their inventions and chievements.

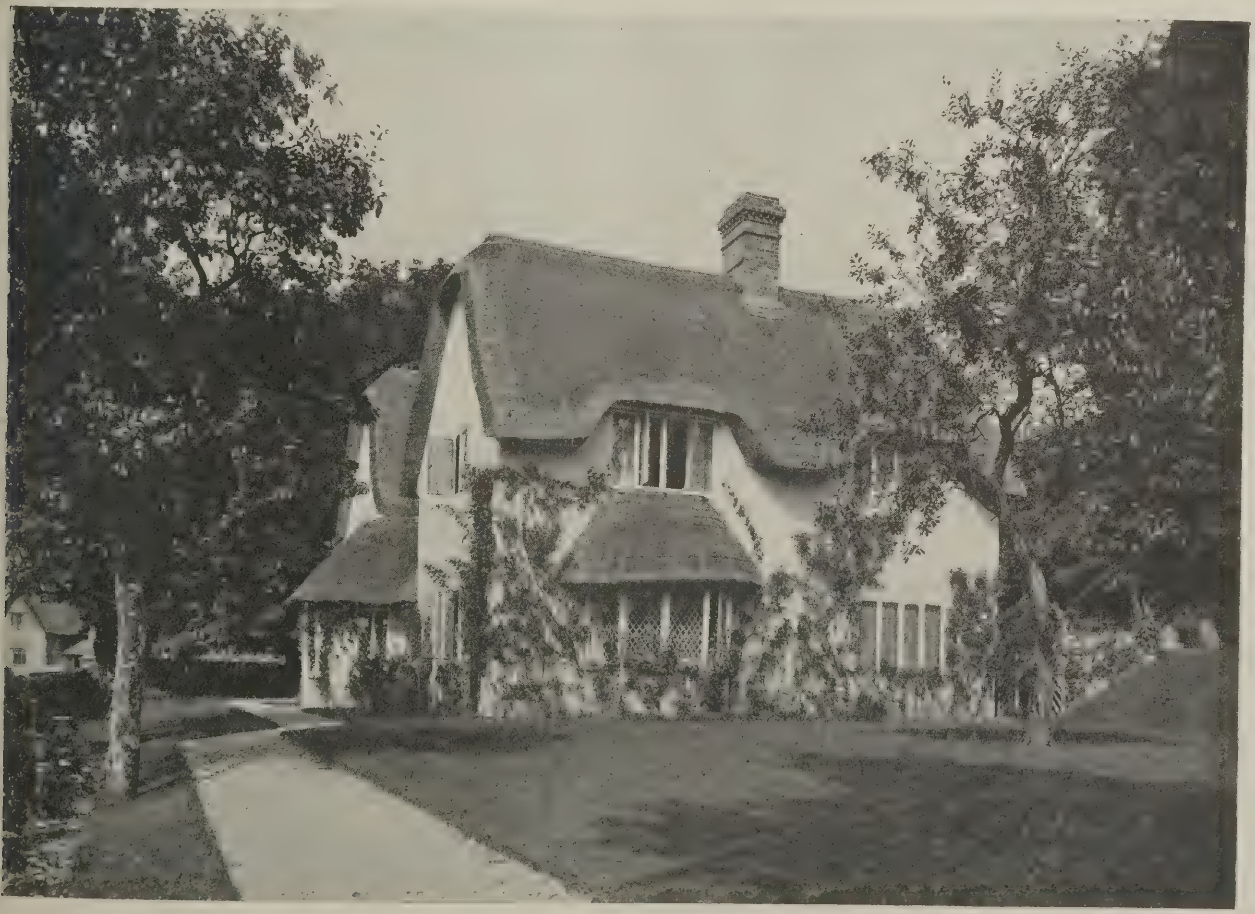
Thatch, though familiar to us all, appealing to us by its beauty as almost a part of Nature, is yet, in many districts, becoming a lost art. Few are those who can now do it, as it should be done, and, outside the craft, still fewer uspect what careful and curious knowledge goes to the making of a well-thatched roof.

For many people the disabilities of thatch have been perhaps too much emphasized, and its abilities not enough. It is warm and cool. When settled down and solid the danger from fire is not serious, there being no draught possible inwards or outwards to encourage flames. I have known a smithy near Cambridge upon which the sparks had fallen in thousands daily for seventy years without damage; and of a thatched house on fire in which the thatch refused to burn, finally falling upon and extinguishing the burning ruins. Moreover, at this present time it is among the least expensive of good roofing materials.

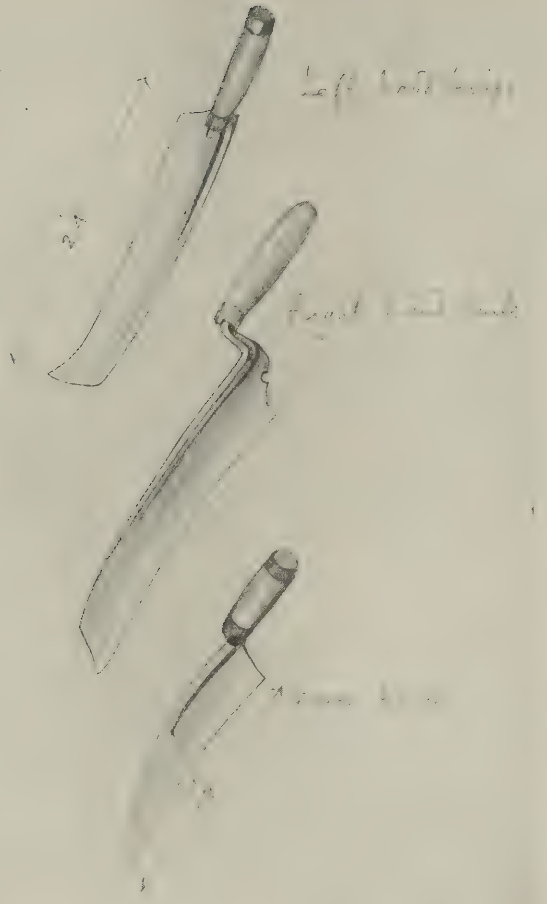
Notwithstanding all that has been urged against it the thatched roof has kept its hold upon our imagination, standing as it does for a visible link between us and our remote ancestors.

The word thatch itself is some indication of the extent and prevalence of the work. The original sense of "covering" conveyed in it is found in Greek, Irish, Welsh, Sanskrit, Lithuanian, Dutch, German, Anglo-Saxon, English; and it seems possible that in all these, to which we might add Latin, the material was understood to be straw or reed, while in Germany, the Netherlands, Scandinavia, Iceland, and England "thatch," "dach," "dak," or "thak," meant always what we mean by it to-day. Thatching is an aboriginal craft, and as we might expect has its own strange terminology, varying with district, dialect, and materials.

Thus, "boltings" or "covings" (bundles of prepared straw), or "threeves" (of prepared heather), or "fathoms" (of prepared reed) are carried on to the thatcher's ladder in



THATCHED COTTAGE AT HEALE, NEAR SALISBURY, WILTS.
DETMAR BLOW AND FERNAND BILLEREY, ARCHITECTS.



"TWO OR THREE KNIVES."

a "flail," "nave," "scratch," "dogs," "nyle," or "groom," in each case a kind of rack filled with straw that can be left stuck into the roof and handy for use.

From his "boltings" the thatcher draws out his "reed," "elms," "yelms," or "halm," lays them in place, and ties them with withes of osier, of dog-tree, of hazelin, or more commonly with marline.

Permanent roof thatching, according to some thatchers, should be done in "gangs," i.e., in horizontal bands or layers round the entire roof, "keeping it going," as the saying is, thus, from eaves to ridge. "Gangs" may also be carried up diagonally, the work being started at the right-hand eaves corner.

Rick thatching is done vertically in breadths of about 2 ft. alongside the ladder. These breadths go by the name of "stulches" or "stelches," "flows" or "yams," and are not suitable for house-thatching, because in time there develops between every such stulch a furrow for the water.

The thatcher pegs his work down with "spekes," "spars," "buckles," or "peikles," which are made from hazel sticks about 3 ft. long sharpened at both ends, and then twisted at the centre and folded up so as to form a long staple. These staples are put over long binders of thin rod and are driven into the thatch by a "bat" or "shuttle." This is a pointed bat, not unlike what is used in the game of "trap bat." Its use as a shuttle occurs in the work of repairing old thatch when it serves to lift up the straw while fresh reeds are, as it were, "woven" in under.

A "driver" and "comb," "rakes" of varying length, and two or three knives make up the remaining apparatus for thatching. "Thatching crooks" are small iron hooks for driving into the backs of rafters when repairing an old roof, so that the new work can be tied to them where plastered ceilings make tying round rafters impossible.

As to the meaning of thatchers' words one may make a few perhaps hazardous suggestions. "Stulch" may be A.S. stealc = steep, a word also used for the side pieces of a ladder; "marline" is from Du. "Marren," to moor, and "lijn," a cord (cf. "marline-spike," used for splicing rope).

"Yelms," "halms," "yams," "elms," may be cognate with Latin "calamus," a rush, given also by Theophilus as the word for leads in window making; we still call these "cames."

"Peikle" is Yorkshire for a hay-prong, and so for "speke" or "buckle," with its double point.

"Stack prod" is a word used by Yorkshire thatchers, but for what implement I do not know.

A "flail" is in Devonshire a rush basket of the "fish-basket" shape.

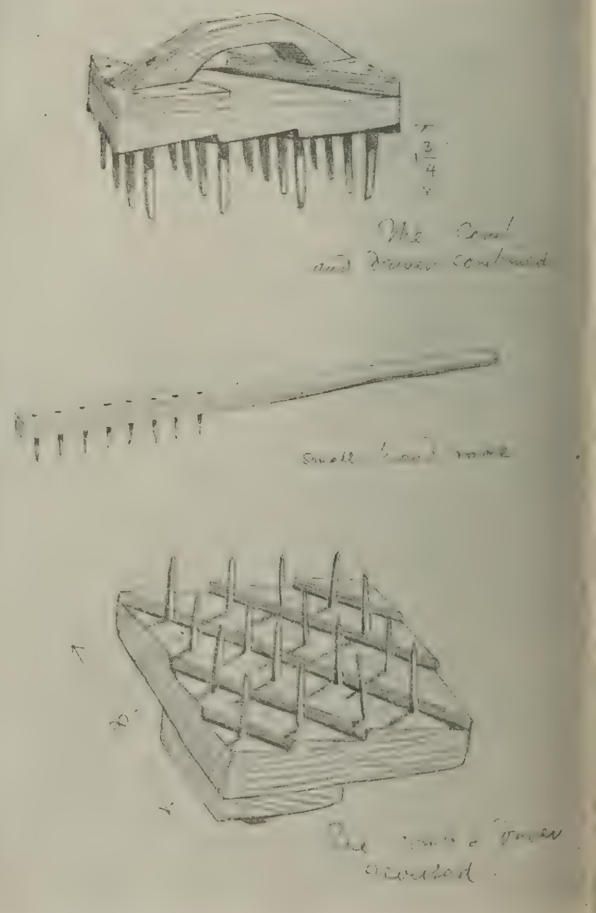
A "fathom," originally the 6 ft. stretch of a man's arms becomes a measure for a bundle of reeds.

To come to the work itself; straw thatch when used as a permanent roof-covering whether it be of fenland reeds, or wheat straw or of rye-straw should leave only the extremity of the halm or stalk exposed to the weather, much as the undisturbed fur of some animals in which the tips of the separate hairs alone are visible. This is managed by laying the halm at a flatter pitch than that of the rafters, so that about a quarter of an inch only of the ends of the straws is exposed, the bulk of them being preserved from the weather to become in time a compact mass of dry thatch for protection and warmth.

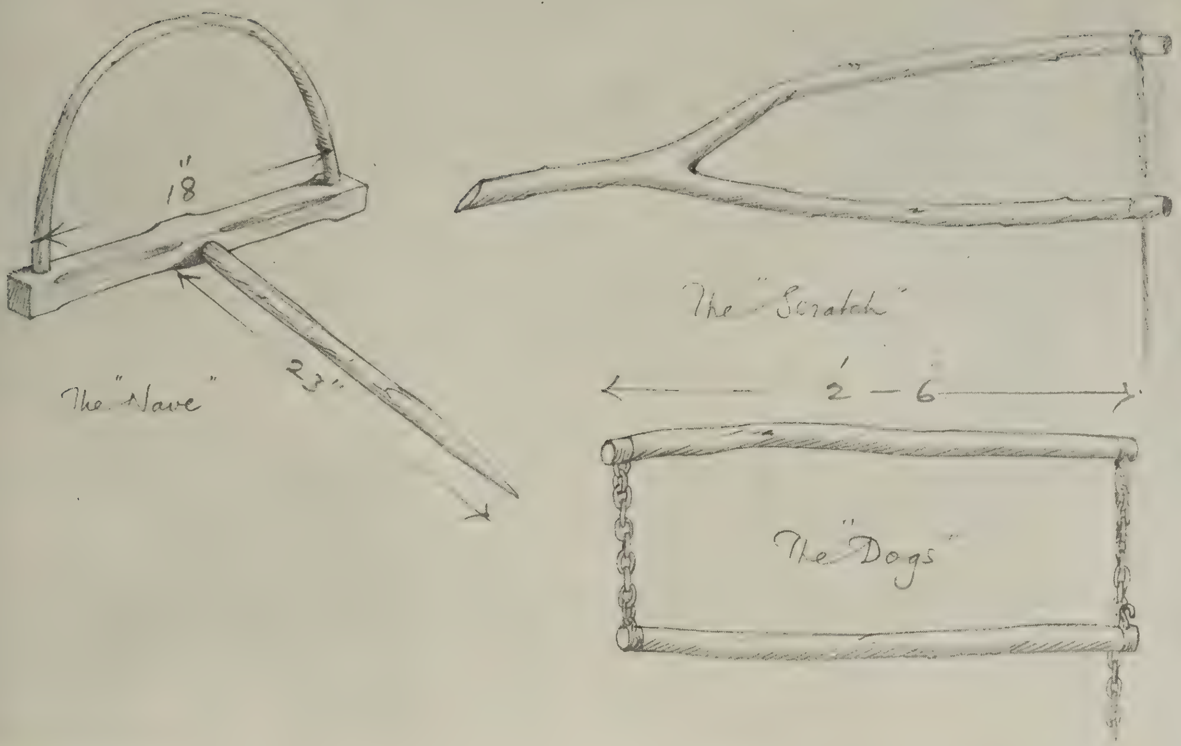
Bearing in mind the slightness and perishable nature of the straw there are a few very essential points which should be secured in good thatching :—

1. The halm must be clean of leaf, stiff and unbruised.

2. The pitch or slope of the halm must be, as stated above, flatter than the slope of the rafters (about 30 deg in a roof of 50 deg.).



COMBINED "DRIVER" AND "COMB," AND "RAKE."



"NAVE," "SCRATCH," AND "DOGS."

3. The work must be tightly pressed and fastened down to the rafters.

To obtain the first a good house thatcher will select his aw (rye-straw is better than wheat-straw), reap and esh it by hand. In Somerset he will even cut the ears separately. He will avoid leafy halm because it makes final raking and combing difficult, and causes too much aw to come away in that process. It also tends to lead wet into the body of the thatch.

The present year is a bad one for thatching owing to this ect in last year's straw.

The second point is easily secured, and for the third it very necessary to have some efficient way of holding the aw down on to the timber framework while it is being d. I have not seen it used in this country, but in Holland y use a bent iron rod, hooked at one end and flattened the other so that it can be hitched under a rafter. It is laid r the straw to be tied, and then knelt upon at the flat-ed end, thus getting the leverage of the thatcher's ght on to it, leaving him both hands free for tying.

The best "tying" is tarred three-ply hempen cord—ally called "marline." Other tying has been of withes sted into thongs or even of straw rope, but these are y suitable for temporary work like rick thatching.

he ties are made with the help of a steel needle 25 in. g and with the eye in the forward end of it. The tie uld always go under the rafter, not under the lath only, separate ties are better than continuous sewing.

thatched roof that has been well laid and well tied ely needs to be spiked and banded, as is often seen on amental thatch. Indeed, the best workers would rather use this since it must interfere with the escape of the during rain.

When "spikes" and bands are used, the "spikes" or ickles" should be driven a little upwards into the thatch they act as a channel for leading water into the roof.

he proper length of the straw boltings is about 3 ft. y are carried up on to the roof as required, and from m the thatcher pulls his handfuls and lays them, making at intervals.

When all is laid, the ends of the straws are driven upwards with a "driver," which brings the surface of the roof into general order, the final smooth finish being done with the knife. The knives (see accompanying drawings) are made from new scythe blades, the larger ones about 24 in. in the blade and turned up a little at the tip to avoid their getting caught in the thatch. There are right-handed and left-handed knives, as the thatcher has to work both ways from his ladder.

The small knife is made from the tip of the scythe blade, and is used to cut the eaves and verges. All have to be very sharp to make a successful finish to the work. Then there is a short billhook for cutting the spekes and sharpening their points.

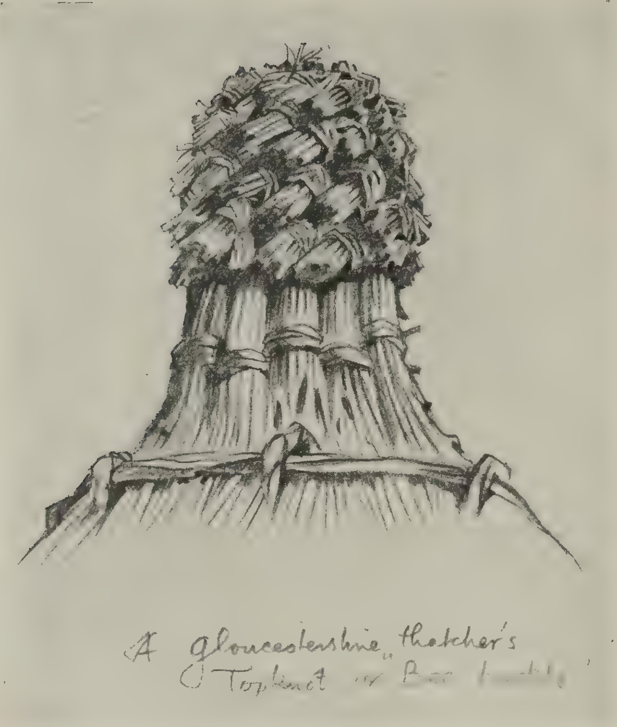
In other days roof thatching was begun upon a foundation of rooty turfs—cut with a hollow turf cutter so that when laid closely over the roof their edges would overlap. Then each handful of thatching halm was given a half hitch at the top or thin end, and this knot being set in a "thatching iron" (a small forked iron rod) and pushed in under the turfs, formed a kind of anchorage, and the subsequent weight of the completed thatch held the work firmly in its place. Such thatching well tied in addition made an enduring roof.

When all the straw has been laid and the driver and knives have given it the proper finish the roof should appear close-cropped and even, with straight verges and straight eaves, perfectly undercut—the eaves level and sharp edged, the verges also sharp edged and cut back to the ends of the overhanging laths or to the face of the gable.

The verges may overhang at their outer edge 12 in. or 15 in., the straw towards the gable end being laid in a diagonal position to secure this.

Dormer windows, whether gabled or hipped, or of the eyebrow form, and also the points of junction with chimney stacks, should be constructed and finished with the greatest care. They are the points of attack that will first be discovered by rough weather, and in their sound beginning and sharp-edged finish lies much of the external character of a thatched roof—its stamp of workmanlike beauty.

Thatch customs vary in every county. In Norfolk the spear grass of the fens—the strongest and best of our



A "TOP-KNOT": GLOS.

thatching materials—has produced a special usage with special names and habit of working.

In Yorkshire we find the work done sometimes with ling on a straw basis. In Sussex they can thatch with chips, the residue from their hoop and hurdle making. In Somerset and Dorset, working with straw, they keep still to a high standard of characteristic and finished beauty. One or two more notes will end what I have to tell.

The eaves and the ridge both need to be specially hard and tight. In the first, the straw should be tied close to the rafter feet, and, as it were, "sprung" down over a large eaves lath. In the second, horizontally laid yams or boltings are used for filling, and the outer thatched covering of these i laid up to the ridge from each side of the roof and left jus crossed (much as the fingers of folded hands would stand upright), or else the ends of the topmost reeds are drawn sideways and coiled, as the work proceeds round long, con tinuous rods, thus forming a stout straw rope along th ridge which is tied to the ridge piece. I have seen in Franc that they sometimes make a trough along the ridge, fill i with soil or turfs, and plant dwarf iris in it, presumabl for the sake of its hard matted roots, but surely also as a remarkable finish at certain times of the year. This metho will be found most often when thatching is used as wal coping.*

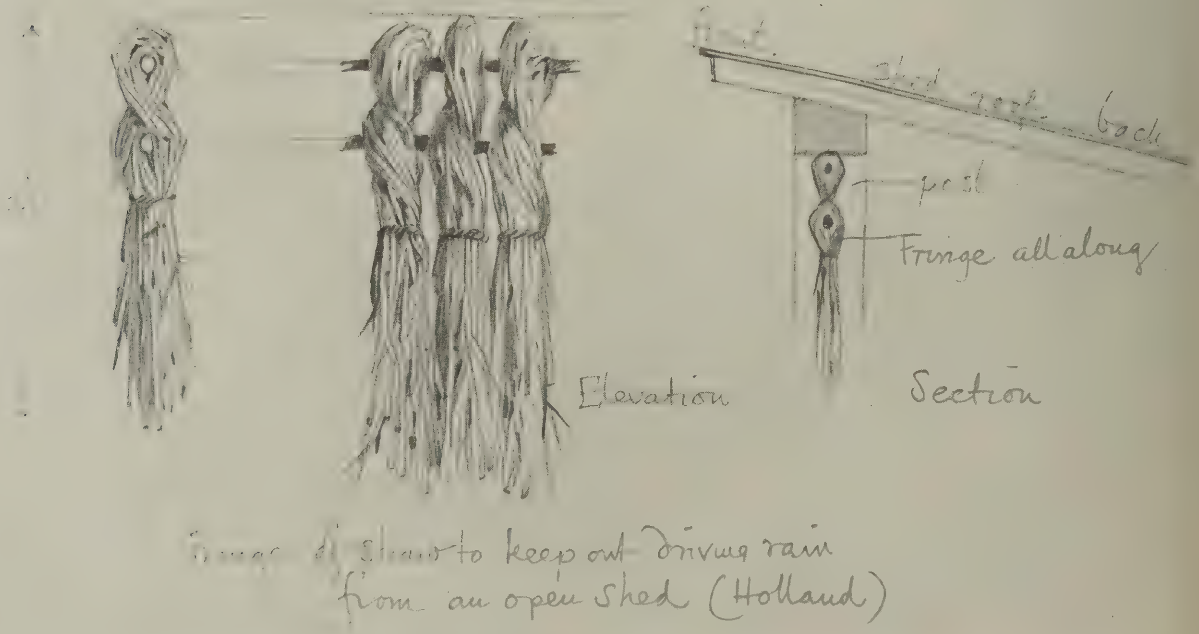
One of the many advantages belonging to a thatched roo is that it can be made to cover and protect almost an shape the carpenter can devise, and with no difficulty The beauty of a thatched roof is only increased by thu putting it to its fullest power of usefulness—pushing it ou over a staircase or hunching up the ridge to get mor height in an attic.

It is impossible to convey in words what lies in work That is to be learnt by doing, but my excuse and hope in setting down these notes about this most interestin builders' craft is that here and there a student or two ma be found willing to turn for a time from office stools to a least a healthier and more absorbing occupation than tha of making drawings for others to work out. Who can sa that were but two to join together and learn this work i might not be the beginning of a more effective invention i architecture, moving the sap in at least one branch of it t fresh growth? Thatchers are too rare in England, and ther is work for many more if they could be found or made Possibly in some counties scholarships in thatching migh be offered. The disuse of the work has caused much hardly won knowledge to disappear, and proper training by expert would bring back to the work the esteem it deserves bu has largely lost.

---

* "Everyone may have seen, upon thatch roofs, how peasants form a large roll mud, in which they insert coarse fleshy plants to maintain the earth and prevent i being washed away by rain. The origin of ornamental ridges is to be found in th naïf procedure." This note from Viollet-le-Duc and also that referring to the roo of the Early Lycian tombs was given me by Professor Lethaby.

[The previous articles in this series appeared in our issue for Jan. 10, Feb. 7, April 25, May 2, and Oct. 3.]


Shed roof back
post
Fringe all along
Elevation
Section
Fringe of Straw to keep out driving rain
from an open shed (Holland)

THE DUTCH METHOD OF "FRINGING" TO KEEP OUT DRIVING RAIN.

The American Women's Club

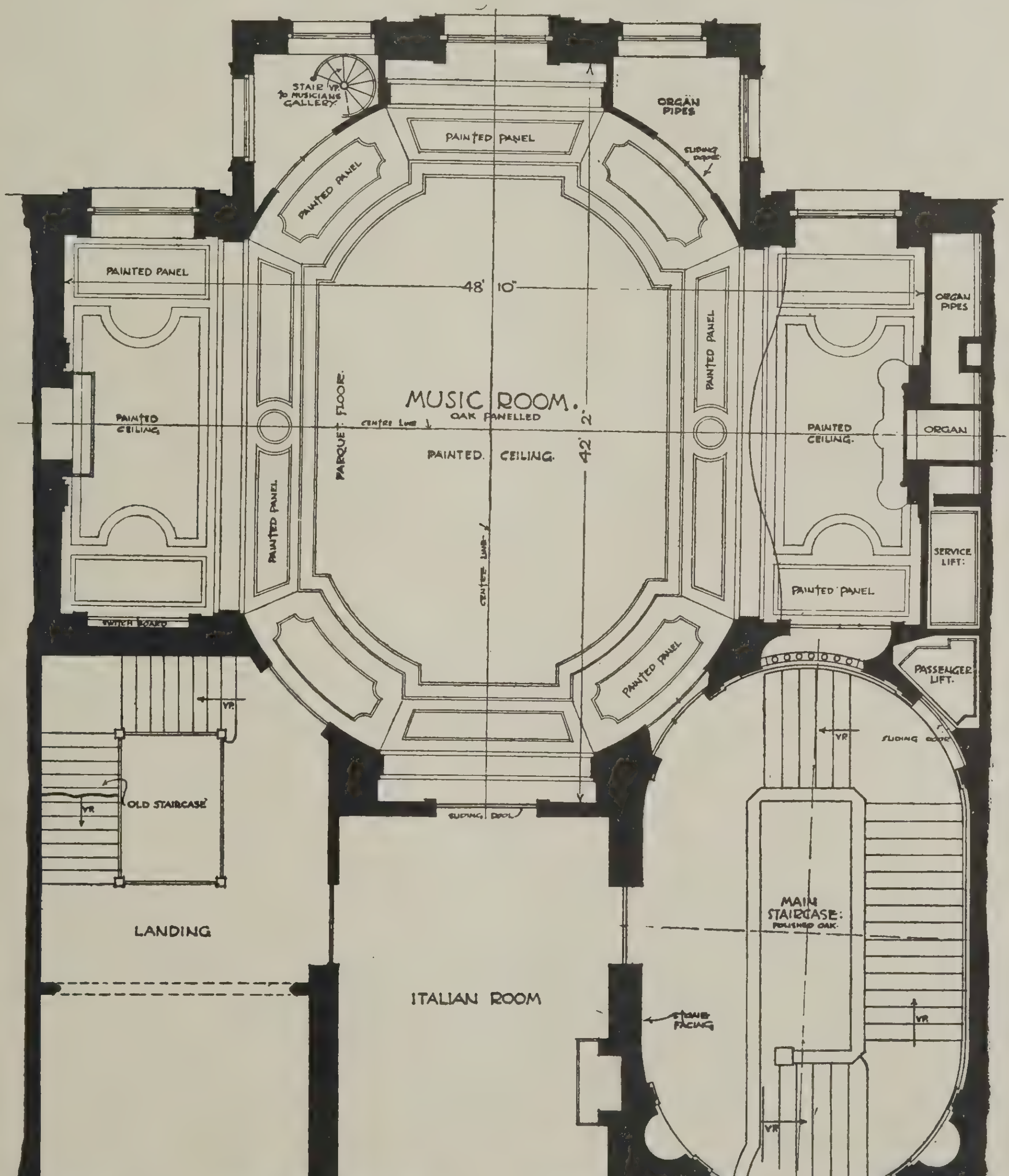
(No. 46 Grosvenor Street, W.)

DETMAR BLOW and FERNAND BILLEREY, Architects

THE present house embodies within its structure parts of three previous houses on the same site. When the last alterations were started, two of the houses had already been converted into one, d the last operation had for its main object the addition the third house. Many of the interior decorations formed rt of the first alteration.

Messrs. Detmar Blow and Fernand Billerey's work consisted mainly in the embodiment of the third house, the entire rebuilding of the Grosvenor Street front and the garden front, the formation of a new main staircase, the creation of a large music-room as the main feature of the reception-rooms on the first floor, and several alterations and additions to the minor reception-rooms, bedrooms, studies, nurseries, etc., garden and the garden house.

The scale of the exterior treatment was inspired by that

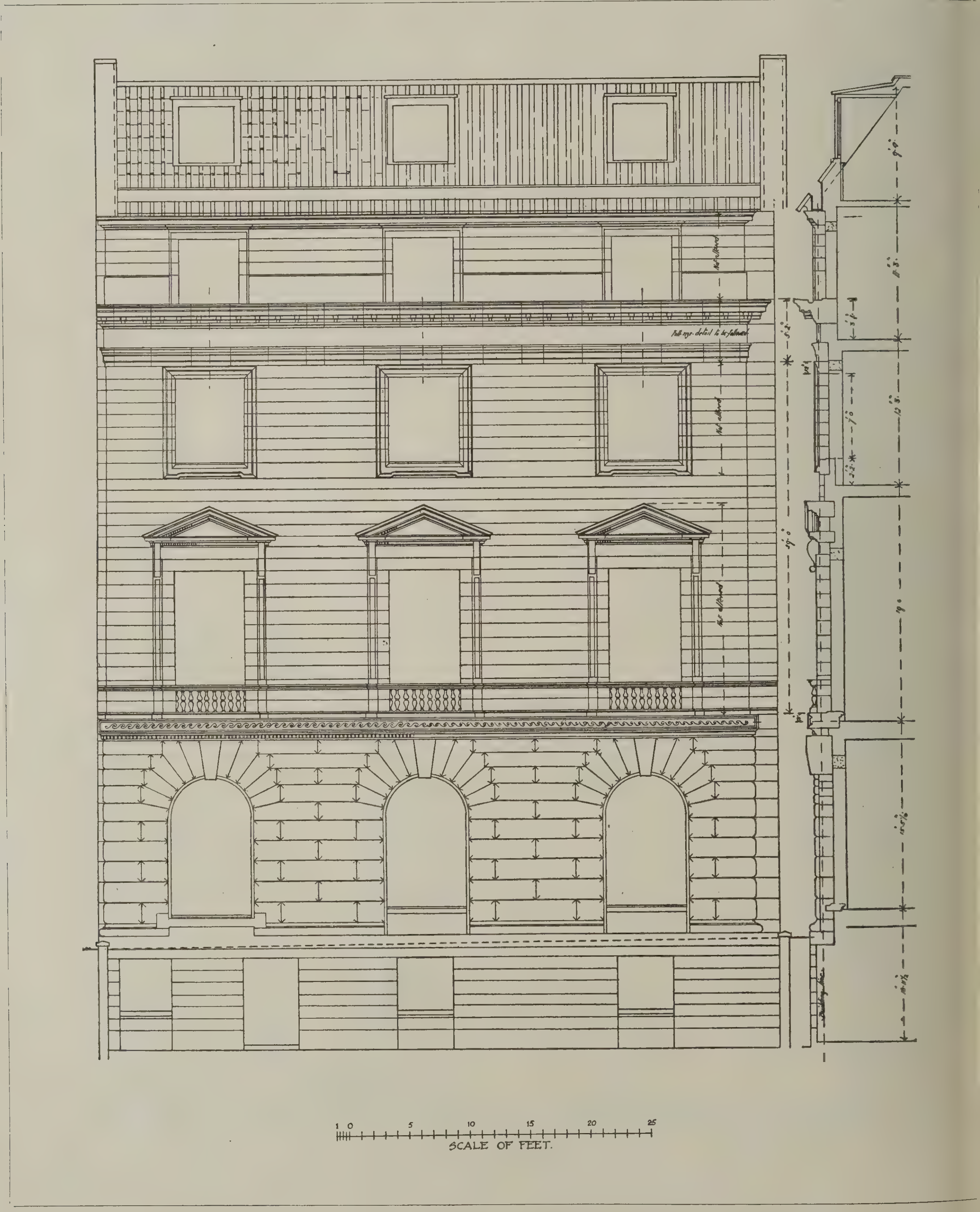


FIRST FLOOR PLAN

of the Florentine Palaces, and, as desired by the owner, the different parts of the interior were treated each in a style recalling that of different periods and countries, the main staircase being of Venetian inspiration and the music-room French Louis XIV.

The music-room, which is in Austrian oak, was carved after the models provided by Monsieur Madeline, the ornaments being prepared for gilding, chased up, gilt and burnished by Parisian artists directed by the decorator Messrs. Carlhian-Beaumetz. The figures on the painte ceiling are the work of Monsieur Tastemain and Monsieu Bremond, and the ornaments and architectural parts ar by Monsieur Jobbi-Duval. The organ is by Messrs. J. W Walker and Sons.

The contractors for the structural work and many of th interior decorations were Messrs. Holland and Hannen an

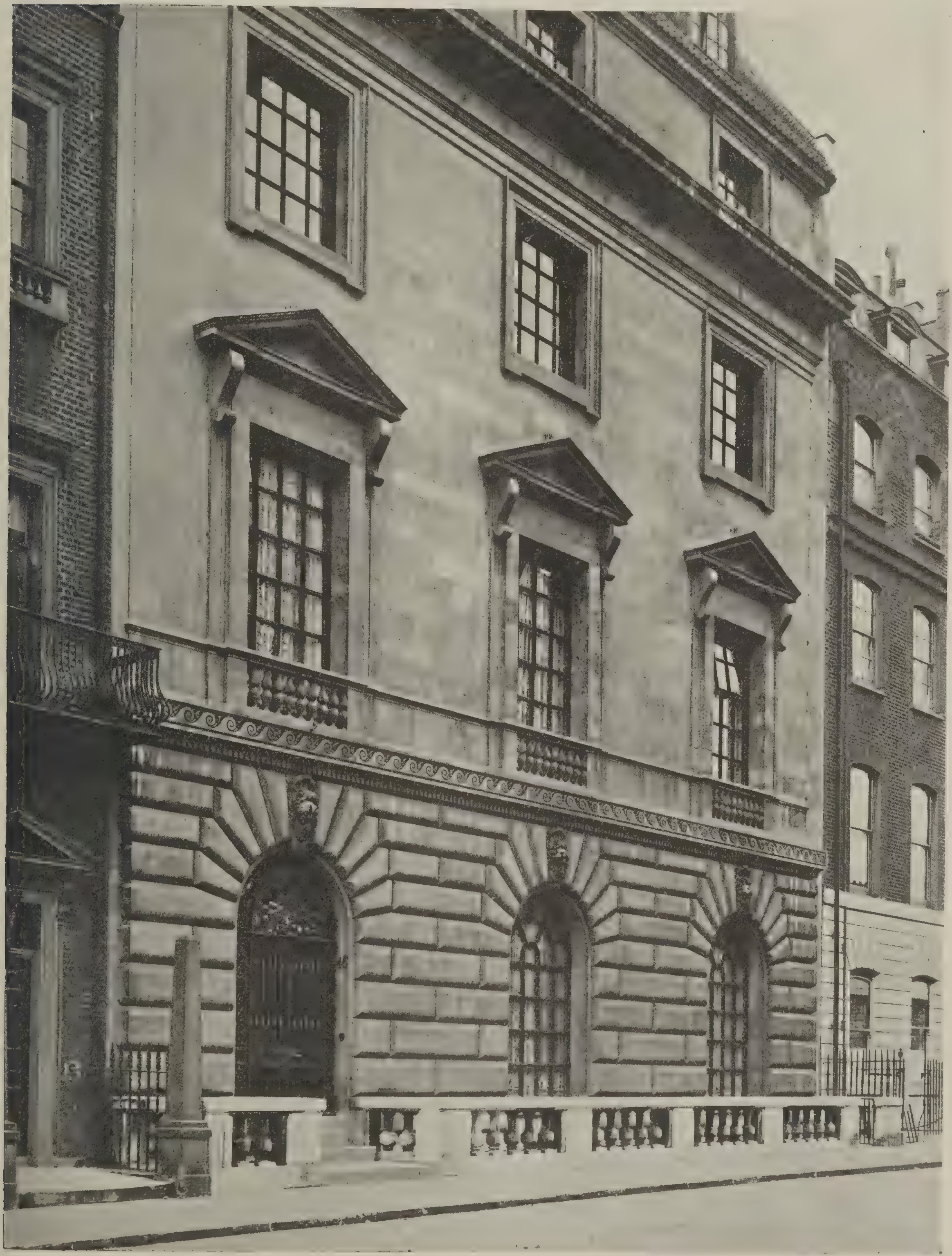


THE AMERICAN WOMEN'S CLUB, 46 GROSVENOR STREET: FRONT ELEVATION.

DETMAR BLOW AND FERNAND BILLEREY, ARCHITECTS.

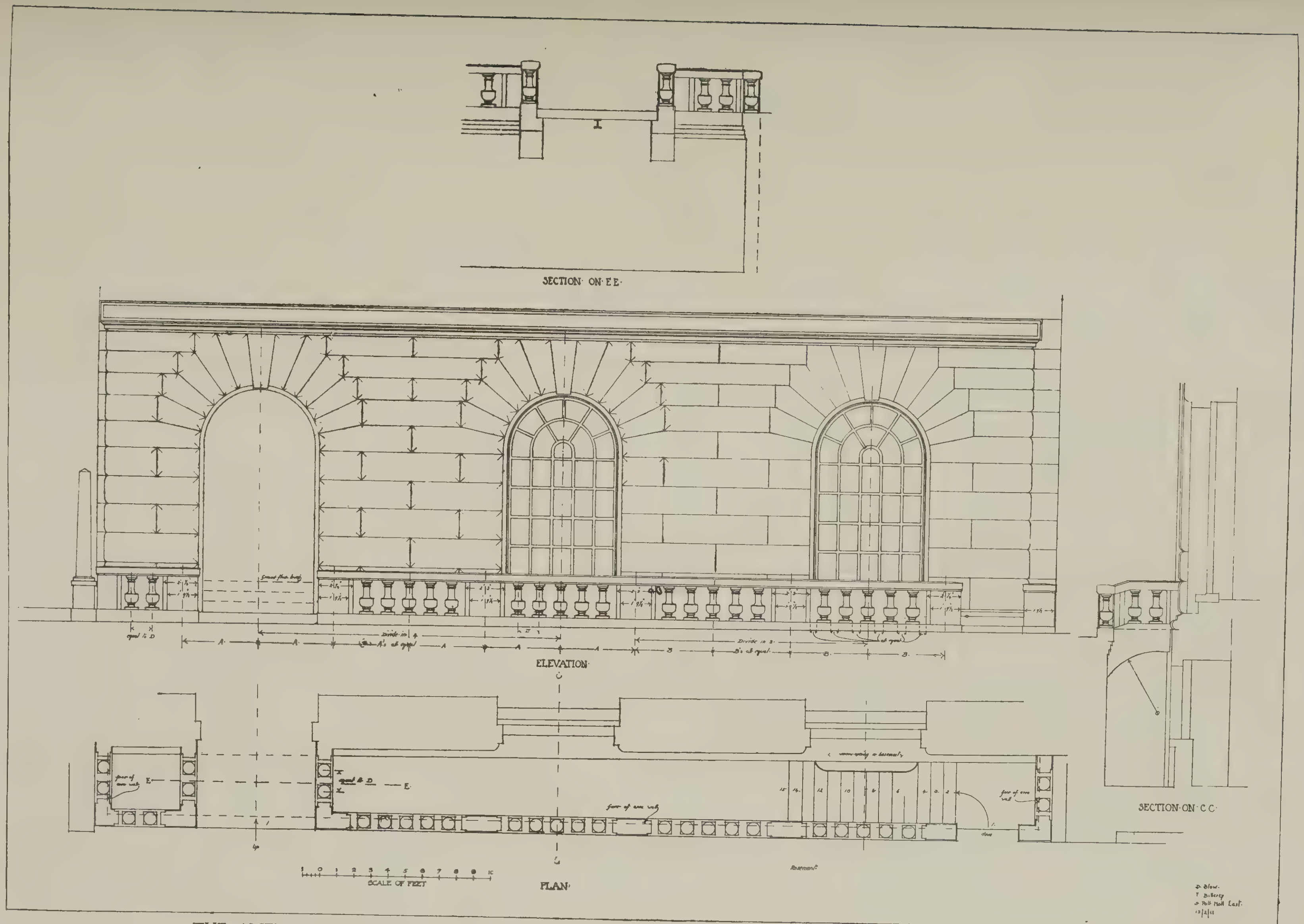
Current Architecture. 213.—The American Women's Club : The Façade

Detmar Blow and Fernand Billerey, Architects



The Florentine influences in the façade of this Club are unmistakable, and perhaps no more suitable treatment could be wished. It combines elegance with dignity.

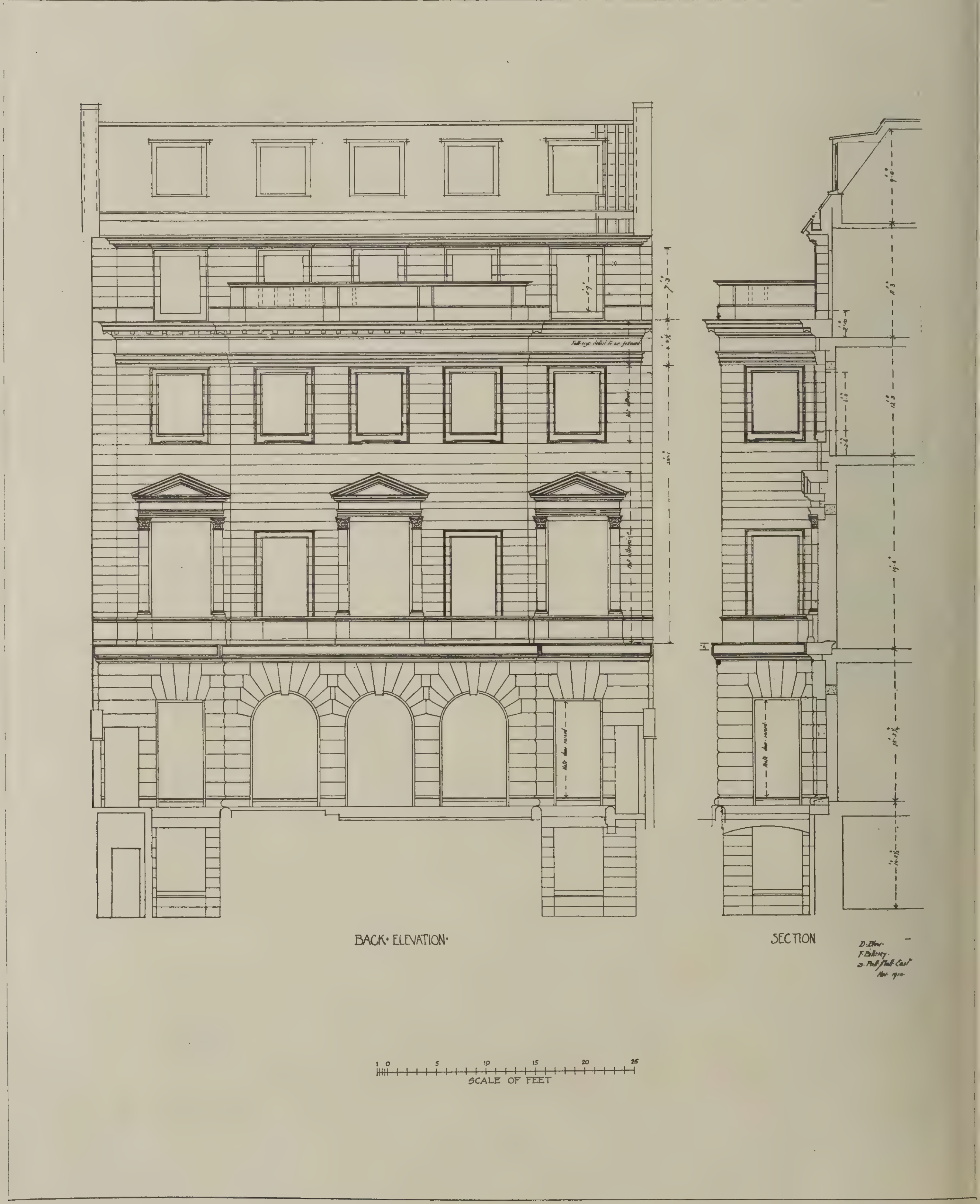
THE LIBRARY
OF THE
UNIVERSITY OF ILLINOIS



THE AMERICAN WOMEN'S CLUB, 46 GROSVENOR STREET : DETAIL OF BALUSTRADE TO FRONT AREA
DETMAR BLOW AND FERNAND BILLEREY, ARCHITECTS.

Cubitts. The main stair was made by Monsieur Buscaylet, of Paris, the carving being after models by Monsieur Madeline. The ornamental wrought-ironwork throughout was made by Messrs. W. Bainbridge Reynolds.

Besides the elaboration of the decorative work, the engineering and practical features of the house were given particular attention. The extensive kitchen apparatus (gas, grill, steam, etc.), were carried out by Messrs. Benham and Sons, Ltd.; the ice-making plant by the Linde British Refrigeration Co.; the vacuum cleaner installatio on each floor, with main apparatus in the basemen by the British Vacuum Cleaner Co.; the passenger an goods lifts by Messrs. Waygood-Otis, Ltd.; the lightin bells, and internal telephones by Messrs. Higgins an Griffiths; the sanitary fittings by Messrs. John Boldin and Sons; and the linen and mail shoots, heating an hot-water installations were carried out by the genera contractors.

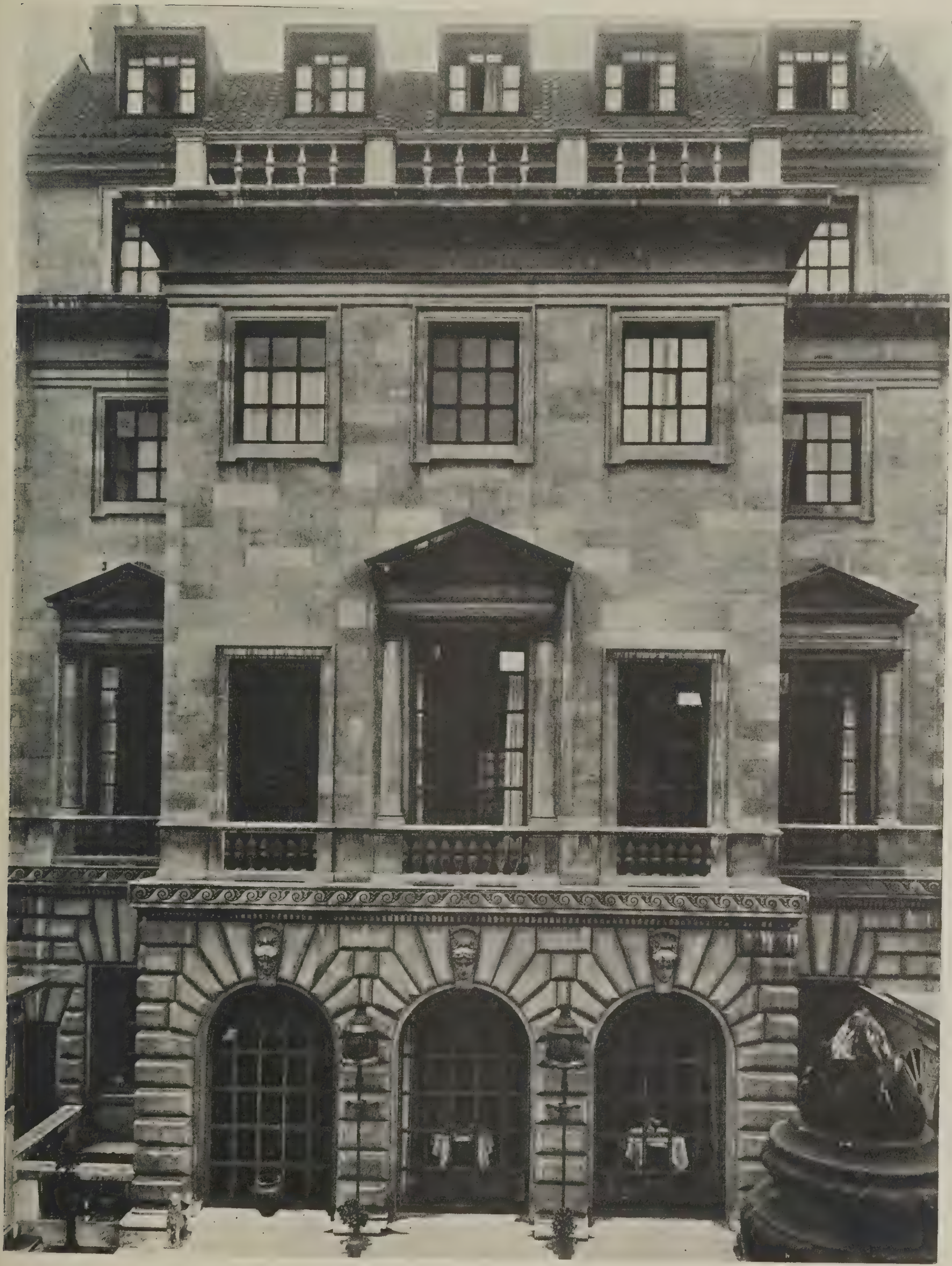


THE AMERICAN WOMEN'S CLUB, 46 GROSVENOR STREET: BACK ELEVATION.

DETMAR BLOW AND FERNAND BILLEREY, ARCHITECTS.

Current Architecture. 214.—The American Women's Club: The Back Elevation

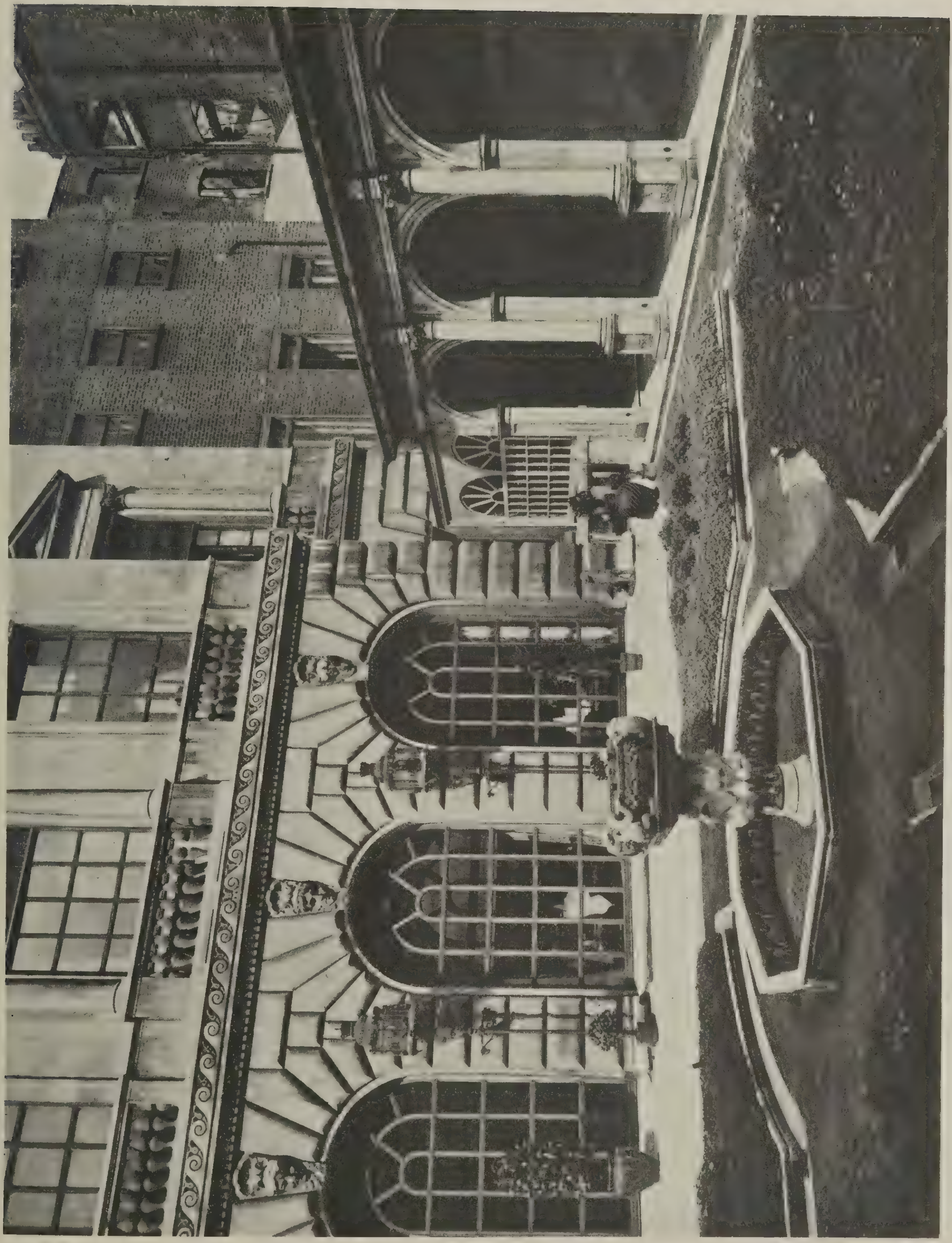
Detmar Blow and Fernand Billerey, Architects



The windows at the back overlook a small laid-out courtyard, still in the Italian manner, with a central fountain and arcading, as shown on the following plate.

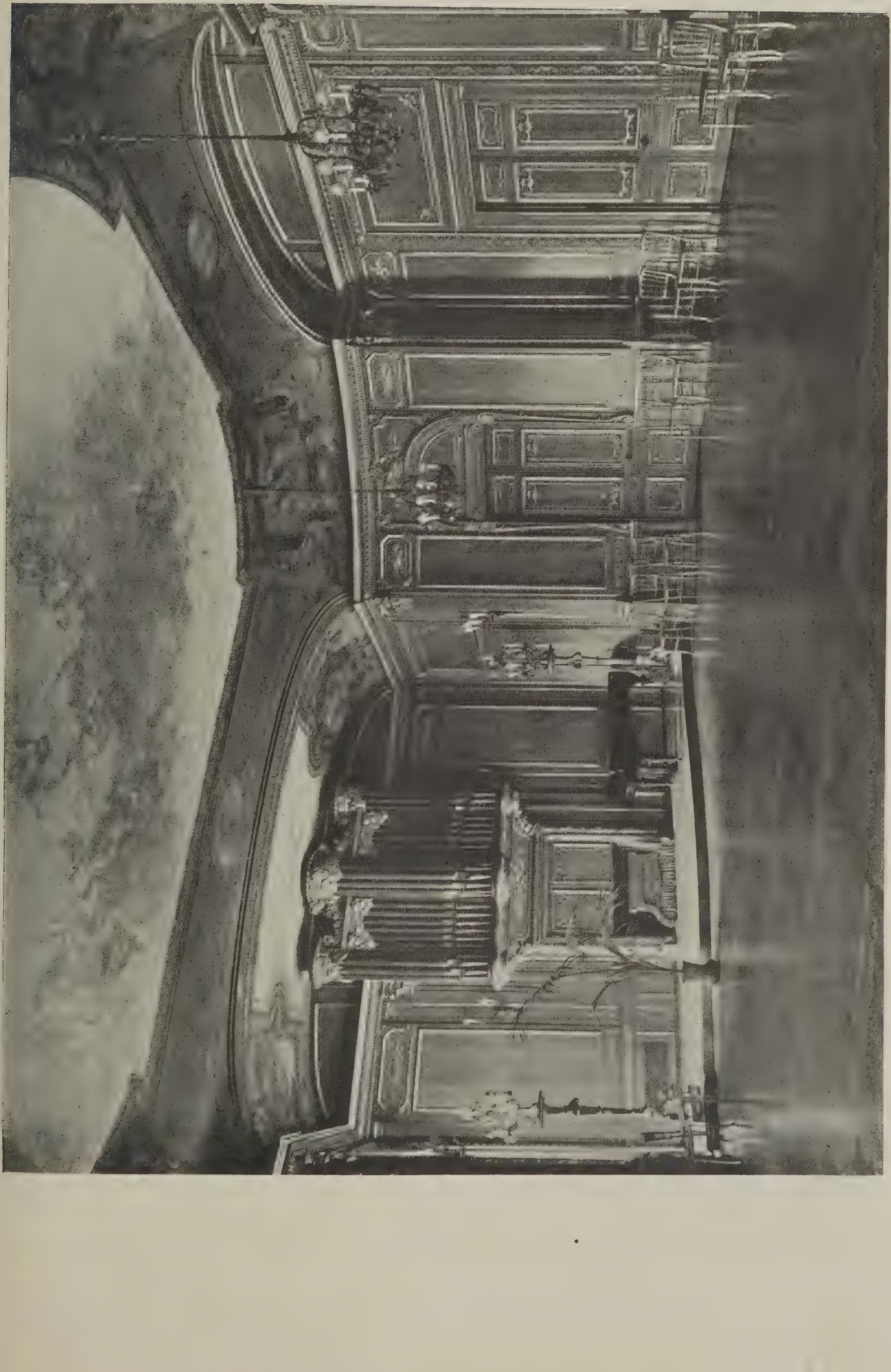
THE LIBRARY
OF THE
UNIVERSITY OF ILLINOIS

Detmar Blow and Fernand Billerey, Architects



Very little space was available at the back of the premises, but there was sufficient for lighting and for the lay-out of a formal garden in the Italian manner.

THE LIBRARY
OF THE
UNIVERSITY OF ILLINOIS



THE AMERICAN WOMEN'S CLUB : THE MUSIC ROOM. DETMAR BLOW AND FERNAND BILLEREY, ARCHITECTS.

The Business of an Architect

10—Specification Writing (*concluded*)

By C. MURRAY HENNELL, F.S.I.

A SPECIFICATION should generally be arranged in order of trades, but there are, of course, exceptions to this rule. In works to existing buildings it would often be extremely difficult to adopt this arrangement, and the result might be confusing. One cannot prescribe any general order for these cases, and each must be treated on its own merits, but it will be found advantageous to group the items within such limits as prevent much repetition. However, in doing this thought should always be given to the prospective foreman, who has to analyse the specification into rooms or sections of the building as well as into trades.

A certain amount of repetition is, therefore, inevitable, but recurrences of instructions need not appear at length, and a clause in the "Preliminaries" on the following lines covers a multitude of future abbreviations :—

"Descriptions are not given fully in every instance in this specification, and the previous amplified descriptions apply to similar work specified later in an abbreviated form."

Let us take the simple example of a house which is to have a few internal alterations, the installation of central heating, general repairs, and redecorations inside and out. We start, as usual, with "Preliminaries," referring to the Conditions of Contract, but not repeating clauses contained in those Conditions. This section of the specification will contain, in addition to the usual items, the general descriptions applicable to the various trades employed, such as particulars of cement, sand, timber, plastering, glazing, painting, etc.

The following should also be included :—

Order in which the work is to be executed.

Cleaning up from day to day.

Protection of furniture, fittings, and other property, and the making good of any damage caused.

Protection of residents (if premises are to be occupied while the work is in progress), and their non-disturbance so far as possible.

Measurements to be taken from the existing work.

Credit to be allowed in tender for all existing materials, fittings, etc., specified to be removed and cleared away.

Also one clause, which obviates several recurrent descriptions, on these lines : "Where doorways, windows, partitions, cupboards, fittings, etc., are to be removed, where new openings are made or old openings filled up, the contractor must allow for all proper upholding, the insertion of suitable lintels, and for neatly making good all flooring, skirtings, dadoes, etc., also ceilings, cornices, and other plastering, all to match existing work; piecings to be carefully and neatly made."

After the "Preliminaries," the specification can usually be divided into two main parts—external and internal—and it does not much matter which is specified first. When it is obvious that the roof is the first item that should be attended to, I prefer to deal first with the external work, commencing with the roofs, which includes all repairs to chimney stacks, adjacent parapet walls, copings and cornices, the work to the main or topmost roof coming first, and then the lower ones, always working downwards.

The elevations are dealt with next, and these can often be grouped together, as the decorative and repair work to each is usually much the same. However, in terrace houses, where the front and back are such separate—and frequently very different—things, it is convenient to specify the work to each independently.

Drains, even though some of them may pass under the building, can very well be regarded as "external" affairs, and all the required work to them can be taken together under one sub-heading.

Then come all the internal matters, starting at the top of the building. Assuming that the uppermost floor consists of four rooms, which only need redecorating, general repairs, new door furniture, etc., and that the treatment required to each of them will be very similar, these can be specified together with a marginal reference "3RD FLOOR (4 ROOMS)." On the lower floors it will probably be found that the character of the work differs in the various rooms, and when this is the case, each room should be taken separately. The main staircase, from top to ground floor, entrance hall, and landings can usually be lumped together, but it is best to separate from these any back staircases, stairs from ground floor to basement, and passages in servants' quarters, as the work is nearly always of a different nature.

In every room or section the items should be described as far as possible in the order in which they are likely to be done—structural alterations first, followed by repairs, new fitments, and ending with decorations.

There are some trades which can almost invariably be specified separately, and are best so done, even though the work is spread over different parts of the building. These are: "Plumber (Internal)," "Heating Engineer and Hot-Water Fitter," "Electrical Engineer," "Gasfitter," "Bellhanger," and other specialists. Such trades can be specified in a similar manner to that adopted in the case of a new building. It will also be found an advantage to group all the ironmongery together, thus saving a lot of repetition throughout the specification and facilitating selection of new door furniture, etc., when the time comes.

The final section consists of "General, Miscellaneous, and Completion," and is a useful place for many odds and ends, which have not found other homes, for general repairs and cleaning up on completion. This, however, should be the smallest and not the largest section of the specification.

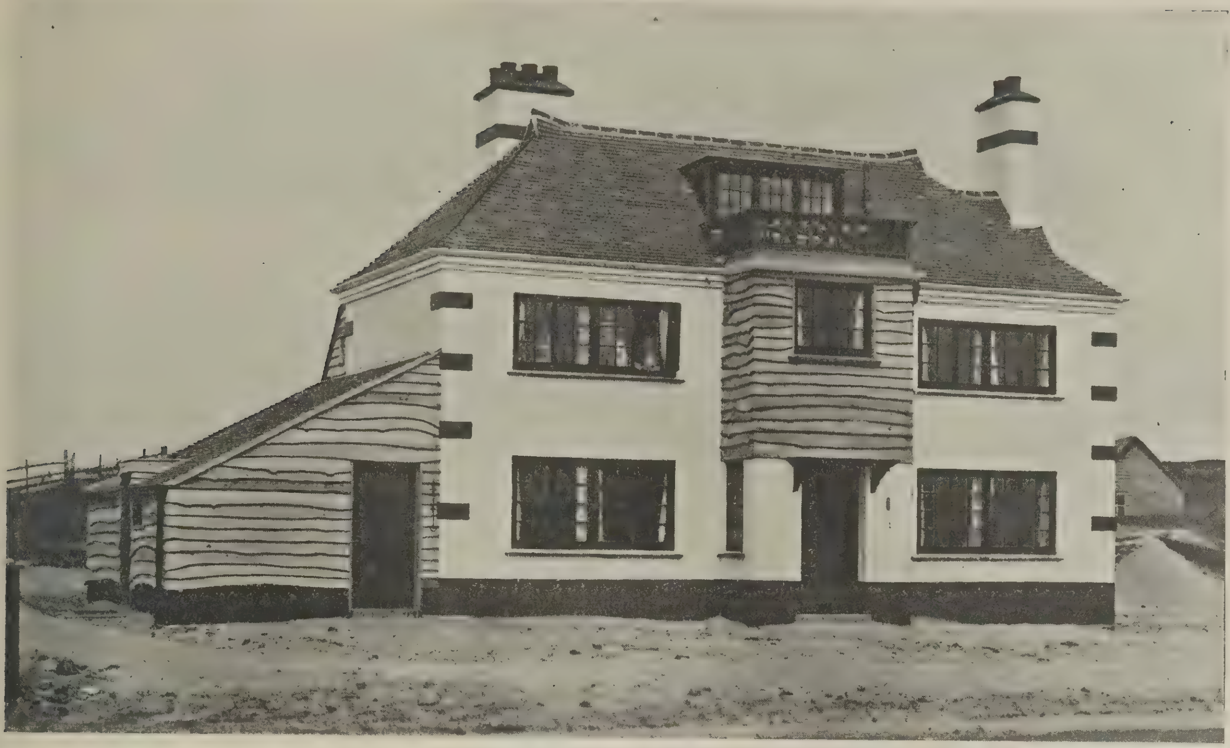
When an alteration affects more than one room, deal with as much of it as possible in the first room affected. Thus in the case of making an opening and providing folding doors, the whole can be specified in one room and need not be mentioned again in the other. If a service lift has to be installed, running between the kitchen in the basement to the dining-room on the ground floor, we can deal with most of it in connection with the dining-room. Here we can specify the lift itself, p.c. so much, fixing same, cutting opening through floor, trimming and making good, also the enclosure in this room, leaving only the enclosure in the kitchen to be specified when we come down to it.

When the job consists of additional buildings as well as alterations to existing, the new work should form the subject of a separate section of the specification, but only one set of "Preliminaries," and general clauses are needed for the whole, provided these are sufficiently comprehensive to cover all sections.

An old building, generally dirty and dilapidated when the architect is called in, is not a convenient place in which to draft a specification, and although we must take all particulars on the spot, it is best not to attempt the actual specification writing until we return to our office. I find it best to take all the particulars I want while measuring up the building, using a good-sized notebook with squared paper. From these notes and the measured and working drawings, it is possible to draft the whole specification in cleanliness and comfort.

(*To be continued.*)

[The previous articles in this series appeared in our issues for April 4, 11, 25, May 9 and 30, June 27, July 18, August 1, and November 7 and 21.]

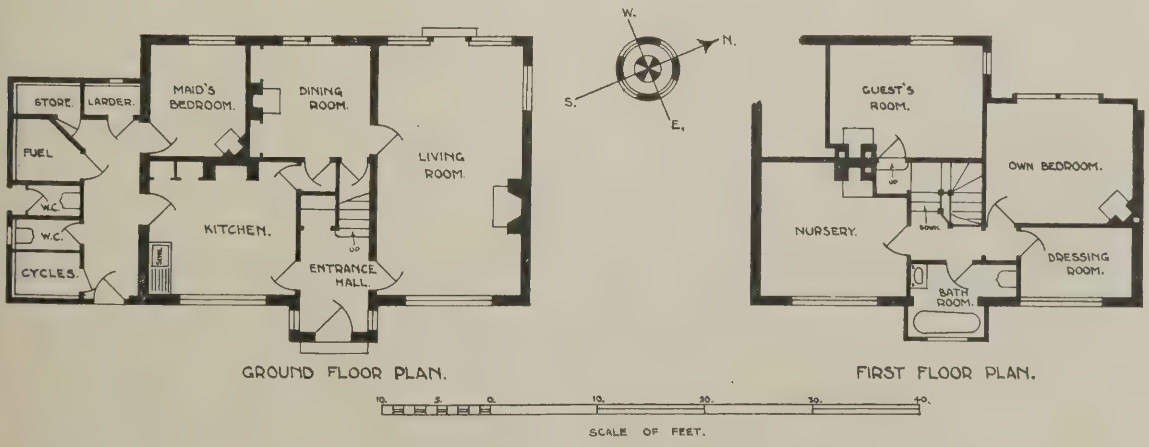


A GENERAL VIEW.

The Fourth Green, Sandwich

DARCY BRADDELL, F.R.I.B.A., and HUMPHRY DEANE, Architects

THIS cottage, which was designed and built for Mr. Nigel Playfair, stands on that wide expanse of sand dunes and desolate waste known as Sandwich bay. In Elizabethan times this o-called "bay" was covered by the sea and its aters lapped the edge of old Sandwich Town which was hen an active seaport. Now the situation is reversed. andwich town is a good two miles inland and as dead as ruges, while the sea bottom has taken over the ancient nportance of Sandwich by becoming the site of three orld-famous golfcourses. Mr. Playfair chose a site for s little house just overlooking the fourth green of the oyal St. George's Club. Previous to this he had been ving in one of the coastguard cottages at Shingle End he far side of the bay), and it was this type of square ncompromising building that he felt was wanted to fit to the tempestuous landscape of great skies and low flat nds which surrounded it on all sides. Accordingly the resent little box of a house was put up. It is roofed with dark red plain tiles, its walls are of brick plastered and whitewashed, and a black tarred base runs all round it. The windows are painted black and white, the quoins at the sides are orange, and so are the window curtains throughout. The plan is a little unusual, for the maids' bedroom is on the ground floor. Upstairs are three good bedrooms, a little dressing-room and a bathroom. At the back Mrs. Playfair has made an enchanting garden in small but steep terraces, from the top of which unparalleled views of sand dunes, sea and sky are obtained. Inside, the house is made interesting by a somewhat unusual but none the less successful mixture of Early Victorian and the purely modern as represented by such men as Roger Fry and Ambrose Heal. Mr. Playfair is no believer in the theory that there is no merit in anything unless it is antique. Meantime the house is going to be added to. More bedrooms and a garage are urgently wanted and the dining-room is much too small, so it is to be increased by adding a bay window.



Correspondence

The Cambridge Collegiate Buildings Competition

To the Editor of THE ARCHITECTS' JOURNAL.

SIR,—The last paragraph of Professor Reilly's letter, in your issue for November 28, reads as follows :—

"Questions of professional conduct are here involved that would seem to demand the attention of the Practice Standing Committee of the Institute. If nothing is done to impose some reasonable standard of loyalty and etiquette in competitions the prestige of the profession must be seriously damaged."

The first sentence of that paragraph demands punishment for sincere criticism; and the second sentence demands that competitors inclined to tell what they know should be forcibly muzzled.

I have a deep respect for Professor Reilly, but I would remind him that sincere opinions are not killed by persecution, and that intolerance is far more unsportsmanlike than criticism.

I may add that I have no connection with competition or competitors. FREDERICK CLARK.

To the Editor of THE ARCHITECTS' JOURNAL.

SIR,—Regarding Professor C. H. Reilly's letter in your JOURNAL in reference to the above, it is in too personal a strain to warrant a reply in your Press.

Mr. W. N. Adams writes a letter very much disclaiming any association with that signed by Messrs. Holt, Rees, and myself. As this association was never for a moment implied on behalf of Mr. Adams, his letter seems to be entirely beside the point. THOS. S. TAIT.

To the Editor of THE ARCHITECTS' JOURNAL.

SIR,—It is unfortunate that the result of an architectural competition cannot be announced without acrimonious correspondence following in its wake.

I have no knowledge as to whether the conditions were, or were not, infringed in the case of the Cambridge Collegiate Buildings; but I have knowledge of such infringements in the past. If, therefore, the letters written serve no useful purpose other than making it clear that competitors do expect assessors to see that conditions, whether foolish or otherwise, are observed these letters will not have been penned in vain.

In more cases than one of recent years the selected design has flagrantly broken the competition regulations, and even competitors' enquiries, as to whether the clause in question could be waived, have been answered by an emphatic negative.

Is it not the assessor's duty to select the design that gives the best solution of the problem and adheres to the regulations as laid down by the promoters of the competition or their expert adviser, and is not any departure from such a policy, even if it results in finding "a far, far better thing" obviously wrong? It is, in my opinion, not only wrong, but a gross injustice to all those who have severely handicapped themselves by following the rules.

Competitors have again surely the right to expect that an assessor should have had some practical experience in the type of building he is called in to adjudicate upon. Few will take such a narrow view that an architect with a practice consisting in the main of domestic work is entirely incompetent to assess a competition for, say, municipal buildings or a public library, but if he has designed and carried out such buildings so much the better for everybody concerned. This seems an obvious truism, but can the R.I.B.A., for instance, claim an altogether blameless record in respect of it?

Assuming a faithful observance of these simple rules a jury consisting of two or more architects seems unnecessary. It is not, moreover, outside the region of practical politics in so far as the average competition is concerned. To triplicate the judges means triplicating the fees, and competition promoters will have none of it. They might even do without an assessor at all, and then the grumblers would really have something to grumble at.

H. T. THORNELY.

Mr. T. S. Tait's Cambridge Design

Mr. T. S. Tait, A.R.I.B.A., has kindly allowed us to reproduce the drawings which appear on the opposite page.

In the report upon his design Mr. Tait says : After careful consideration of the site and a most thorough examination of the surrounding buildings, I am strongly of the opinion that any building facing the lawn must be carried out in harmony with the important buildings already erected there. Although the new chambers complete the group of chambers started by Bodley, I feel it would be fatal to the composition, viewed from the lawn, to attempt to carry round its architectural treatment, as it would entirely be out of harmony with the fine Gibbs building and the quiet horizontal lines of the beautiful old Clare College. I have, therefore, endeavoured to design the new façades in harmony with both existing buildings on the lawn, as far as the "conditions" would allow.

The library building forming the central note of the proposed new suite of buildings is designed in harmony with the Gibbs building, repeating the treatment of the central doorway on the connecting links between the library and the chambers on either side.

The treatment of the chambers block is designed to be in sympathy with the Clare building, repeating the horizontal character of that façade in cornices, string courses, and dormers, with, at the same time, an endeavour to get greater refinement of detail than is obtained on that façade.

The façade to the Bodley court would, of course, be classical, and harmony with the Bodley building would be obtained by intermarrying the features at the junction of the two façades. This court, I think, is particularly happy.

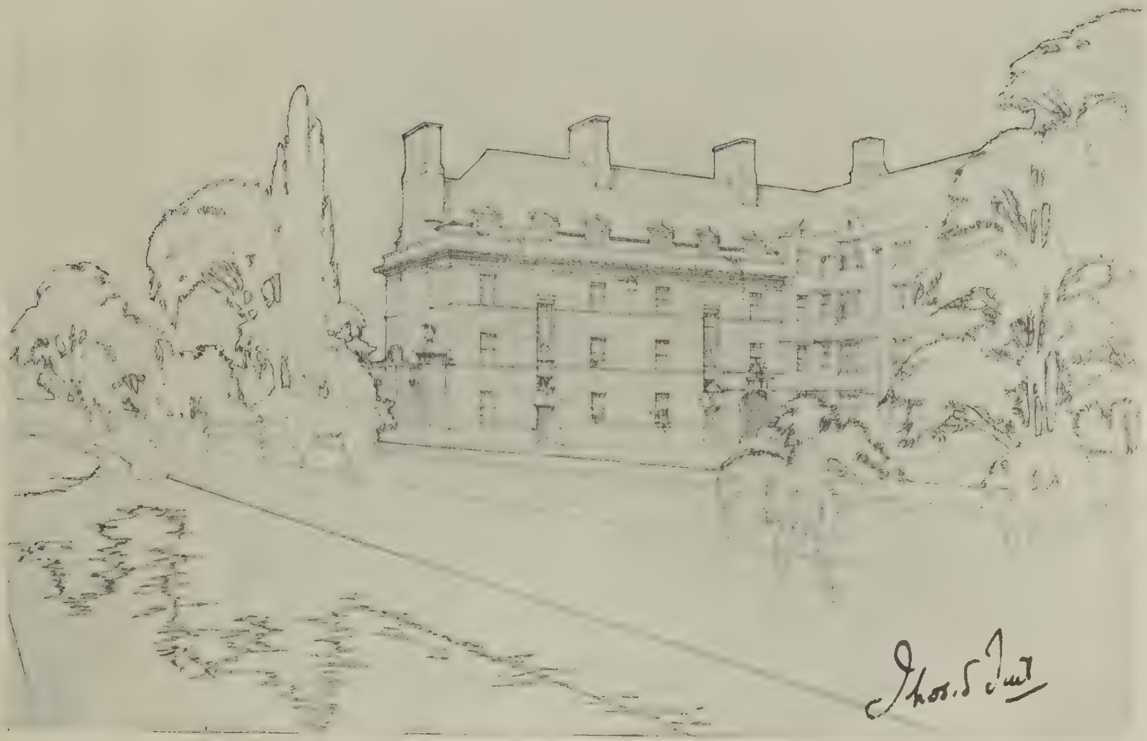
Being fully alive to the responsibility devolving on any architect called upon to make a design for a building suitable to this historic site, no attempt has been made to obtain originality of design. My whole endeavour has been to design a building which will be suitable for its purpose, carried out with the greatest refinement, dignity, and restraint.

Most of the buildings of the college have been constructed in Ketton stone, but as this quarry is now closed, the most suitable stone, in my opinion, would be Ancaster or Weldon stone, as carried out in the Bodley building, so that the new buildings would sit on the site without discord both as regards design and material, leaving the Portland stone façade of the Gibbs building to stand out as a central note in the scheme.

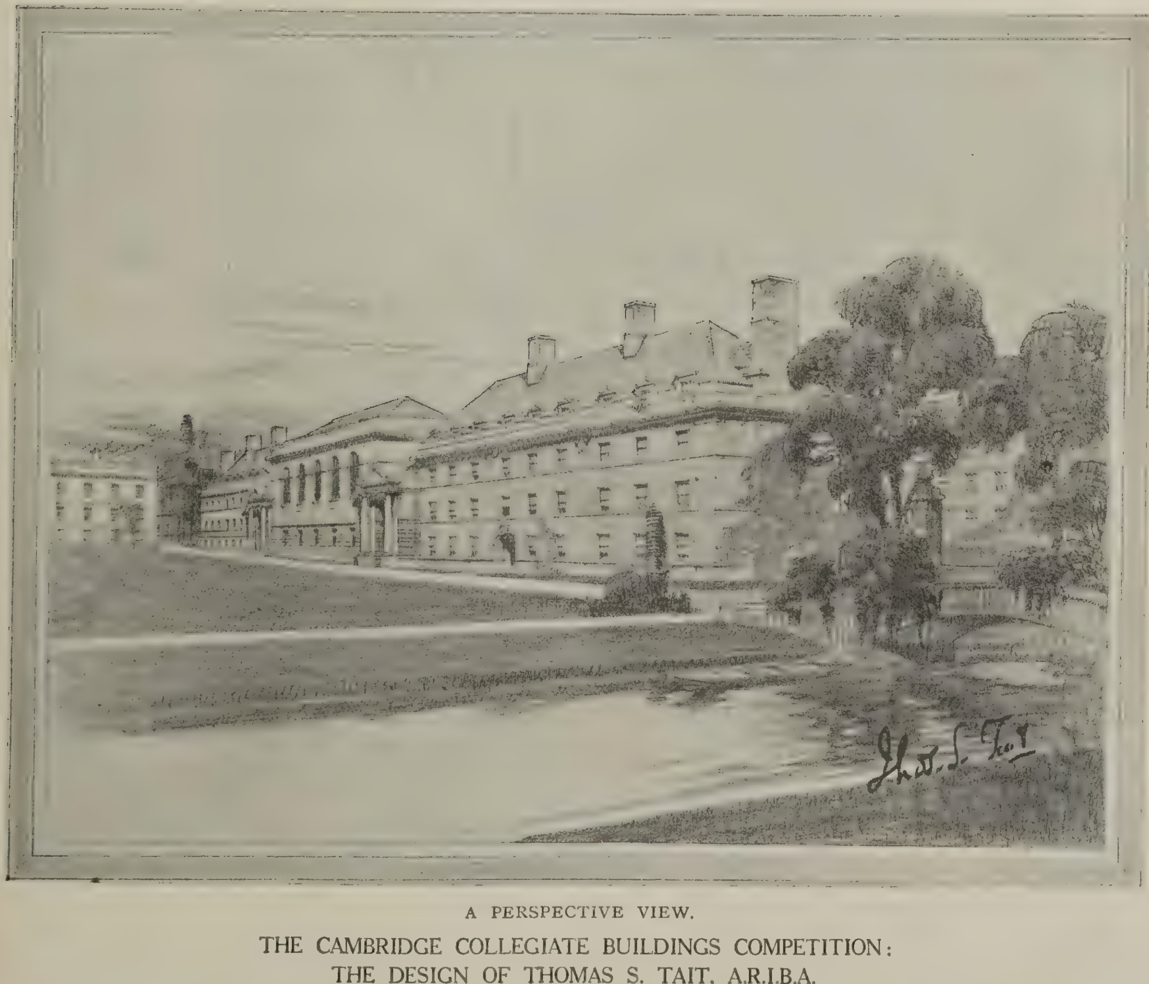
The block plan of the whole college and surroundings, together with the extended elevation showing the group of buildings surrounding the lawn, has been submitted as being the only sure way of obtaining a grasp of the whole conception, and showing the proposed buildings in relation to their surroundings.

Although every care has been taken to meet the requirements, these plans should be taken more as a scheme to enable the assessor and committee to form a decision. Any amendments and adjustments which they may require can easily be effected, as no scheme evolved from printed documents can be as satisfactory, so far as meeting their requirements is concerned, as that worked out in direct contact with the principals of the college.

I estimate the cost of the proposed sets of chambers will be approximately £20,000, based on a cost of 2s. per cube foot.



THE WEST CHAMBERS FROM BODLEY QUADRANGLE.



A PERSPECTIVE VIEW.

THE CAMBRIDGE COLLEGIATE BUILDINGS COMPETITION:
THE DESIGN OF THOMAS S. TAIT, A.R.I.B.A.

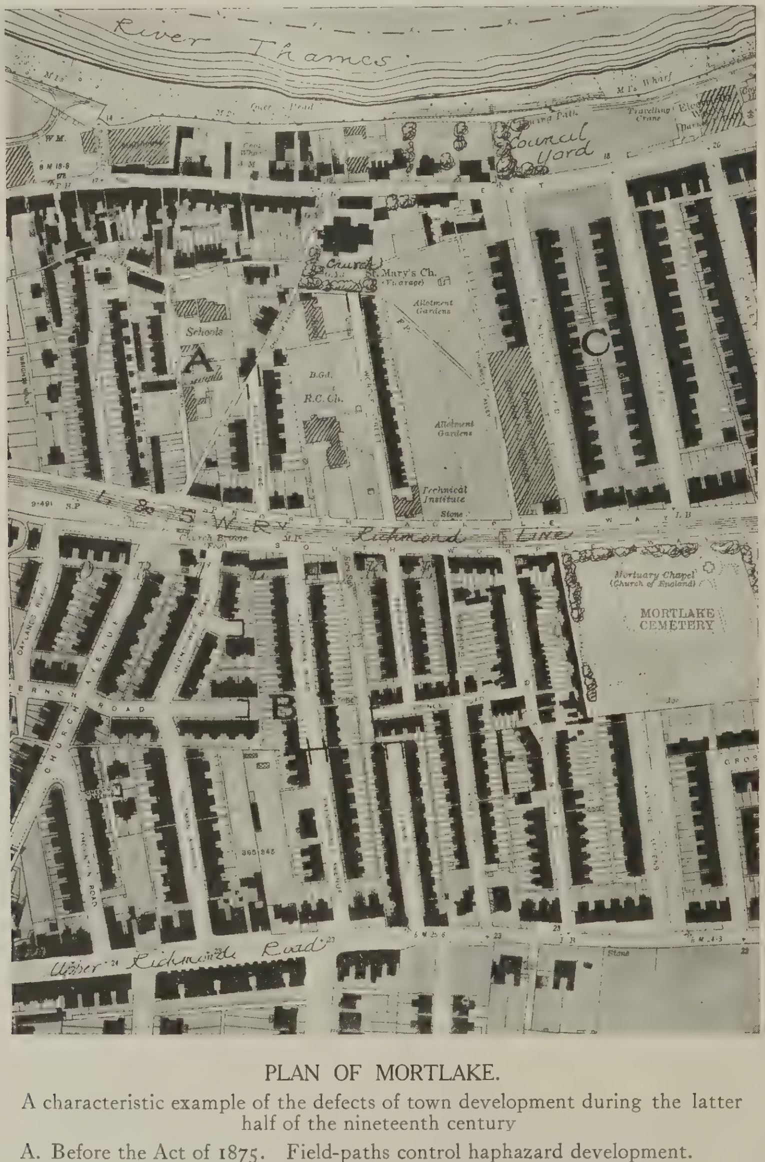
Book Reviews

The Fundamentals of Town Planning

The term town planning has now come to include so vast a subject, or, more correctly, such an infinite number of subjects or an infinite aspect of an infinite number of subjects, that there is a need for a greatly extended literature which shall deal variously with them. We are therefore glad to see that this book of Professor Adshead's is but the first of a series and, therefore, may be regarded as an introductory volume.

Town planning, as has so often been pointed out in these columns, is not primarily a matter for the engineer, the architect, or the financier, but for the sociologist, and it is only at a later stage that the services of the specialist are required. The town is an outward expression of man's gradual social evolution, of which different types of towns to-day express different aspects. If we consider at random such towns as Bournemouth, Bristol, Salisbury, Blackpool, Liverpool, Oldham, Sheffield, Shoreham, Newquay, we shall find that their differences are fundamental, and their particular developments are the results of particular circumstances and particular needs. Merely to regard them as ugly or beautiful towns, salubrious or unhealthy towns, well-planned or badly-planned towns, or loosely, as manufacturing or seaside towns, cathedral or residential towns, is superficial, and an attempt to town plan on such an assumption would be disastrous. Yet the demand for efficient town planning to-day exceeds the supply of those who have studied the matter deeply and from its fundamentally human origin. What, after all, is more intimately connected with the lives of men than the towns in which they live? Not even the clothes they wear. Is it not, therefore, the height of presumption and arrogance (actually it is usually the result of ignorance) to presume that the future of a town or a suburb can be made to conform with some pleasant axially arranged pattern contrived on the drawing board.

Professor Adshead, in his opening chapter, "The Sociological Basis of Town Planning," deals with the fundamental basis of town planning, and he has produced one of the most stimulating essays on the subject that we have yet seen. He shows how the occupational distinctions of mankind are more real than the class distinctions; that the



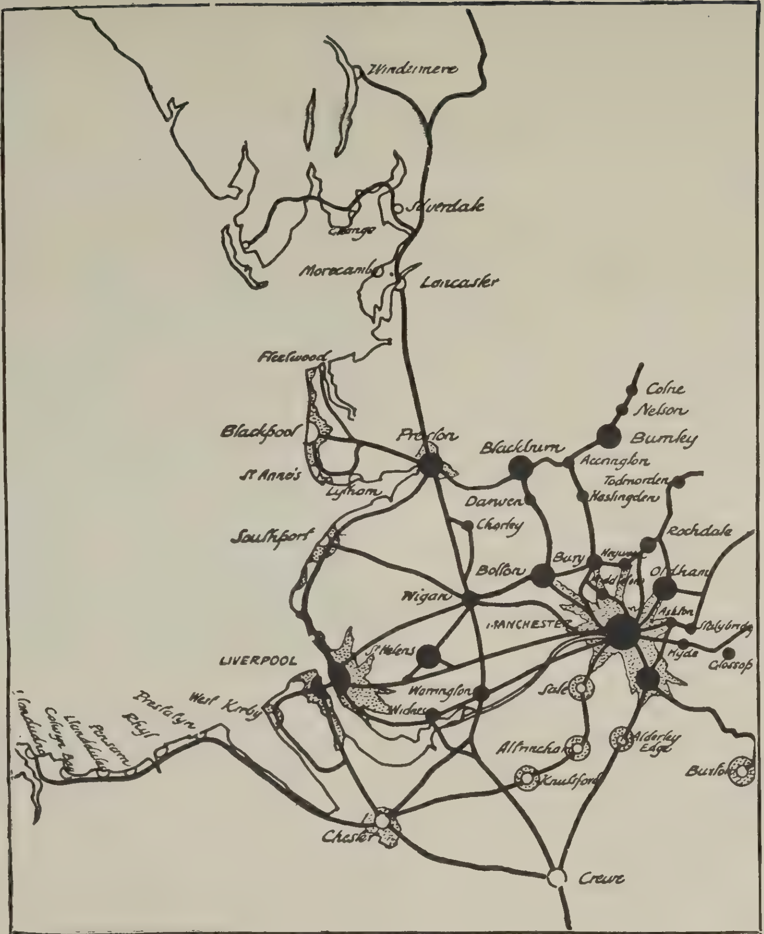
PLAN OF MORTLAKE.

A characteristic example of the defects of town development during the latter half of the nineteenth century

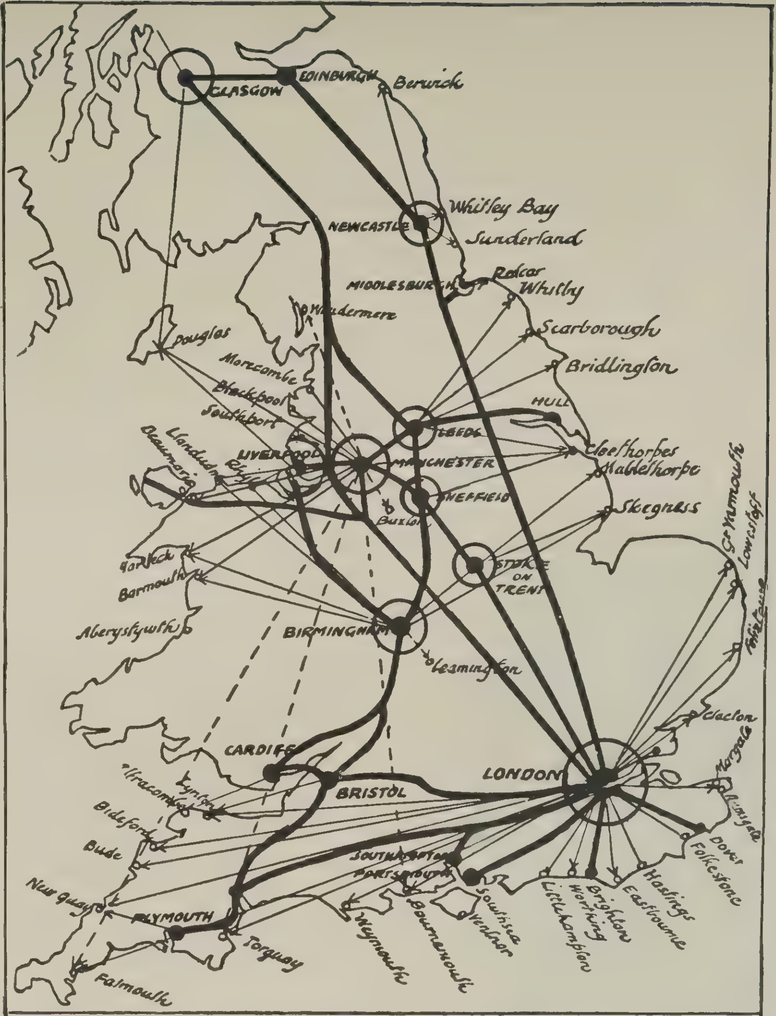
A. Before the Act of 1875. Field-paths control haphazard development.

B. Bye-law development since 1875 with lack of co-operation between owners.

C. Recent stereotyped bye-law development.



Map shewing the Lancashire group or conurbation of Towns. Thick black lines indicate railways. Black circles indicate industrial and commercial areas. Dotted spaces indicate residential areas. Open circles indicate residential and recreative towns.



Map of England shewing the way in which towns are related to one another. Towns which have an outer circle are the centres of related groups, or conurbations. Heavy lines shew the main railway arteries of the country. Thin lines connecting recreative towns with these industrial conurbations indicate those upon which they depend. Dotted lines indicate the direction in which the more wealthy emigrate.

(*Reproduced from "Town Planning and Town Development," by Professor S. D. Adshead.*)

A YORKSHIRE MILL.

("Town Planning and Town Development.")

bank clerk has more in common with the bank manager than with the agricultural labourer. He indicates the gradual process which has taken place along the great valleys of the world. First the huntsman killing for his food, then the shepherd thriftily nurturing his flock, and driving the huntsman up the valley, then the peasant tilling the soil, and thrusting the shepherd up into the hills, and then the fisherman and the sailor, and the beginning of trade and finally the miner, from whom is evolved the city dweller of to-day—for the large manufacturing towns are essentially the development of the mining camp. Here we are, indeed, at the roots of town origins, and this first chapter is crammed with fascinating matter which some day, we hope, the author will develop into a separate book.

The following chapter, which deals with "The Relation Between Towns," is scarcely less interesting. We are shown how industrialism produced planetary systems of towns; the various classifications of towns to-day, and the part which they play in the wider national organization. There are recreative towns and dormitory towns, there are towns for the retired bourgeoisie, and self-contained towns, there are cathedral cities and market towns, there are industrial towns and garden cities. And these, too, vary; thus, Blackpool varies from Eastbourne; Bedford from Bournemouth; Luton from Sheffield; Manchester from Liverpool; Letchworth from Welwyn; Port Sunlight from Bournville. Facts such as these should be realized not only by the expert, but by the town councillor and, indeed, the conscientious citizen who is now becoming alert to his civic responsibilities.

From the general the book passes on gradually to the particular—transport, traffic requirements, and road administration are dealt with. There is a chapter on zoning. Here the folly of framing too strict regulations is emphasized. A town is essentially a flexible growth. Then follows an account of town planning by private initiative, and the various Acts which have been passed. We see how the great Public Health Act of 1875, which making our cities sanitarily perhaps the cleanest in the world, at the same time made them ugly. It did this not merely negatively, but positively, through the stereotyped development which it encouraged. And so we must remember that the infinitely dull monotony that grew up in and about the poor districts of our towns was not altogether the fault of callous landlords and employers, as we are apt to imagine to-day, but an unforeseen result of the model by-laws. The Acts of 1919 are reviewed. We are surprised to see that the Additional Powers Act is not adversely criticized; surely it is the worst piece of housing legislation that was ever placed on the statute book. Perhaps its theory was not so much at fault as its practice. The result of it was to give an impetus to the building of the very ugliest, cheapest, and tawdriest type of dwellings; dwellings as shoddy in their construction as they are arrogant in their appearance. Moreover, they have scarcely afforded any relief to the class which the Act was intended to benefit. And these houses are subsidized by the taxpayer.

In a book of such immense value and interest it may perhaps seem ungenerous to cavil at literary laxities, yet we cannot refrain from expressing a hope that before the book appears in its second edition, and this will surely happen before long, a few corrections are made. For example, the last sentence on page 43 is without a predicate, and is, therefore, in fact, not a sentence. Probably the full stop preceding it should have been a semi-colon. And as for the split infinitives, they are legion.

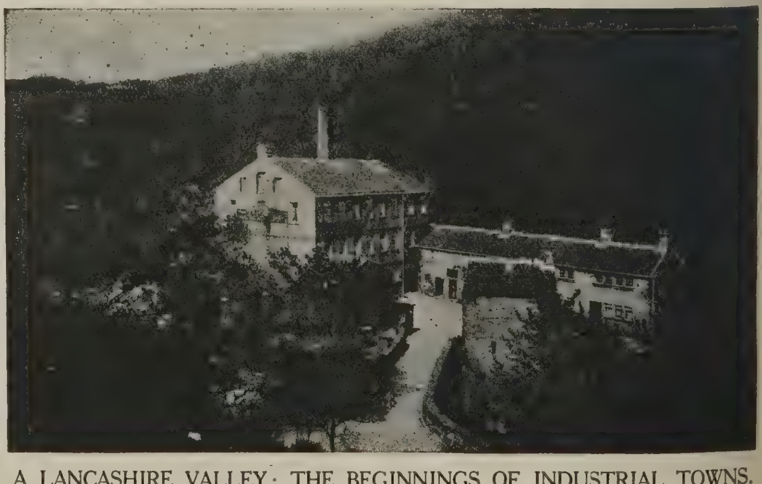
But such slight defects will not deter the book from finding its way into the hands of every class of reader, for the entrancing interest of the earlier chapters must appeal to every thinking person, and the valuable information in the latter chapters are essential equipment for anyone whose duties or activities lie at the fringe or at the centre of present-day town planning. H. J. B.

"Town Planning and Town Development," by S. D. Adshead, M.A., F.R.I.B.A., Professor of Town Planning, London University. London: Methuen & Co., Ltd., Price 10s. net.

Merseyside

Twenty-seven years had elapsed between the British Association's recent meeting in Liverpool and its previous congress in that city, and it would indeed be difficult to name any other quarter of a century that had witnessed such immense changes in outlook, conditions, and knowledge. The volume, therefore, that was prepared for this recent meeting is a much ampler affair than that which greeted the members at their previous assembly in the city.

The year of the last meeting, 1896, approximately synchronizes with the beginning of Liverpool's municipal undertakings. The Liverpool Electric Supply Company was purchased by the Corporation in that year, and the tramway system was bought by the Corporation during the following year. To-day, as everyone knows, Liverpool's municipal undertakings are among the most efficient and thorough in the kingdom. And this applies particularly to housing matters. Liverpool's famous Sanitary Amendment Act of 1864 enabled her to demolish insanitary property, but it was only some thirty years later that it was realized that if houses were demolished others must be built. But from that time steady progress was made, and before the war the Liverpool Corporation owned and managed some 2,500 artizans' and labourers' dwellings and tenements, and about thirty shops.



A LANCASHIRE VALLEY: THE BEGINNINGS OF INDUSTRIAL TOWNS.

("Town Planning and Town Development.")

Another important event which has happened in the intervening years is the granting of an independent charter to Liverpool University in 1903. Previously, University College, Liverpool, had been one of the three constituent colleges of Victoria University, of which Manchester was the official seat. From that time of its independence, however, the university has thrived and expanded. Its Department of Architecture, as we know, is, perhaps, second to none in the kingdom, and its more recent Department of Civic Design is likely to attain to equal eminence.

It will be seen, therefore, that Liverpool has always possessed strong civic instincts, and this fact is clearly shown in her architecture, which she endeavours to control in a manner which other cities—the metropolis included—would do well to emulate. St. George's Hall is not a flash in the pan; it is the centre and dominating feature of a fine group of monumental buildings forming a noble civic centre. There are no surviving buildings of an earlier date than the eighteenth century, but from that time onwards the successive deposits contain examples of first-rate architectural merit culminating to-day in the Cathedral. Of one grave mistake Liverpool is assuredly guilty, and that is of permitting the heteredox assembly of the Dock Board building, the Liver building, and the Cunard building on the dock, giving a suggestion of carelessness to every approaching Atlantic liner, which is far from typical of the rest of the city. The Liverpool docks are, indeed, gateways to the world, and it is one of the saddest events of the age that Liverpool should so ignominiously have failed to produce something worthy of her great position. Her failure compromises not only herself, but the whole Empire. But this matter is pungently handled by Professor Reilly in his contribution: "A Note on the Architecture of Liverpool."

The whole volume, which includes some thirty articles by specialists and deals with such varied matters as "The Climate of Liverpool," "The Entomology of the Liverpool District," "Chemical Manufactures on Merseyside," "Engineering Development in Liverpool," and so on, constitutes a very valuable handbook on one of the greatest cities in the Empire. We have only one criticism to make. We consider the omission of maps, both of the city itself and of its immediate surrounding, a grave defect.

"Merseyside," a handbook to Liverpool and District, prepared on the occasion of he meeting of the British Association for the Advancement of Science in Liverpool, September 1923. Edited by Alfred Hold, M.A., D.Sc. The University Press of Liverpool, Limited. London: Messrs. Hodder and Stoughton, Ltd. Price 3s. 6d. net.

How to Approach the Architect

The rapid development within recent years of the popular Press as a result, on the human side, of the growth of a literate population and, on the mechanical side, of vastly improved methods of newspaper production, has opened up new vistas of opportunity to commercial enterprise. Advertising was long regarded as rather a risky adventure into the unknown, and with good reason, for he field of endeavour was a veritable *terra incognita*, which, however, soon yielded valuable guidance to those who gave it close and careful study.

The architectural Press forms only a small section of the newspaper world, but, in common with the great general body of the Press, it has gone through its period of trial and experiment. Most of those factors which were at one time incalculable have now, however, been more or less accurately ascertained as a result of the intensive study of the subject that specialists have given to it over a long period of years.

It has been left to Mr. William Regan, a Director of he Architectural Press, to reveal the working of the mechanism of successful publicity in the architectural sphere, and he does it very clearly and convincingly in a small volume entitled "How to Approach the Architect."

Into ten short chapters he compresses the result of wenty-five years of personal experience of architectural ublicity. Mr. Regan rightly points out that those who wish to find the best market for building products must approach the architect and not (a common misconception) the builder, for it is the architect who specifies goods, though, in consequence of established building practice in this country, it is from contractors, acting under the instructions of architects, that enquiries are mostly received. This is very important from the advertiser's point of view, for a misreading of the situation may lead to non-productive expenditure.

The whole field of architectural publicity is surveyed, and the reader is given an illuminating insight into the various processes that lead progressively to success. There is an invaluable chapter on "copy" writing—a factor of supreme importance. Nowhere else have we seen so instructive an analysis of the psychological element in advertising. Other chapters deal with advertising agents and specialists, the selection of media, catalogues, booklets, circulars, letter-paper, travellers, and so forth. The book transcends its title: it is really a reasoned guide to success in business, for the principles to which it gives expression are of universal application. It is a book that will interest not only business concerns but architects themselves.

"How to Approach the Architect." By William Regan. London: The Architectural Press. Price 2s. 6d. net.

"Kelly's Directory of the Building Trades—1923"

In this volume information is given concerning those who are engaged in every trade and profession in any way connected with building and architecture. The alterations and additions which have been rendered necessary in revising the previous edition to bring it up-to-date was 47 per cent. of the total. This will indicate both the care taken in compilation and the uselessness of an out-of-date directory.

The principal sections of the book are as follows: An alphabetical arrangement of the names in the towns and villages under each county, with the populations; a general classification of trades for London and its suburbs, i.e., classified lists of professions and trades with the names arranged alphabetically of those engaged therein; a similar classification for the rest of England, Scotland, and Wales; the names for the principal towns of Ireland, arranged under towns and trades; and the names of the Channel Islands and the Isle of Man, arranged under towns.

A special feature is the list of proprietary articles and trade names (pp. 2251-2265), which gives the maker's name and address after the name of each article.

"Kelly's Directory of the Building Trades, 1923." Price 50s. Kelly's Directories, Ltd., London, W.C.

Publications Received

"Quantity Surveying for Builders." By Wilfrid L. Evershed, F.S.I. Price 10s. 6d. net. Chapman and Hall, 11 Henrietta Street, Covent Garden, London, W.C.2.

"Housing: the Facts and the Future." By Major Harry Barnes, VP.R.I.B.A., F.S.I., etc. Price 25s. net. Ernest Benn, Limited, 8 Bouverie Street, London, E.C.4.

"The Poetry of Architecture." By Frank Rutter. Price 2s. 6d. net. Hodder and Stoughton, Ltd., St. Paul's House, Warwick Square, E.C.4.

"The Problem of the Obelisks." By R. Engelbach, Assoc. C. and G. Inst. Price 9s. net. T. Fisher Unwin, Ltd., 1 Adelphi Terrace, London, W.C.2.

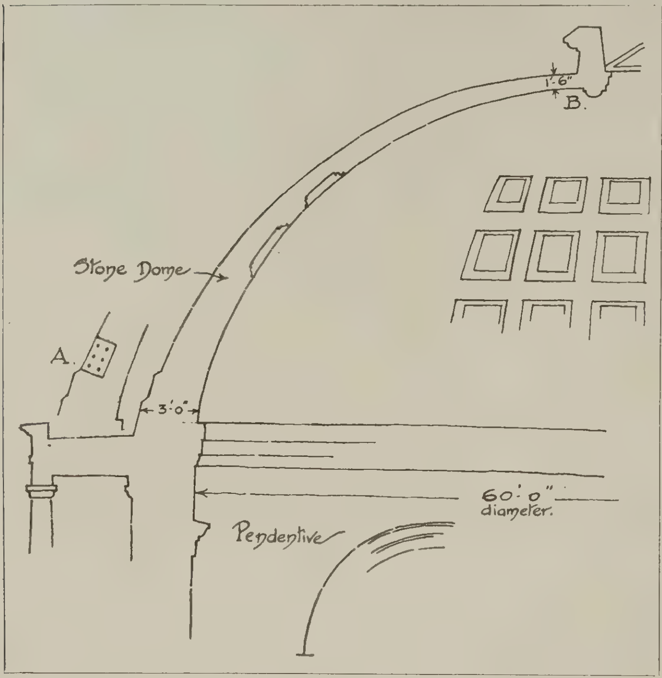
"Old Masters and Modern Art: The National Gallery Italian Schools." By Sir Charles Holmes, Director of the National Gallery. Price 21s net. G. Bell and Sons, Ltd., York House, Portugal Street, London, W.C.2.

"Quantities. A Text Book in Tabulated Form for the use of Architects, Surveyors and Builders." By Professor Sir Banister Fletcher. J.P., D.L., F.R.I.B.A., F.K.C., and Herbert Phillips Fletcher, D.S.O., F.R.I.B.A., F.S.I., A.M.I.C.E., Barrister-at-Law of the Middle Temple. Ninth Edition. Revised and enlarged. Price, 10s. net. B. T. Batsford, Ltd., 94 High Holborn, London, W.C.1.

"The Smoke Inspector's Handbook of Economic Smoke Abatement." By Herbert G. Clinch, M.R.San.I., M.I.H., Chief Smoke Inspector to the Halifax County Borough. Price, 7s. 6d. net. H. K. Lewis & Co., Ltd., 136 Gower Street, London, W.C.1.

Enquiries Answered

Enquiries from readers on points of architectural, constructional, and legal interest, etc., are cordially invited. They will be dealt with by a staff of experts, whose services are specially retained for this purpose. If desired, answers will be sent direct through the post. In no case is any charge made for this service.



Dome Construction.

"Correspondent" submits the accompanying sketch of a hemispherical stone dome supported by pendentives, and covering a compartment 60 ft. in width. The thickness at the base of the hemisphere is 3 ft., and at the crown 1 ft. 6 in., where an opening of 8 ft. diameter is formed. The circular ring of masonry which forms this opening supports a cylindrical wall 2 ft. in thickness, and 6 ft. in height, the inner diameter of the cylindrical wall corresponding with the diameter of the ring. Our correspondent asks :—

1. Is the thickness of the dome approximately correct ?
2. Should the stones be rebated, tabled, or dowelled ?
3. Is a reinforced concrete or metal band required at the crown ?
4. Should a metal band be placed on the circumference at the base or further up ? What size of metal is required ? Would a reinforced concrete band answer the purpose better ?
5. How should the joints in the dome and pendentive be shown ?
6. Is the outward thrust at the base greater in a hemispherical dome than that in a 'pointed' dome ?"

—1. No. With over 23 tons of masonry poised at the crown the thickness would require to be increased to such an extent as to make the structure quite impracticable.

2. The conical beds only should be rebated, the vertical joints being joggled and grouted with cement.

3. A metal band at the crown is not required.

4. A metal band or series of metal cramps should be embedded in the bottom bed at the base and in each conical bed which does not make a greater angle than about 23 deg. to the horizontal base. But as the maximum outward thrust of the dome is at the base, and as this thrust diminishes in each succeeding superposed course, the amount of metal in the tension bands or cramps of each course should be proportioned accordingly. A reinforced concrete band would be an improvement, but a reinforced concrete base course the full thickness of the dome would be still better.

5. The arrangement and geometrical projection of the joints in domes and pendentives are fully described and illustrated in the following issues of the JOURNAL : May 17, 1905 ; April 16, 1913 ; and April 19, 1922.

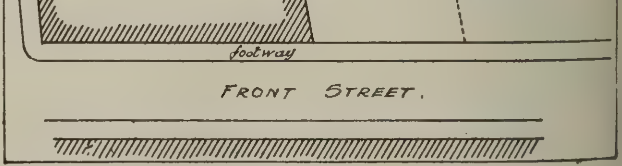
6. Yes, and for an exterior dome a slightly pointed form is preferable.

A structure of this nature demands careful designing in regard to (*a*) its stability ; (*b*) architectural effect, both internally and externally ; and (*c*) its resistance to weather. The design submitted has many imperfections. The structure should consist of an outer and inner dome. The outer dome should be pointed for external effect, and to give greater stability in supporting the load at the crown. For internal effect the inner dome may be a little less than a hemisphere. A single dome, as shown in the sketch, will not be weatherproof. The proper thickness can only be determined by carefully making a stress diagram which, however, will give only approximate dimensions. Assuming this structure to consist of an outer and inner dome, the thickness at the base of the latter would be about 5 ft., and at the crown about 2 ft. 6 in. The outer dome would probably require to be approximately 6 ft. in thickness at its junction with the inner dome, tapering to about 3 ft. at the top. A stone dome of 60 ft. span, however, appears to be rather an impracticable proposition. It would be statically better and certainly much more economical were it constructed throughout in reinforced concrete.

J. S. BOYD.

Compensation for Setting Back.

"D" writes : "The accompanying sketch shows a building plot A, the proposed building on which is to conform with the boundary lines of same and to project for 5 ft. past the back street building line of property B. The back street has no made footways, and the property B has a wood fence 5 ft. from the building line. Can the local council insist that the building on plot A shall be set back to the line of property B at the rear without compensation ? No compensation was granted in the case of building B, nor was any compensation applied for."



—Yes, the local sanitary authority have full powers to enforce a building line under the circumstances detailed, and are not liable to pay any compensation in respect of it. The Public Health Act, 1875, section 156, reads : "It shall not be lawful in any urban district, without the written consent of the urban authority, to bring forward any house or building forming part of any street, or any part thereof, beyond the front wall of the house or building on either side thereof, nor to build any addition thereto beyond the front of the house or building on either side of the same."

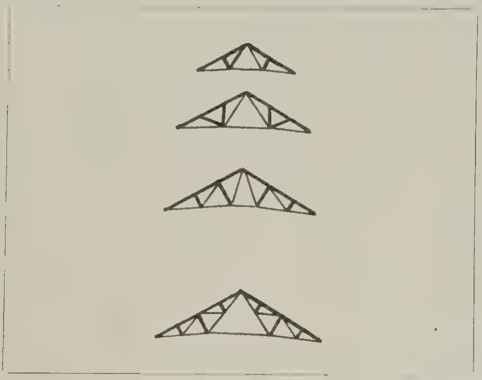
F. S. I.

radle Roof Trusses: Their Construction and Use

THE cradle roof truss was invented less than four years ago, yet already it has been successfully used in large numbers by architects for important buildings. A smaller type is also in use for housng work, and has lately been adopted by Mr. Edgar D. Dennis, M.S.A., architect, for the Blackpool scheme. The radle truss is a type of composite roof principal in which ll the parts are scientifically designed and standardized to romote rapid delivery, the result being that the erection of he truss can be accomplished with the minimum amount f time and labour.

As will be seen from the accompanying drawings the ompression members of the truss are of timber, and the ension of steel; and the difficulty of joining these materials as been overcome by the use of a pressed steel cradle. he tension rods are all in pairs, set wide apart (an average f 5 in. on smaller, to 8 in. on larger trusses), and are symmetrically placed about the centre of gravity to secure teral rigidity. These rods are "cradled" on the surface, nd the framework is not therefore weakened in its vital arts by the drilling of holes for these connections. All the oints are formed with screwed steel bars (there being no veted joints) so that every member can be readily dismantled should the trusses ever require to be taken down nd re-erected elsewhere. These joints are adjustable in a w minutes after erection to avoid initial strains.

The timber rafters enable the purlins, or the roof coverng, to be fixed easily in any position along the rafter, and hey can be easily inspected and painted. The timber afters and struts give a substantial appearance, which is very desirable feature when the truss is used for lecture alls and public buildings generally. At the ends of all the mbers pressed steel cradles are used, and these are designed that they can be obtained in any variation of pitch and rength.

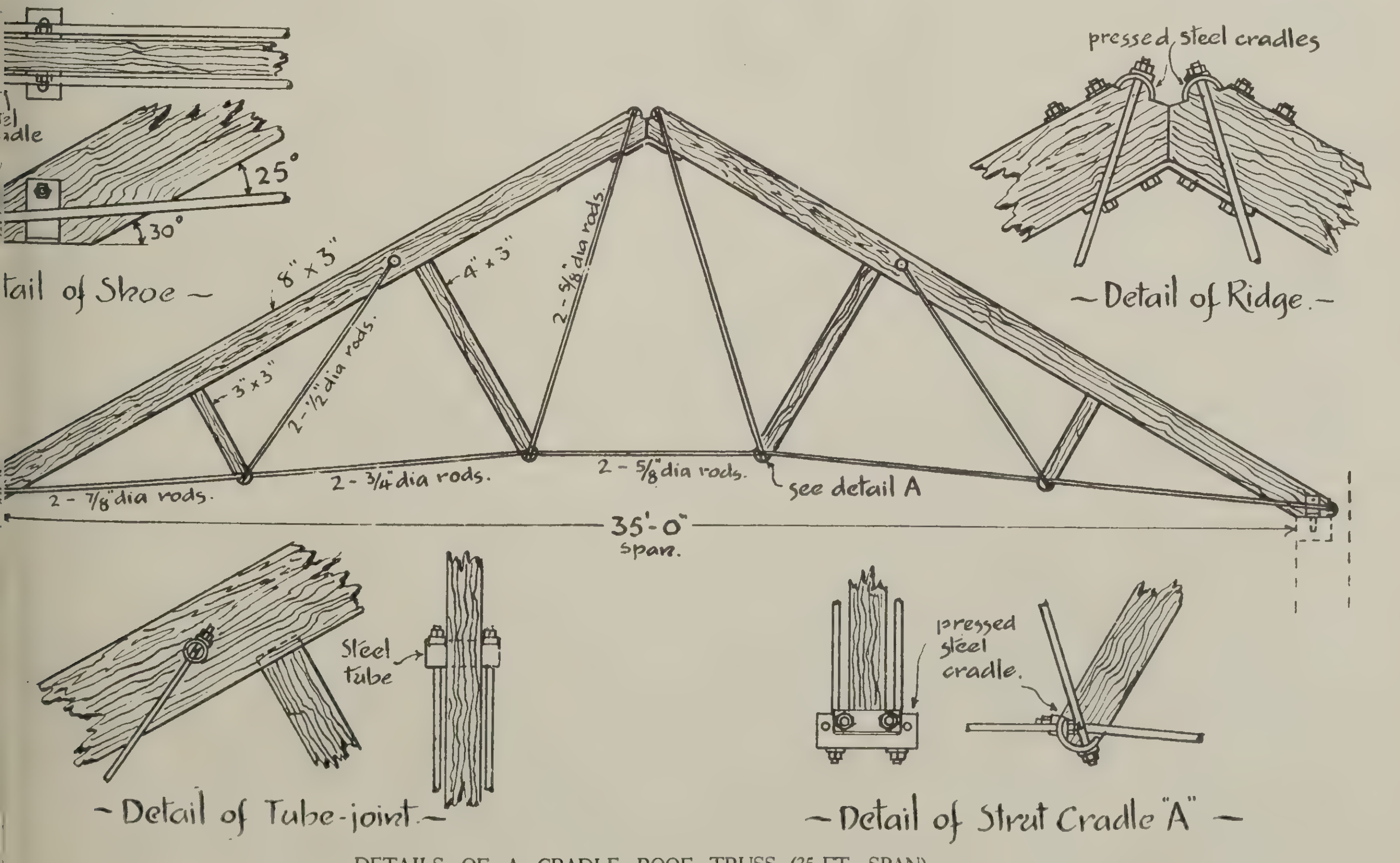


DIAGRAMS OF CRADLE ROOF TRUSSES.

For spans of 20 ft. to 25 ft., 30 ft., 35 ft. to 45 ft., and 50 ft. to 60 ft., respectively.

The trusses can be supplied by the makers, Messrs. ames Wild & Co., of 49 Deansgate, Manchester, and 7 Wellington Street, London, W.C.2, engineers, in any pitch, and to suit any kind of covering, for all classes of work from 15 ft. to 80 ft. span, either complete, or steel parts only, with a drawing of the timbers which are simple to make. The standard cradle trusses are the correct strength for slates when placed 10 ft. apart. For lighter covering the distance apart can be increased to suit, or a light type of cradle truss can be obtained. Cradle trusses have been used with good results on roofs having semi-circular and elliptical ceilings, and they are also particularly suitable for taper buildings and other unusual jobs. It will be noticed that the truss eliminates the heavy tie beam and that there are no cast-iron shoes or joints.

The small cradle truss for houses used on the Blackpool municipal housing scheme has met with the entire approval of Mr. Edgar D. Dennis, who has expressed himself as quite satisfied with their many advantages for housing schemes. By the use of this small cradle truss the 4½ in. walls to the first floor of the houses can be eliminated and the building can be roofed in quickly. It also allows the



DETAILS OF A CRADLE ROOF TRUSS (35 FT. SPAN).

architect great freedom in planning, and provides a sound job constructionally.

Following are particulars of the spans and weights of the four cradle trusses shown on the accompanying small diagrams. The trusses are 30 deg. pitch for carrying slate roofing at 10 ft. centres :—

Span.	Total Weight. lbs.	Steelwork portion. lbs.
No. 1 (the smallest), 20 ft. ..	270	95
Ditto, 25 ft.	320	105
No. 2, 30 ft.	430	160
No. 3, 35 ft.	510	265
Ditto, 40 ft.	720	285
Ditto, 45 ft.	860	400
No. 4 (the largest), 50 ft. ..	1150	510
Ditto, 55 ft.	1400	630
Ditto, 60 ft.	1750	750

American Architecture as I Saw It

By E. W. B. Scott, A.R.I.B.A.

I visited the States and Canada in the spring of this year for the purpose of studying American architecture, because I believed the best work in the world was being done in America. During my visit I saw nothing to modify and much to confirm that belief. This is not to say merely that in America their wealth enables them to erect expensive buildings, for their best work, while often rich, does not flaunt its costliness.

I do not suggest that all American buildings are good—far from it. There has been during twenty years or more an amazing amount of building, and a large proportion in America, as is the case elsewhere, is not the work of architects at all. There is, of course, much that is bad; but I do say the average in America is higher than the average of modern works elsewhere, and the best in America is absolutely and unquestionably the best that is being done anywhere. There are, of course, numberless historical buildings in Europe of which I do not speak, and American architects are their greatest admirers. They come over in crowds to study them, and all the best American work is based on these great architectural epochs. But it does not lavishly copy.

This is a new age, making ever new demands on architecture, demands undreamed-of in past times. To-day you require from the architect most complex cities with all that connotes great offices, hotels, factories, schools, hospitals, and railway stations. A hundred new problems have been presented for solution.

It is as unfair to compare these with Gothic churches or even Florentine palaces as to compare a motor-car with a Sedan chair or a stage coach. True, this present is not a great age of architecture, but the great age is near—nearer than most of us realize. This is, for architecture, a time of experiment and gradual advance, of false starts and disappointments. The architecture of America is leading this pioneer work, and I ask you to study it with eyes not on the dead past, however lovely, but on the future. Only so can you appreciate the interest and significance of these buildings.

The above extracts are from a lecture given under the auspices of the Norfolk and Norwich Association of Architects. The lecturer showed a number of interesting slides to illustrate different points in the construction of big buildings of all sorts. On the subject of "stores," Mr. Scott drew attention to the fact that in almost every case they were plain in the middle, interest being concentrated on the tops and bottoms, and particularly on the doorways. The most unique point about the construction of the hotels was that the most expensive rooms were at the top. The construction of factories and mills was far in advance of that of any other country. There was plenty of light, and everything was mechanical—even the window-openings. Such factories were erected at the rate of one floor per week. In a review of its public buildings, Mr. Scott termed Washington "a modern Athens."

The Progress of Road Construction

A well-attended conference, convened by the Associations of Local Authorities in conjunction with the County Surveyors' Society, and presided over by Sir Henry Maybury, was held at the Royal Agricultural Hall in connection with the Public Works, Roads, and Transport Exhibition.

In a joint contribution by Lieutenant-Colonel J. F. Hawkins (County Surveyor of Berkshire) and Captain C. J. Mitchell (Ministry of Transport) on "The General Construction of Bridges," it was pointed out that the revolution in traffic conditions had brought with it the knowledge that a very large number of road bridges were quite inadequate, both as regards strength and width. As the improvement in roads usually preceded the strengthening of bridges, the highway engineer was faced with a difficult problem. The Ministry of Transport had come to his aid in the task of fixing a minimum standard of loading. The Road Department load was based on a 20-ton engine drawing three 13-ton trailers with 50 per cent. added for impact—which ought to provide for all normal traffic conditions for many years to come. The construction of new bridges, whether of reinforced concrete, steel, brick, or masonry, presented far less difficulty than the widening of existing structures.

In the discussion, Mr. W. P. Robinson (Surrey County Council) drew attention to the difficulty of dealing with bridges in the ownership of railway companies, canal companies, and others over whom highway authorities have no control. Mr. A. B. Collins (Norwich) referred to the objections which had been raised referring to road works as a means of alleviating unemployment on the score of the men's lack of skill. He said that in the case of a viaduct built under his superintendence, part of the work was done by those who would otherwise have been unemployed and the rest put out to contract. During a recent critical examination of the work it was found that the portion executed in order to afford employment did not require any renewal, while that carried out by contract was in a very bad condition.

Mr. W. P. Robinson read a paper on the reconstruction of existing roads. He expressed the opinion that, while the surfaces of the main roads of the country were suitable for mechanically-propelled traffic, the foundations were not adequate to the requirements of heavy vehicles, and the need of undertaking costly road foundation work was a burden which some local authorities were unable to bear.

Sir Henry Maybury in summing up the discussion, said that the question of bridges belonging to railway companies and other outside owners had been for a long time engaging the attention of the Highway and Bridge Committee of the County Councils Association, and he hoped before long that a satisfactory solution would be reached. He impressed on those engaged in road work the importance of getting good value for money, and of planning on economical but sound lines. A calculation made in connection with the classified roads of the country showed that if it were possible to save in road works 1d. per superficial yard it would represent £1,800,000 a year.

The Public Works Exhibition at the Agricultural Hall has been productive of several interesting examples of advertising literature. Amongst these must be included an illustrated booklet entitled "The Better Way." All concerned with the modern road and its construction will find much relevant value in this little survey of present-day problems and their approach. The booklet is issued by Messrs. Richard Hill & Co., Ltd., of Middlesbrough and London, reinforced concrete engineers, and indicates briefly the evolution of road transport and its incidence to modern practice in highway engineering. The burden of the modern road is emphasized by statistics and the employment of reinforced concrete as a solution to the problem of wear and tear is broadly outlined. The application of the theory is illustrated by photographic views and description of actual work where "Maxweld" reinforcing fabric is employed.

Societies and Institutions

R.I.B.A. New Members

At a general meeting of the R.I.B.A., on December 3, the following members were elected :—

As Fellows (21).

Allner, J.
Conder, A. R., P.A.S.I.
Drysdale, G.
Francis, E. C.
Godwin, W. H.
Greenaway, F. H.
Hatchard-Smith, W. H.
Hepworth, P. D.
Hill, O.
Hutt, H.
Markham, J. H.
Marshall, C. J.
Mayston, A. R.
Morton, R. H.
Newberry, J. E.
Newton, W. G., M.C., M.A. (Oxon).
Sharp, A.
Sullivan, L. S.
Unsworth, G., M.C.
Wilson, G. C.
Wood, D., O.B.E. (Mil.), F.S.I.

As Associates (30).

Alexander, T. M.
Billimoria, H. F., B.Arch. (Liverpool).
Black, K E.
Buchia, S. N., O.B.E. (Civil)
Bush, S. P.
Clark, R. J. B.
Clist, H. A.
Davidson, A. E.
Deuchar, C. C.
Doddington, W.
Eales, W. H.
Fearn, S. W.
Foreman, L. R.
Hall, L. W.
Halliday, F. L.
Haughton, V. P.
Igglesden, S. D.
Masey, R. J.
May, A. J.
Milligan, T. W.
Moffat, J. A. C.
Monk, S. G.
Parham, A. D.
Riding, R. A. F.
Ross, W.
Sterrett, J. E.
Toy, S., F.S.A.
Trengrove, W. H.
Walker, H. A. H., M.C.
Wilson, J. G.

As Hon. Fellow (1).

Burnham, The Rt. Hon. Viscount, C.H., M.A., LL.D., D.Litt.

As Hon. Associate (1).

Kenyon, Sir Frederick George, K.C.B., M.A., D.Litt.

The Society of Architects

Appended are notes from the minutes of the last Council meeting of the Society of Architects :—

Registration.—On the invitation of the Council of the R.I.B.A. the Council of the Society have appointed representatives to resume negotiations with members of the Institute Council on the subject of registration. Conferences between the parties are proceeding.

Arbitration Tribunal.—The Council of the Society have appointed an Arbitration Committee available for reference to arbitration : (a) by consent out of court, and (b) by reference under an order of the court concerning matters in dispute affecting or connected with (a) the profession of architecture, and (b) the building and allied industries. The Committee is constituted at present as follows : E. J. Partridge, P.S.A., F.S.I. ; E. C. P. Monson, PP.S.A., F.R.I.B.A., F.S.Arc. ; E. J. Sadgrove, PP.S.A., F.R.I.B.A., F.S.Arc. ; A. J. Taylor, VP.S.A., F.S.Arc. (Bath) ; and John Knight, M.S.A. (Manchester). The registrar of the Committee is Major W. E. Watson, F.R.I.B.A., barrister-at-law. The persons eligible for appointment as arbitrators under the rules are : (a) Fellows and Members of the Society of Architects ; and (b) specially qualified persons appointed by the Committee. It is the first tribunal of its kind, and its purpose is to have ordinary differences settled speedily and economically, and its benefits are not restricted to members of the Society of Architects. Rules regulating the procedure and the fees payable have been drawn up.

Board of Professional Defence.—Major Harry Barnes, VP.R.I.B.A., and Major W. E. Watson, F.R.I.B.A., barrister-at-law, have accepted the Council's invitation to serve on the Society's Board of Professional Defence.

Education.—As a result of reports and recommendations received from various committees dealing with educational matters the Council have made such revisions to the Society's regulations relating to examinations, scholarship competitions, and design courses as will increase their scope and privileges and remove restrictions other than those necessary for their proper conduct, thus enabling them to be carried on with greater benefit and advantages to all concerned.

The Building Surveyors' and Inspectors' Association

We have received a copy of the first issue of the "transactions and proceedings" of the Building Surveyors' and Inspectors' Association. Mr. William J. Stone, the chairman, in the foreword, outlines the events which led to the formation of the Association, and says the idea originated with a few friends in the north. Several informal meetings were held, after which an invitation was extended from Mr. Stone and Mr. Wm. A. Warwick to building surveyors in many of the northern and western areas with the result that in 1920 it was decided to form an association "for the professional and educational advancement of building surveyors."

Mr. Stone says : Outside the Metropolitan area of London building surveyors and inspectors do not appear to have been brought together from any common standpoint. Hitherto the ranks have been filled more or less haphazardly in many of the smaller towns, the Public Health Act placing the responsibility upon the local authorities for the appointment of surveyors, the duties, in addition to engineering and surveying, including that of building surveying or inspection work ; some few of the larger cities and towns, by virtue of special Acts were empowered to appoint building surveyors, as distinct from city surveyors or engineers. Without encroachment or usurpation on other professional institutions, there appears a case for the independent appointment of building surveyors for all local authorities equal to or above the recognized county borough basis. Doubtless some surveyors may think such a reclassification unwarranted, but many would no doubt welcome it as relief from a branch of work difficult of complete or personal supervision, and, in many instances, difficult to control from the fact that reliance must be placed on the evidence of subordinate officers ; whereas actual personal inspection or observation is so essential to a complete understanding of many examples of work that are at once involved and intricate. If building surveyors realize the advantages of organization and educational development, the broader aspect of the Association's work should develop when the work of obtaining statutory recognition similar to other branches of the public service would be amply facilitated. With regard to the future of the Association, he says the road ahead is full of twistings and turnings. But we have the courage of men who believe the venture that has been made will lead to great things. Not only will it lead to greater efficiency of public service and the improved status of each of us in that service, it will lead to the wider and far-reaching things which are implied in public service : it will lead to such contributions to the life of the community which benefits from our work as shall make life nobler and saner and sweeter—surely a desirable goal after the horrors from which we have been so slowly emerging.

The Association is affiliated with the National Association of Local Government Officers, and the hon. secretary and treasurer is Mr. William A. Warwick, M.R.S.I., 124 Well Lane, Birkenhead, Cheshire.

The Wembley Exhibition of Architecture

The R.I.B.A. have been invited to arrange an exhibition of architecture in the Palace of Art at Wembley. The exhibition of architecture will open on May 19 and will close on June 28, 1924, and will consist of a representative selection of the recent work of living architects in the United Kingdom, India, the Dominions, and Colonies. It is proposed that photographs and models only shall be exhibited. The exhibition will be of a general nature, except that town planning and housing schemes will be excluded in view of the fact that a town-planning exhibition is to be held immediately before the exhibition of architecture. The arrangements are being carried out by the R.I.B.A. Exhibition Committee with the assistance of the Architecture Club. Owing to the limited space at their disposal and to the necessity for the display of representative work from the whole Empire, the Committee propose that the exhibition shall be arranged by invitation only.

Annual Prize-giving at Cardiff

There was a large gathering of members of the South Wales Institute of Architects, students and their friends at the Technical College, Cardiff, on the occasion of the annual prize distribution and exhibition of designs and measured drawings. Mr. Percy Thomas, F.R.I.B.A., President of the South Wales Institute of Architects, in presenting the prizes, referred to the improvement in the standard of work shown and the keenness with which the students had competed.

Mr. W. S. Purchon, M.A., A.R.I.B.A., Head of the Department of Architecture and Civic Design at the Technical College, Cardiff, gave an address on the work of the school of architecture. He spoke of the close association between the School and the South Wales Institute of Architects, and expressed the thanks of the staff and students to those whose generosity had made the prize distribution possible. He explained that the School, while comparatively young, was steadily growing, and that much of its success was due to the ability and zeal of his assistants, Mr. R. H. Winder, M.A., A.R.I.B.A., and Mr. Eric Page, A.R.I.B.A., and the excellent work done by the students of architecture in the courses which they took in the school of art and in the departments of engineering, mathematics, and chemistry.

Following is a list of the prizes awarded :—

South Wales Institute of Architects, Central (Cardiff) Branch Prizes :—

Design.—Atelier : C. A. Benson. Day Department (third year) : B. Thomas, and L. Monroe, equal. Day Department (second year) : First prize, J. B. Wride; second prize, V. Banks.

Measured Drawings.—First prize, B. Thomas; second prize, J. B. Wride.

Department of Architecture and Civic Design Prizes :—

President's Prize for Draughtsmanship (presented by Mr. Percy Thomas, F.R.I.B.A.), D. J. Williams.

The Architectural Sketching Prize (presented by Messrs. Teather and Wilson), E. B. Byrd.

The Architectural Construction Prize (presented by Mr. Sydney Williams), L. Monroe.

The Batsford Prize for Architectural History (presented by Messrs. B. T. Batsford, Ltd.), V. L. Nash.

The Essay Prize (presented by Mr. Alwyn Lloyd, F.R.I.B.A.), V. L. Nash.

The Cardiff Technical College Certificates in Architecture.—L. Monroe (with distinction), V. L. Nash (with distinction), B. W. Thomas (with distinction), Kathlyn Atkins, W. O. Oakley, D. J. Williams.

The above Certificate carries with it exemption from the Intermediate Examination of the R.I.B.A.

Other successes obtained by students in the Department during the past Session :—

R.I.B.A. Jarvis (Ex-Service) Travelling Scholarship : B. S. Bailey.

Prize for Architectural Design, National Eisteddfod, Mold : D. J. Williams.

R.I.B.A. Intermediate Examination : G. H. Griffiths, E. B. Tyler.

Municipal Recreation

In his eighth lecture on Town Planning at Birmingham University, Mr. William Haywood, F.R.I.B.A., said that an important auxiliary to health in great cities was the provision of an adequate amount of open space; and where this could be arranged in association with closely built areas it was at its greatest value; whether for the general purpose of ventilation, or as an aid to amenity. The absence of spacious accommodation for promenading in industrial towns led to the use of main roads for this purpose; a purpose which they were never intended to serve. Suburban parks, which were once used almost exclusively for promenading, were now greatly encroached upon in order to accommodate casual or organized ball games, the increasing demand for which continued to embarrass the park administration of our great towns. It was clear that park administration in this country was tending towards wider and more significant responsibilities; and that in common with other European countries we should reconsider the whole question of municipal recreation on a basis similar to that adopted in America; where great nature reservations outside the city were linked up with suburban parks, by means of parkways and strays which cut right across the heart of the town.

The late Mr. Edward Maxwell

We regret to record the death of Mr. Edward Maxwell, R.C.A., a prominent Canadian architect. Born in Montreal in 1867, he received his early education at the Montreal High School, and began his architectural career in the office of the late A. F. Dunlop. Later he went to Boston and was associated with the firm of Shepley, Rutan, and Coolidge, returning in 1892 to take up practice in Montreal. In 1903 he founded the firm of Edward and W. S. Maxwell. For years he was an outstanding figure in the architectural profession of that continent, his great capacity and ability being reflected in his uniform success in architectural competitions held throughout the Dominion. He was the rare combination of a practical architect and true artist, which qualities were early recognized and appreciated, and for many years he carried on one of the largest practices the Canadian profession has known. As memorials to his talent and energy Mr. Maxwell leaves some of the best known architectural achievements throughout the Dominion in monumental and commercial buildings, churches, city residences, country estates, and monuments. Among his most notable works are the Arts Association building, Montreal; Legislative and Executive buildings, Regina; Royal Alexandra Hospital, Montreal; Montreal General Hospital; Nurses' Home, Royal Victoria Hospital; the Church of the Messiah; Montreal High School; Montreal Stock Exchange; Merchants Bank building; Canadian Pacific Railway Hotels at Winnipeg, Calgary, Vancouver, and the Chateau Frontenac at Quebec, and much domestic work, including the city residence of the general manager of the Bank of Montreal. He was a member of the Royal Canadian Academy, of which he was vice-president and councillor for many years. He was one of the pioneers of the Province of Quebec Association of Architects.

Contemporary Art

The Leicester Galleries.

There is a fierce intensity in the paintings of Vincent van Gogh which amounts to a motive force. There is a stage of vitality which goes beyond reality into revelation. "The Postman" lives not only on the canvas, but in the spirit; the projection of the houses in the Arles picture is awkward according to rules, but vividly actual to the eye : the postman and the artist's house are there. Never had a great artist so poor a technique as van Gogh, but never has technique achieved so much either as to reality or as to vision. There is in "The Cornfield with Rooks" much rough painting, but it has succeeded in conveying a convincing imaginative display entirely of the spiritual order; a revelation of emotion. But it is not only in vision that there is emotion in van Gogh, for despite the peculiarities of technique, or because of them, there is emotion in the very paint of these works, there is a fiery rhythm, and an intense vibratory sensation in it which is the result aimed at, but which also exists in the very mechanism of the paint and brushwork themselves. Van Gogh has achieved perpetual vibratory motion. The forty works now exhibited at last in London are a triumphant vindication of a ridiculously maligned master of the nineteenth century.

The quiet and calm assurance of knowledge and method shown by the works of E. M. O'R. Dickey are in direct contrast to van Gogh's titanic strivings. The peace of the "Sabine Mountains" lends itself to such treatment, but so clever is the artist that the railway crossings of "Kentish Town" are invested with the same composure, and, moreover, it is convincing as seen in this picture : that is the artist's magic, he can make of any scene what he sees and feels himself, if he is clever enough—E. M. O'R. Dickey is.

The Greatorex Gallery.

It is seldom that so homogeneous, so cultured, and so right a collection of water-colour drawings is seen in London as that by De Ville, of Cheshire and the Wirral Peninsula. They are mostly small; they are in low tone, befitting the subjects; they are atmospheric, but compact of the earth and the river; and they have a human interest. Their method is consonant with that of the British masters, and consists of soft-running washes of colour tones accented with pen lines and very delicate and fine brush strokes. De Ville gives a broader treatment to his oil pictures, but in these drawings, so full of charm, there is a tranquillity of treatment which well fits the subjects chosen. Some of them ought to be secured for the national collections.

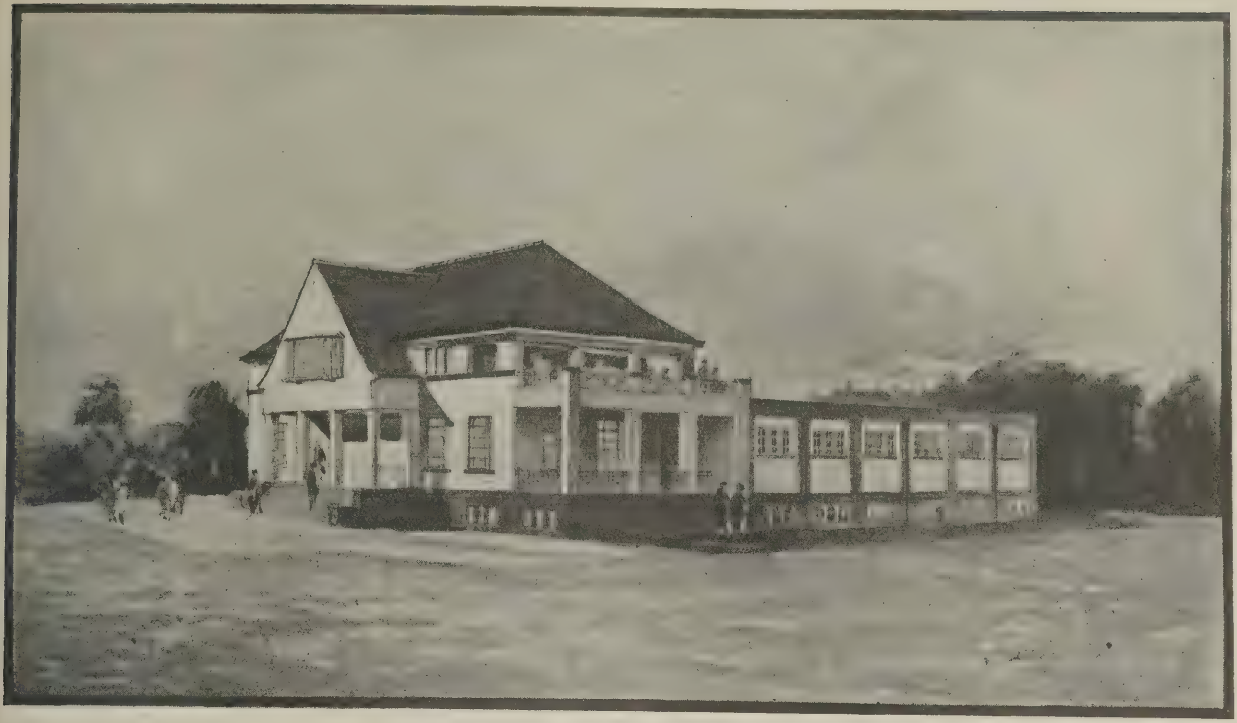
The St. George's Gallery.

The fourth annual exhibition of the Society of Wood Engravers is one of the most hopeful and beautiful signs of the times. It sets a standard; it is the standard of Bewick and W. J. Linton; the standard of all great engraving. Even when Gordon Craig makes one of his wood engravings look like an etching the standard is not wholly departed from, and when Eric Gill rises to a height, as he does in at least one of his prints, he lifts the whole exhibition with him. Here, if anywhere, is a typical exposition of British art of to-day. England has much to be proud of in its wood engraving of the past, and its present revival is a thing to be devoutly thankful for. Most of the younger artists of the time are participating in it—Paul and John Nash, E. M. O'R. Dickey, Gwendolen Raverat, and Ethelbert White, and the display of nine prints by the last-named artist is a remarkable one. Some of the older men, too, like Lucien Pissarro, contribute.

Other Galleries.

May Tritton is exhibiting her water-colours at Walker's until December 16. At the Arlington Galleries, paintings, water-colour drawings and etchings by E. J. Detmold made a pleasant display. At Mr. Furst's Little Art Rooms in the Adelphi, Frances Hodgkins has some paintings and drawings until the twenty-second, and at the Galerie L'Effort Moderne in Paris, M. Léonce Rosenberg exhibits old and new works by the modernists, including Braque, Csaky, Gleizes, Laurens, Picasso, and Severini.

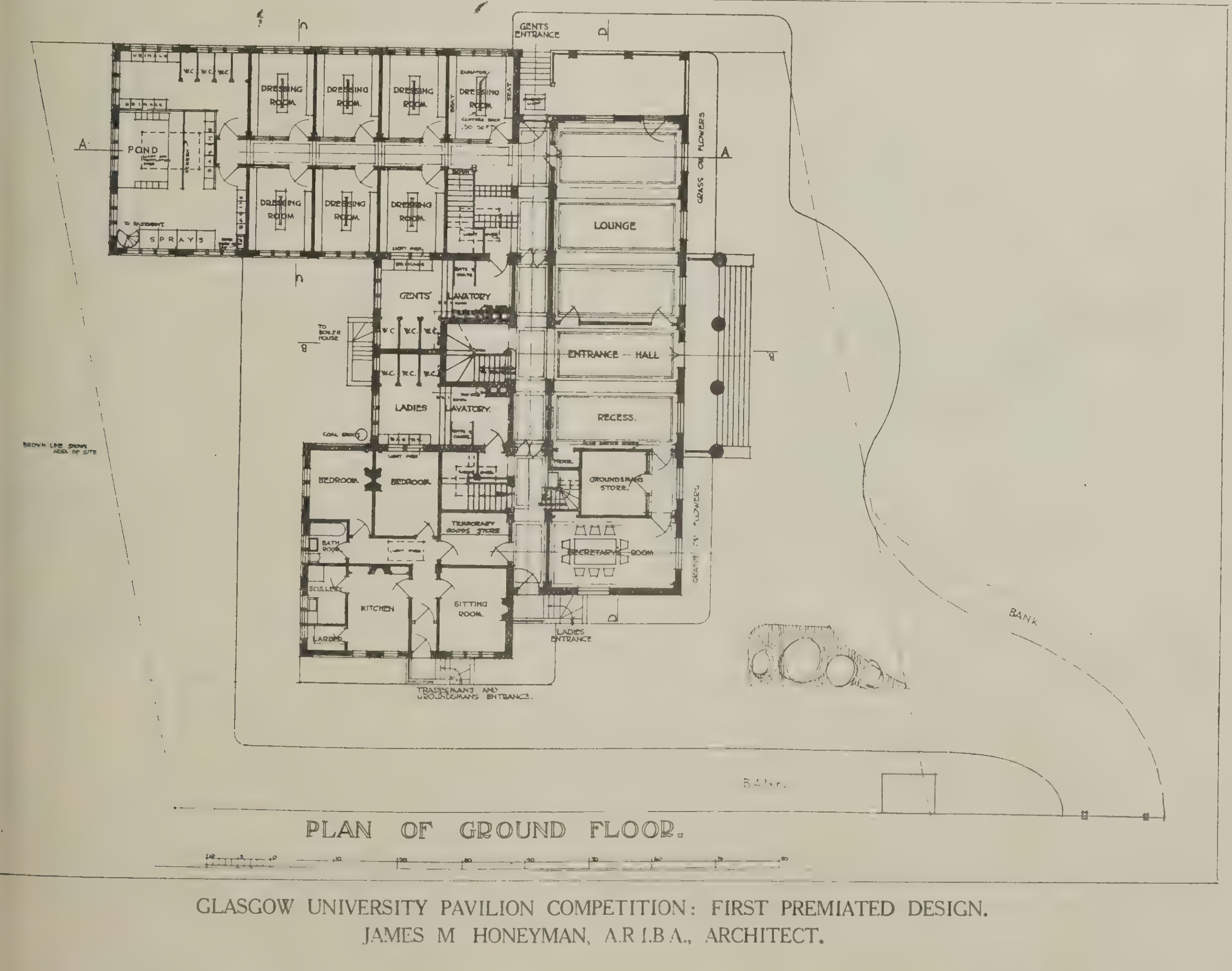
KINETON PARKES.



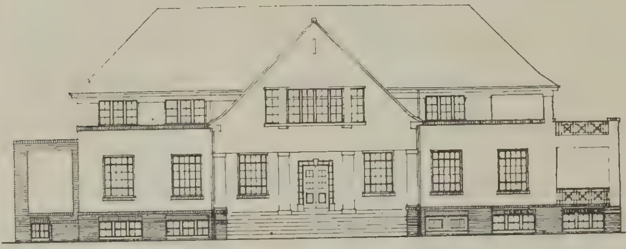
A PERSPECTIVE VIEW.

Glasgow University Sports Pavilion Competition

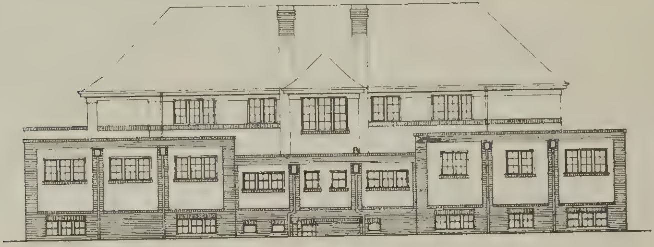
THE assessor, Mr. A. N. Paterson, A.R.S.A., F.R.I.B.A., made the following awards in the competition for the Glasgow University Sports Pavilion: 1st, Mr. James M. Honeyman, A.R.I.B.A.; 2nd, Mr. Will J. B. Wright; 3rd, Messrs. John Burnet, Son, and Dick. A criticism of the designs is unavoidably held over till next week. The winning design is illustrated on this and page 888.



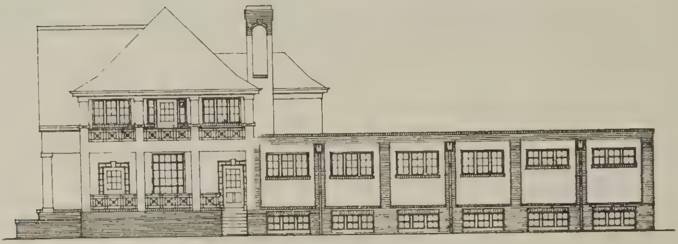
GLASGOW UNIVERSITY PAVILION COMPETITION: FIRST PREMIATED DESIGN.
JAMES M HONEYMAN, A.R.I.B.A., ARCHITECT.



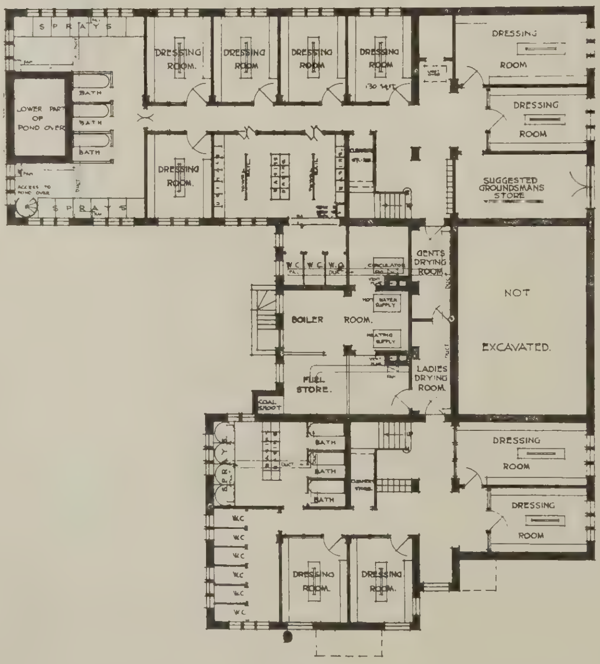
EAST ELEVATION



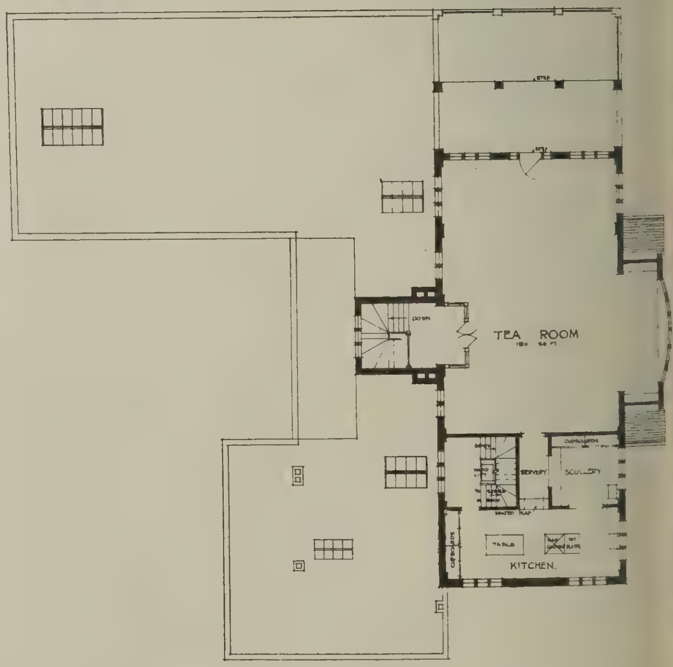
WEST ELEVATION



NORTH ELEVATION



PLAN OF BASEMENT FLOOR.



PLAN OF FIRST FLOOR.

GLASGOW UNIVERSITY PAVILION COMPETITION: FIRST PREMIATED DESIGN.
JAMES M. HONEYMAN, A.R.I.B.A., ARCHITECT.

ednesday, December 19, 1923. Vol. LVIII. No. 1511.

THE ARCHITECTS' JOURNAL & Architectural Engineer

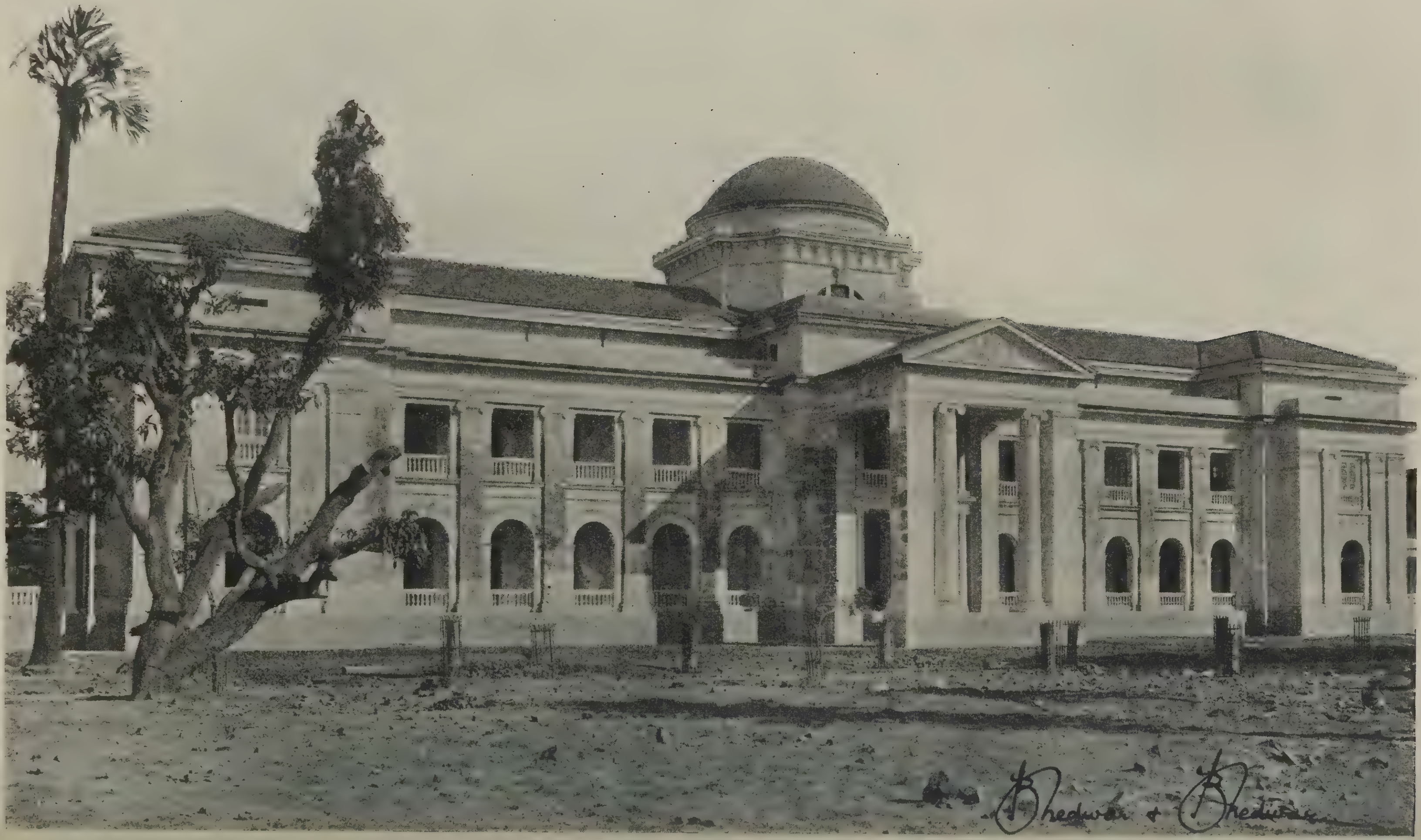
With which is incorporated "The Builders' Journal."

THE TOLSEY, BURFORD.

27-29 Tothill Street, Westminster, S.W.1.

Current Architecture. 216.—The Victoria Jubilee Technical Institute, Bombay

Bhedwar and Bhedwar, Architects



This building erected on the new Institute grounds at Matunga near Bombay forms the central block of a scheme comprising such other buildings as workshops, power house, staff and students' quarters, gymnasium, etc. The plan is E shaped.

THE

ARCHITECTS' JOURNAL

27-29 Tothill Street, Westminster, S.W.1.

'ednesday, December 19, 1923 Volume LVIII. No. 1511

Housing: Facing the Facts

WE make no apologies for once more devoting these columns to housing, for it is surely becoming quite evident that the methods hitherto adopted are proving inadequate. We are not concerned with party politics or, indeed, with abstract principles, but with facts. The returns sent in under the Act of 1919 showed a net deficit of 796,248 houses, including replacements. This figure was subsequently challenged, particularly since it showed such an enormous increase above a similar return, but one made with less thoroughness in 1918, which estimated the need for England and Wales to be 384,040. The number, however, cannot have been less than half a million, and to this must be added a yearly requirement of about 100,000, a requirement which, owing to the growth of the population and to a general raising of standards, tends to increase.

Unfortunately the whole matter is frequently obscured by statements and arguments which are only partially true. For instance, it is stated that supply and demand, if left alone, will adjust themselves; and if there be a demand for houses and no outside interference—either by the State or by the municipality—someone will satisfy it as they have satisfied it in the past. Actually neither of these statements is entirely true. Supply and demand can adjust themselves only economically but not effectively. It is the demand of only those who can afford to pay, either by outright purchase or by adequate rent, that supply will meet, as for the remainder the alternatives are overcrowding and the hedgerow; the results are disease and discontent. Moreover, since the gross number of the houseless and the improperly housed has been steadily increasing for the last hundred years, it is manifestly incorrect to state that supply and demand have adjusted each other in the past. The proportion of houseless to housed has decreased, yet the sum total of arrears is ever increasing.

Attempts are made to explain away the present state of affairs by blaming building operatives, who, by means of short hours and restricted output, are said to have been the cause of expensive houses for which the working classes cannot afford to pay rent. Undoubtedly during the disastrous and artificial boom which occurred soon after the armistice, labour defaulted in both these respects, but then, it must in justice be pointed out, so did all those who sought to take advantage of the conditions and the situation. Yet if the rent be analysed it will be found that labour costs represent a comparatively small percentage of the whole, less than materials, less than rates, less than, collectively, the sums for repairs, empties, and management costs.

Another line of argument tries to show that since there is unemployment more men should be employed to build houses, thus two objectives would be achieved at once: more houses would be built, and there would be less unemployment. Unfortunately the matter is not so simple as that. In the first place there are already many unemployed in the building trade itself, in the second, building—even cottage building—is still, thank goodness, a craft and not the mere assembling by physical energy of discrete materials into a homogeneous mass. And craftsmen require training. However great the demand for building a certain amount of unemployment in the trade is inevitable, since the locality in which building activities is required changes, and unless we are to have mobile armies of building operatives, a suggestion which has in all seriousness been made, local unemployment is almost inevitable.

Neither can the Rent Restriction Acts be made responsible for the shortage. There is no doubt that these Acts, as pointed out in the Majority Report of the Departmental Committee, have deterred investors to some extent, but the main deterrent is the incapacity to pay an economic rent, a state of affairs which the removal of the rent restrictions would not materially affect.

Look at the matter how we may we are forced back to the conclusion that there is a gap between the cost of the house and the capacity for payment. This gap is not attributable to any isolated cause, but is the result of general conditions and arrangements. Unless it can be bridged it is quite hopeless to expect any natural adjustment of the laws of supply and demand, and it then becomes necessary to seek some artificial remedy. It is possible to make an analogy between housing and education. If all facilities for public education were withdrawn there would still exist a demand for education, but this demand could not be met by private enterprise because those making the demand would be unable to give adequate remuneration. It is realized to-day, however, that a country the mass of whose people are semi-educated is insecure and cannot hold its own, and so it becomes necessary to make education a public service to which all contribute and from which all, either directly or indirectly, benefit. The principle of public education is no longer questioned although its scope and the details of its administration may be. During the last quarter of a century our expenses in public education have quadrupled. Similarly, it may be argued, that a country many of whose people are houseless or are improperly housed is insecure and unable to hold its own, so that it becomes necessary for the State to undertake or to supplement the supply of houses, and from such procedure likewise all would benefit either directly or indirectly. We do not hesitate to say that before long this fact must receive general recognition. There will then remain the task of devising the best and most economical method for making this provision.

There is an old and sound adage which says that those who pay the piper call the tune. If the State is to pay for the building of houses it is therefore surely necessary for it to see that the houses are worth paying for. And this entails a closer and more careful supervision than the mere approval of plans for isolated houses. Successful housing depends on more than the erection of individually good houses. Their relation to each other, to their position, and to the present and probable future needs of the community must be considered. In other words, it is not enough for the State to subsidize individual houses, even though they conform to a general standard of fitness; it must do more; it must assume control or partial control over housing as distinct from houses, and it must see that materials are available at a fair price. Broadly, it may be said that the first Act of 1919 dealt with housing while the subsequent Acts have dealt with houses, and for this reason, if for no other, they are ineffectual.

It would thus appear that the matter cannot be dismissed on the ground that State control in any form is undesirable. If the provision of a certain commodity be for the benefit of the community as a whole, and if those most in need of that commodity are not in a position to pay for it, then clearly it behoves the community as a whole to provide it. When once this fact is accepted, ways and means will be forthcoming.

Sash or Casement ?

Mr. C. F. A. Voysey has an interesting note on the subject of "Casement or Sash Windows," in the current issue of the R.I.B.A. Journal. He gives the arguments for and against both, but it is easy to see that his personal predilection is for the casement. He sums up by saying "Casements are essentially English, and sashes essentially classic." A doubtful distinction. Our English version of "classic" is surely no less an indigenous product than is the pre-Renaissance architecture which Mr. Voysey apparently has in mind when he says "English." Is not the sash-window English in origin ? It is hard to say. Nobody seems to know whence or when it came. It seemed to steal into existence unnoticed. According to Mr. Gotch there is no authenticated instance of the use of a sash-window before the time of William the Third. No one, however, except Mr. Voysey, has yet hinted that sash-windows are foreign to the soil. And are they necessarily classic ? Contemporary views of the Banqueting House in Whitehall show it with casement windows, and it is of course perfectly well known that many of Wren's buildings were originally fitted with casements, the sashes that we see to-day being later insertions. Mr. Voysey has not made out his case. On the general question of windows, however, there can be no doubt that casements are, somehow or other, more suitable to picturesque or informal architecture, especially bucolic domestic, while sash windows are more in keeping with the formal kind of work that we label "Georgian." These distinctions generally prevail and it seems to be right and natural that they should.

Architecture in the Popular View

Professor Rothenstein had some vigorous things to say about the neglect of architecture and of architects in a lecture which he gave at Manchester University last week. He roundly condemned the popular attitude towards architecture expressed in the conventional phrases "I don't pretend to know much about architecture, but I know what I like," or "We can't afford that kind of thing." Both are the result either of ignorance or of misconception. No man should be so pre-occupied with personal affairs that he has no time to think intelligently of the art that comes closest to everyday life. If he is, then he is an object of pity rather than of scorn, and must be helped to a better understanding of the true values of life. The man who says "We can't afford that kind of thing" is a more difficult problem. He suffers from the delusion that architecture must necessarily be expensive. "Business experience" has convinced him that a good thing must be dearer than a bad; therefore he is not going to have anything to do with architecture, and he employs a builder, or possibly a gentleman who combines the professions of surveyor, estate agent, and undertaker, to design his premises for him. He is a hard case, but he should yield to treatment. We have in this country enormous resources of trained artistic ability. The first necessity is to know how to employ this ability. It cannot be allowed to run to waste or to be diverted into non-productive channels. The public has to be educated to a perception of the value of the services of the architect to the community, and already many forces are working towards the achievement of this end.

Architects—Geographically Classified

The geographical distribution of architects is perhaps one which is worth looking into. For instance, a recently compiled list of the local distribution of architects which appears for the first time in the pages of the R.I.B.A. Kalendar, shows 1,500 members practising in London, whilst Manchester, Birmingham, Liverpool, Sheffield, and indeed all the other large cities of the country have, in one case, just over a hundred members, and, in the other cases, less than a hundred members apiece. Places such as Warwick and Rugby and Leamington have only one member. Now this is truly surprising. There are, of course, architects in practice who are non-members of the Institute, but members of the Society of Architects, and also there are numbers of free-thinking men who are members of no society at all; but nevertheless the percentage of architects per head of population in the provinces is very low. Either people living in the provinces build without an architect—or come to London for one. It will be worth while at some time to go more deeply into the matter.

The Price of Fog

As the experts predicted they would be, the recent fogs in London have been followed by a sharp rise in the Metropolitan death-rate. Bronchitis, broncho-pneumonia, and heart affections are the diseases that are induced or aggravated by fogs of the type we have recently experienced in London. How much longer shall we deliberately commit suicide ? For it amounts to this, the remedy lying in our own hands. Mist we cannot help; but fog, which is simply coal-dust in suspension in the atmosphere, it is definitely within our power to abolish. The smoke nuisance must be promptly and strenuously grappled with if our cities are to become safe to live in. Where New York has succeeded London ought not to fail.

Temporal and Spiritual

To combine business with pleasure is quite a common aspiration; to combine business with religion is a less common achievement, though it is not altogether unknown, even in this country. It has been left to our friends the Americans to apply the principle comprehensively and openly to a building. The Rutgers Presbyterian Church at the corner of Seventy-third Street and Broadway, New York, found financial difficulty in maintaining its position in an expensive business locality. Dit it incontinently retire and seek a cheaper neighbourhood ? Not at all. It went into partnership, so to speak, with a trust company and evolved a scheme for a combination church and bank building, "with a large electric sign projecting into Broadway." There is no real mixing of the mundane with the spiritual, however, as the Trust Company occupy only the two lower floors, the church taking over those above, including a roof garden for summer services. Both on Sundays and for evening prayer meetings the congregation will have to use the bank's lifts, thus passing through the place of the money-changers on their way to the temple. The scheme is said to involve a "bold disregard of tradition," as indeed it does. The unconventional is always startling, but not necessarily is it reprehensible. Churches must somehow be accommodated in great cities, and it is better to compromise with the powers of finance than to submit to them without a struggle. In London, of course, the powers of finance are predominant, or would be if the Bishop of London's little scheme for selling some of the churches were not carefully watched. It will be a sad day for the City when the only indication of the site of an old church is a "large electric sign."

Some Recent Indian Architecture

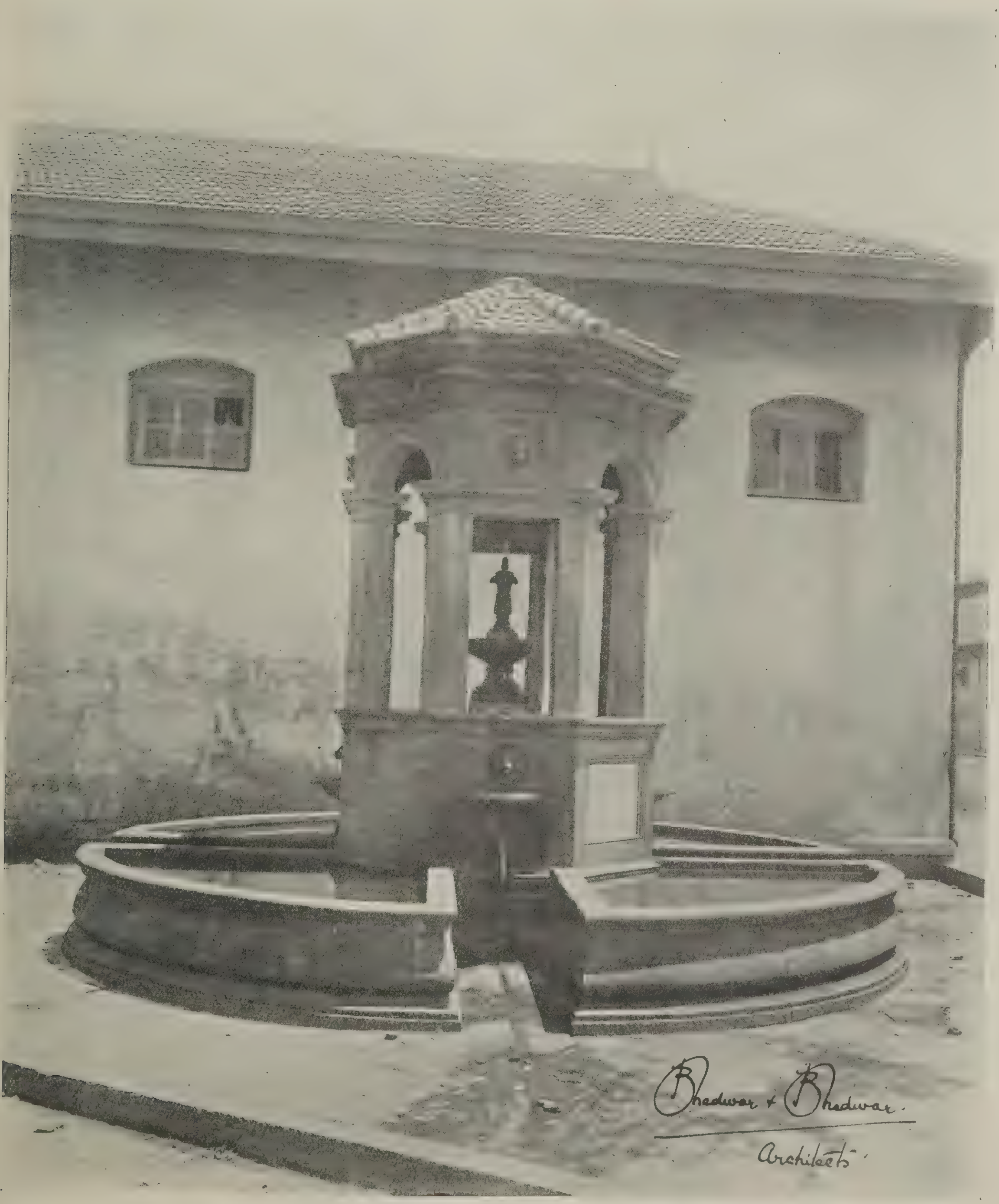
K. BHEDWAR, F.R.I.B.A., B.A., L.C.E., and C. K. BHEDWAR, L.C.E., Architects

THE various buildings by Messrs. Bhedwar and Bhedwar, illustrated in this issue, are good examples of the recent architecture of India. All this work was carried out within the last ten ars—much of it, indeed, is post-war—and it is indicative the breaking away from national styles and the embracing modern ideas.

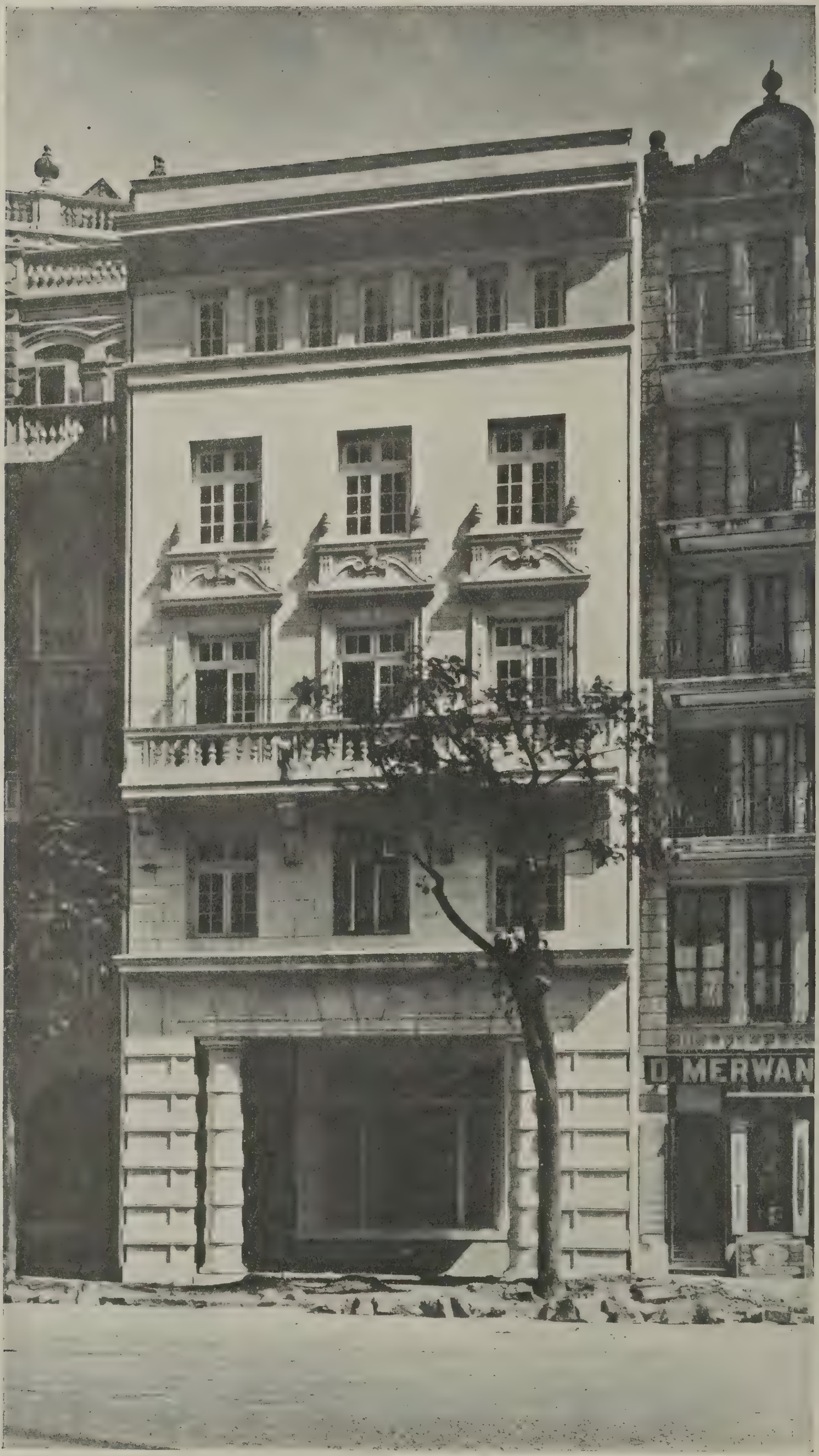
Islamic architecture, which reached its climax in India, more than any other style, the result of inspiration om religious ideas; less than any other style, it has it itself to the business of everyday life. European ethods have had to be adopted and adapted to meet iental requirements, and there is slowly but surely owing up another style, and one more suited to the airs of the day.

The Victoria Jubilee Technical Institute, Bombay.

This building (page 890), erected on the new Institute grounds at Matunga, near Bombay, forms the central block of a scheme comprising such other buildings as workshops, power house, staff and students' quarters, gymnasium, etc. It was completed in 1921. The plan is E-shaped. Through the central portico, a wide flight of steps leads up to a spacious vestibule and stair hall. Arcaded verandas give access to lecture rooms, laboratories and drafting rooms on each side, both in front as well as in the north and south wings of the building. Loggias connect this main building with workshops on the north and south. The frontage is built throughout of fine dressed Porebunder stone. The floors are of reinforced concrete construction on the



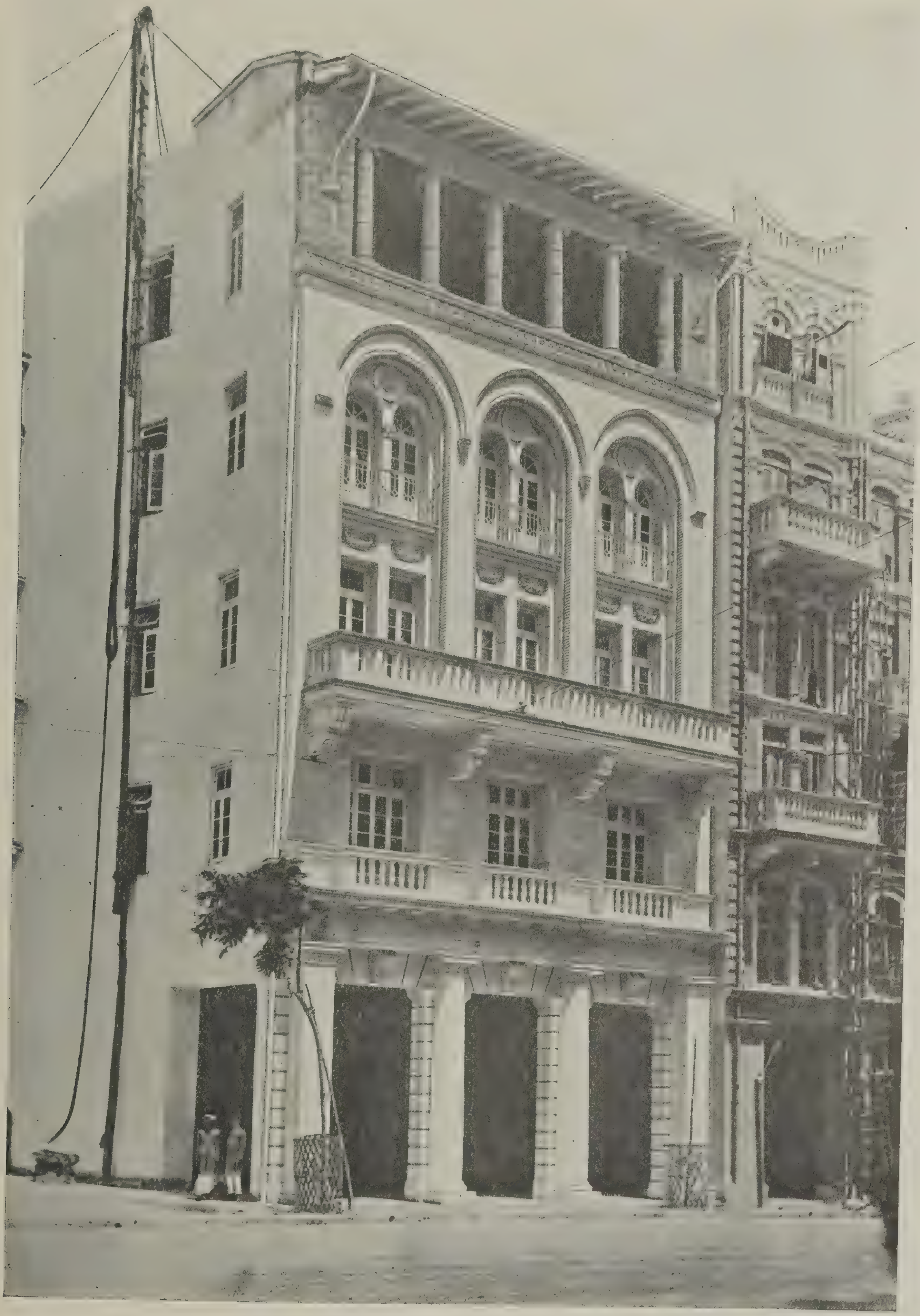
MEMORIAL FOUNTAIN NEAR ALEXANDRA DOCKS, BOMBAY.



OFFICE PREMISES IN HORNBY ROW, FORT BOMBAY,
BHEDWAR AND BHEDWAR, ARCHITECTS.

Current Architecture. 217.—Office Premises in Hornby Row, Fort Bombay

Bhedwar and Bhedwar, Architects

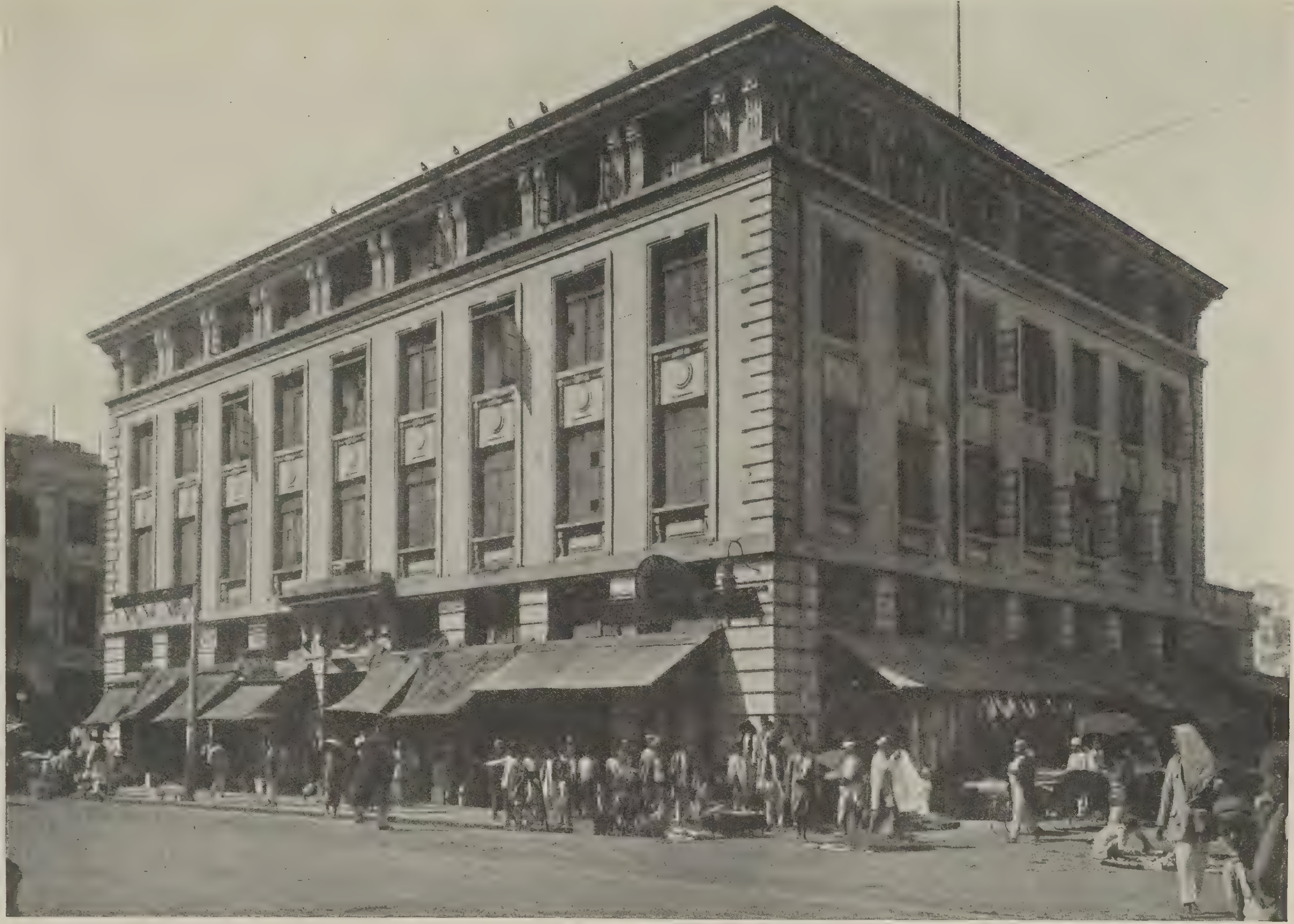


The façade is built throughout of Hemmiger stone—a fine-grained white stone. The ground floor shows an arcade 16 ft. deep to the shop front inside. The entrance is through the arcade by a passage along one side leading up to the stair hall, which divides the total depth of about 100 ft. of the building into front and rear blocks of offices on each floor.

THE LIBRARY
OF THE
UNIVERSITY OF ILLINOIS

Current Architecture. 218.—Business Premises in Sandhurst Road, Bombay

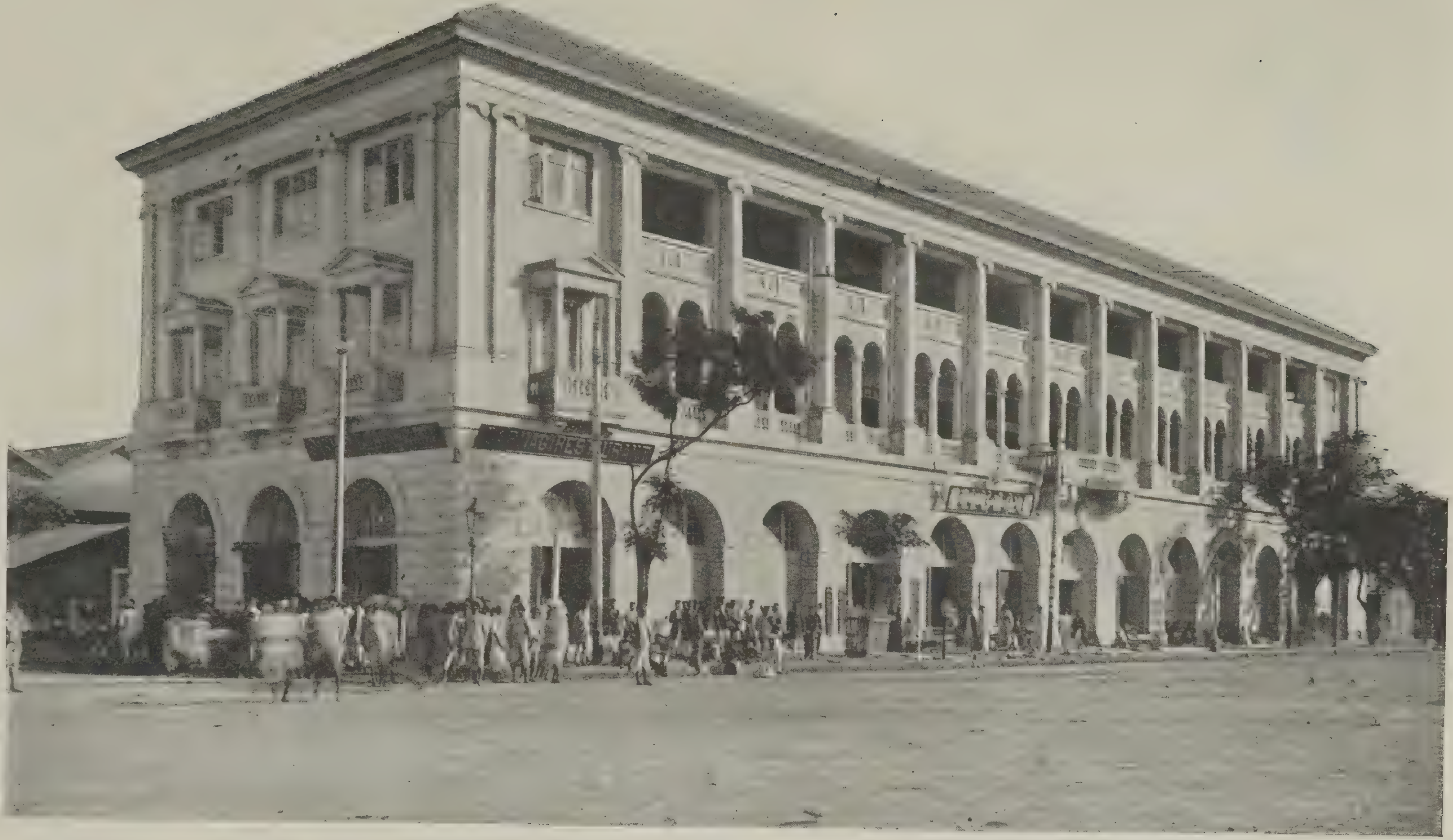
Bhedwar and Bhedwar, Architects



This building has three similar frontages and stands in a very busy quarter of the town. There are shops all round on the ground floor, and merchants' offices and residential flats in the upper stories. The façades are built of Porebunder stone. The building was carried out between 1913 and 1914.

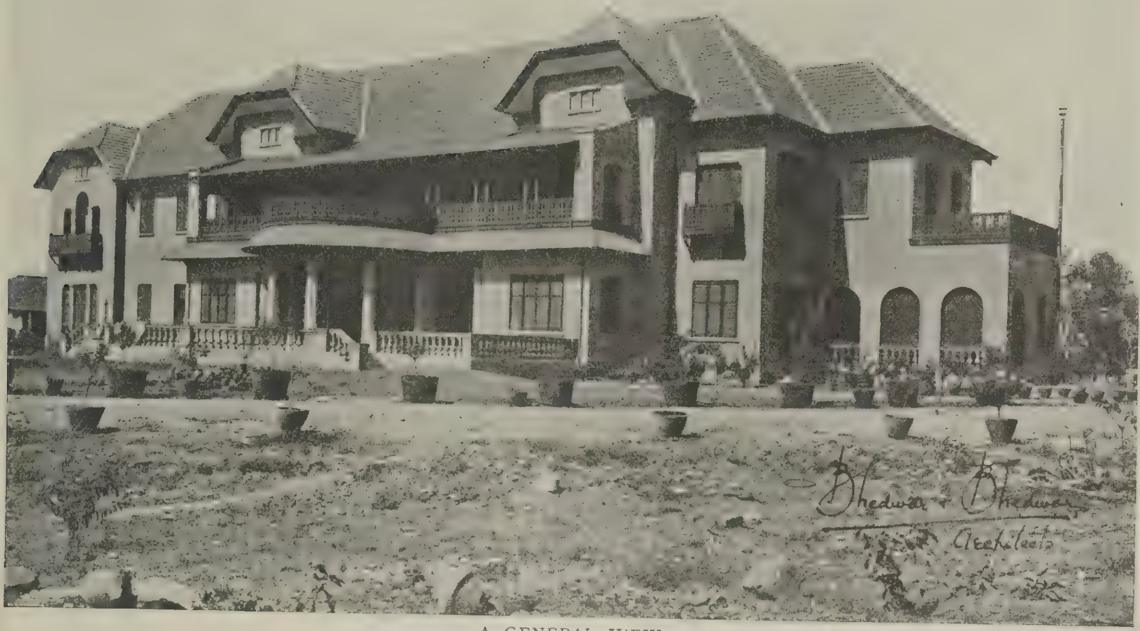
THE LIBRARY
OF THE
UNIVERSITY OF ILLINOIS

Bhedwar and Bhedwar, Architects

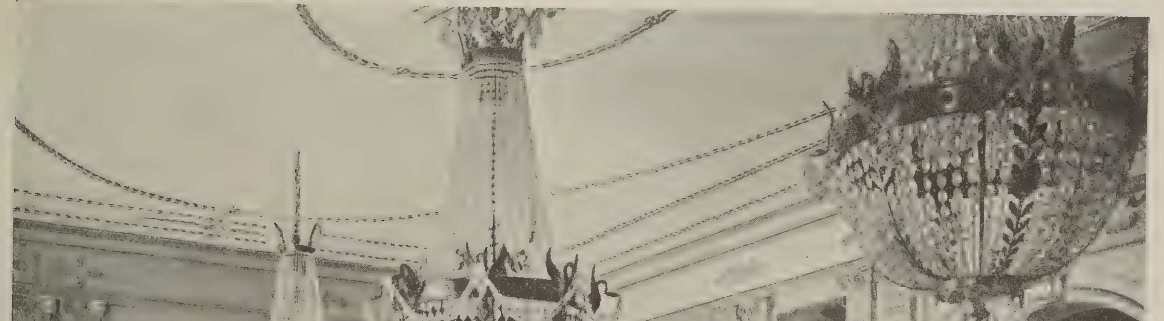


This building was carried out in 1922. It stands just opposite the east end of Carnac Bridge, on Port Trust Grounds, between the Princes and Alexandra Docks. It has shops on the ground floor and offices on the upper floors. The exterior is all Porebunder stonework. The whole of the interior including the stairs is of reinforced concrete construction.

THE LIBRARY
OF THE
UNIVERSITY OF ILLINOIS

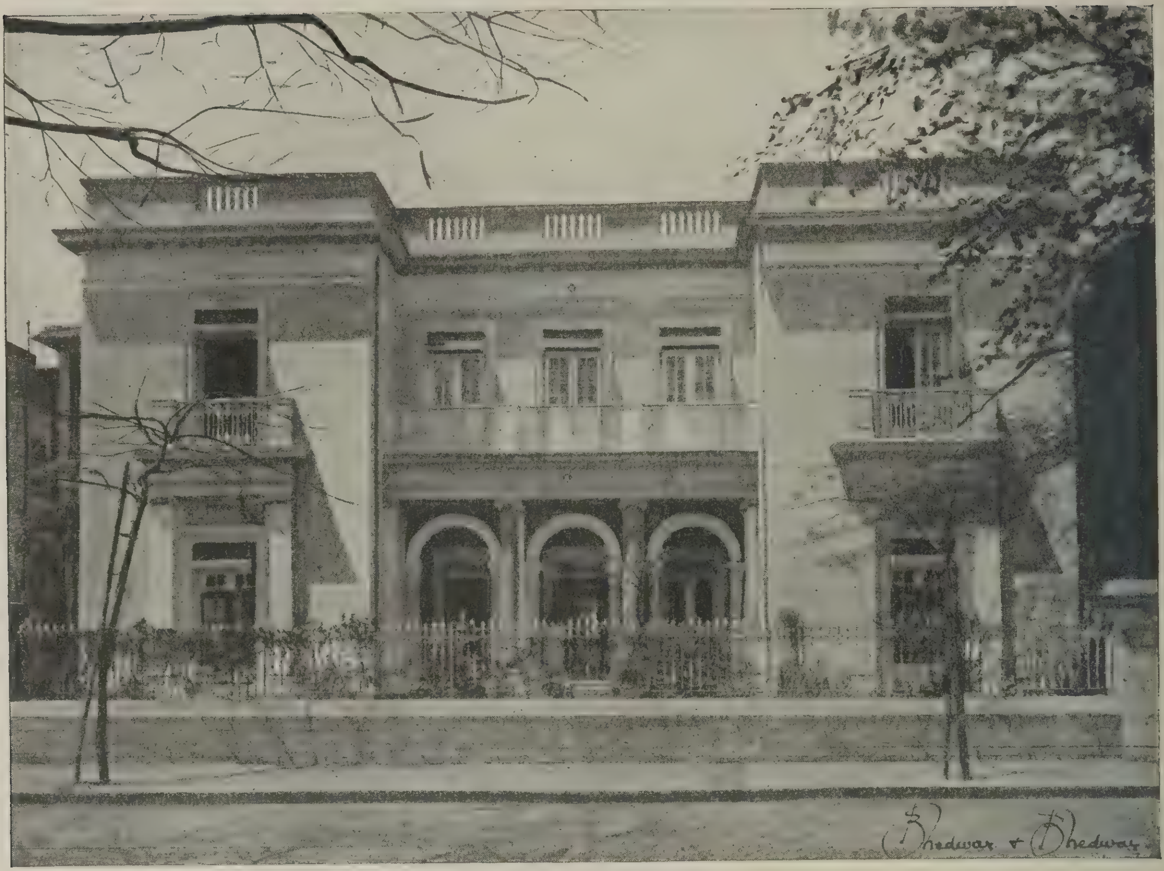


A GENERAL VIEW.



THE SALOON.

COUNTRY HOUSE AT POONA, FOR SIR D. M. PETIT, BART.
BHEDWAR AND BHEDWAR, ARCHITECTS.



A VILLA IN REYNOLDS ROAD, BYCULLA, BOMBAY.

Kahn-Bar system. The shallow central dome which covers the stair hall is built also of reinforced concrete.

Memorial Fountain near Alexandra Docks, Bombay.

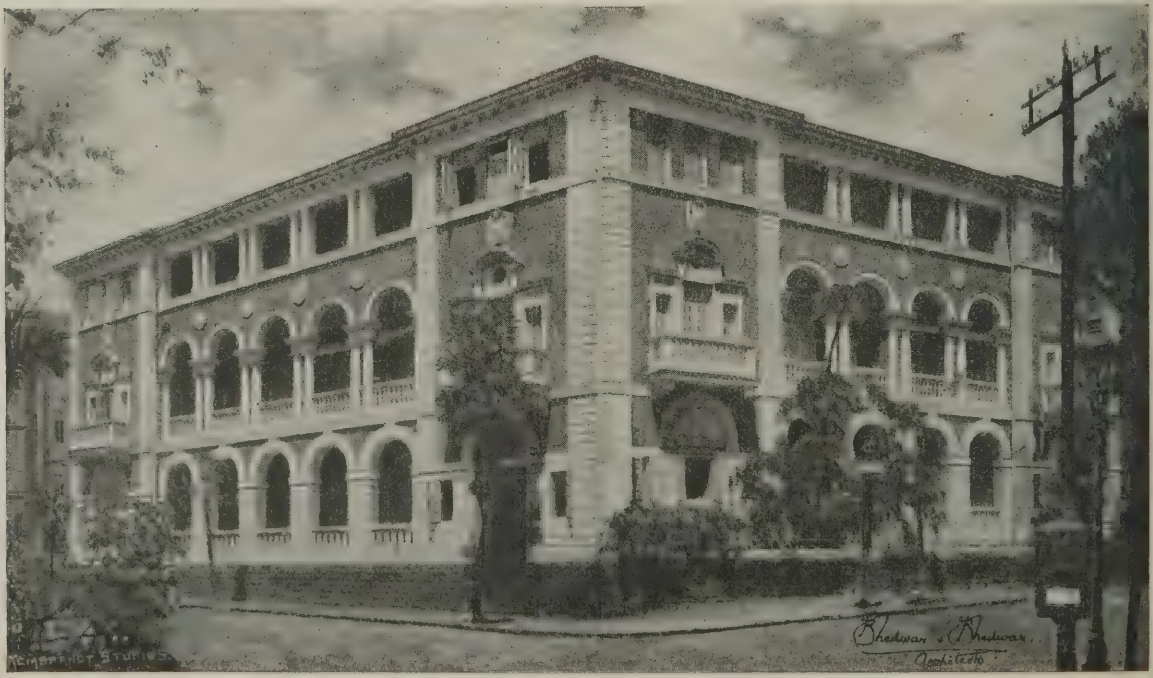
This fountain stands just outside the north gate of the Alexandra Docks, and was erected under the direction of the Port Trust as a memorial fountain to a Hindu gentleman. It is built throughout of fine-dressed Porebunder stone. There is a central fountain-spout built on a raised plinth, surrounded by water troughs for cattle at a lower level.

Business Premises in Frere Road, Fort Bombay.

This building was carried out in 1922. It stands jus opposite the east end of Carnac Bridge on Port Trus grounds between the Princes and Alexandra Docks. I has shops on ground floor and offices on the upper floors The exterior is all Porebunder stonework. The whole o the interior, including the stairs, is of reinforced concret construction.

Business Premises at Sandhurst Road, Bombay.

This building has three similar frontages, and stands in



RESIDENTIAL BLOCK IN OWEN DUNN ROAD, NEW GAINDEVI, BOMBAY.

ry busy quarter of the town. There are shops all round the ground floor, and merchants' offices and residential ts in the upper stories. The façades are built of Pore- nder stone. It was carried out between 1913 and 1914.

Office Premises in Hornby Row, Fort Bombay, for K. S. Powvala, Esq.

The façade is built throughout of Hemmiger stone—a e-grained white stone. The ground floor shows an ade 16 ft. deep to the shop-front inside. The entrance is ough the arcade by a passage along one side leading to the stair hall, which divides the total depth of about ft. of the building into front and rear blocks of offices each floor. The ground floor has a spacious shop in nt with stores in the rear. The interior is of steel-framed nstruction. A feature of the front is the loggia on top, h a boldly projecting roof eaves. The building was npleted in May last.

ce Premises in Hornby Row, Fort Bombay, for Messrs. R. and K. S. Powvala.

his building stands in the same line as the one shown page 894, and quite close to it. It has an arcade and a p and stores on the ground floor, and offices on the upper rs. The façade is all built of Hemmiger stone.

intry House at Poona for Sir D. M. Petit, Baronet.

his house has a unique situation in very spacious and uresque grounds between Bund Garden and Connaught ds at Poona. The exterior is of fine dressed bluestone sonry with yellowstone arches and lintels. The house a spacious central salon with dining and billiard rooms each side and a suite of private rooms at the end on the und floor. The upper floor comprises a morning room suites of private apartments opening on to verandas. floors and ceilings are of woodwork, excepting in the n, which is finished throughout in plaster of paris. A ure of the garden front is the spacious curved veranda, ch opens on to a garden terrace.

he photograph shows the interior of the room carried in the Empire style. The walls and ceilings are finished with plaster of paris painted ivory-white. The mouldings and decoration being picked out in gold.

Villa in Reynolds Road, Byculla, Bombay.

This is a two-storied house with an Italian Renaissance frontage. It is built of stuccoed brickwork with Porebunder stone arcade and window mouldings.

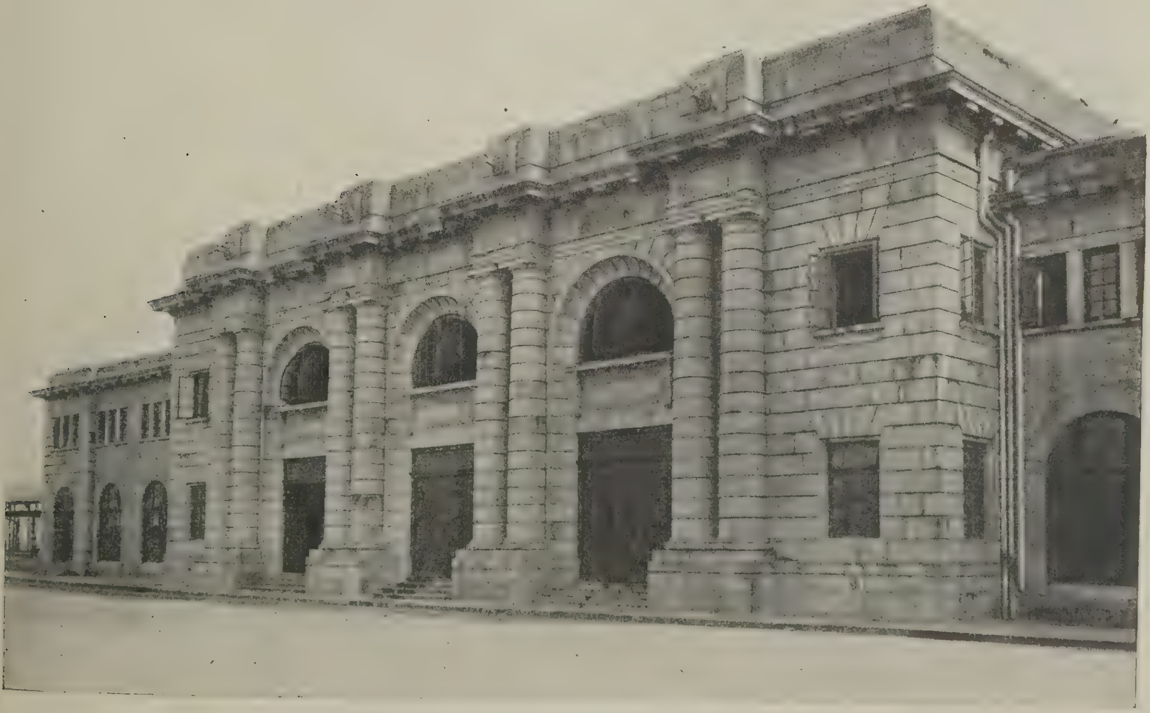
Residential Premises in Owen Dunn Road, New Gaindevi, Bombay.

This was built for Dastur Sahib Dinsha J. Garda, Parsi High Priest of Bombay. The building consists of residential flats on each floor. The design is in the Italian Renaissance style. The frontage is built of pointed red brickwork with Porebunder stone for the veranda arcades, moulded strings, window heads and dressings.

Alexandra Dock Railway Station, Bombay.

This building was designed by Mr. S. K. Bhedwar, F.R.I.B.A., for the Bombay Port Trust in 1913 and carried out under the supervision of Messrs. Bhedwar and Bhedwar between 1916 and 1918. It stands at the extreme south-east corner of the Alexandra Docks, and serves as a passenger and mail station for the P. & O. and other liners to and from Europe. The building comprises a central station hall, with waiting, refreshment and medical inspection rooms, a mail and customs department, and a block at the south end with a signal and clock-tower. The station hall gives access to railway platforms at the north end for direct transit to and from all parts of India. The station hall and south tower block are built of fine dressed yellowstone ashlar and the rest of the building is constructed of brickwork faced with yellowstone coursed masonry. The floors and flat roofs are of reinforced concrete construction on the Kahn-Bar system. The building has a total frontage of about 600 feet.

The firm of Messrs. Bhedwar and Bhedwar, responsible for the designing of the above buildings, is composed of Mr. S. K. Bhedwar, F.R.I.B.A., B.A., L.C.E., and Mr. C. K. Bhedwar, L.C.E., who was a pupil of the late J. L. Pascal of Paris, and was trained in the Atelier Pascal.



ALEXANDRA DOCK RAILWAY STATION, BOMBAY.
S. K. BHEDWAR, F.R.I.B.A., ARCHITECT.

"Our Clients and Ourselves"

IN the course of a paper read before the Liverpool Architectural Society, Mr. Herbert A. Welch, A.R.I.B.A., said: I think there never has been a time in the history of our art when better facilities for art and constructional training have been available to the student. This has already resulted in a great advance in the general level of modern architecture. That this general level will attain even greater heights I have not the slightest doubt. By this, however, I do not mean that I am entirely satisfied that the present method is quite the best which could be evolved. I look forward to the time when the system at present adopted in the schools will be supplemented by or dovetailed into fairly lengthy periods spent by students in the offices of practising architects whereby they will be enabled to get more closely into touch with matters of practice during the more impressionable period of their training. In my opinion we have yet fully to realize that our profession calls not only for a high level of artistic and scientific attainment but—what I think to be equally important—a fair measure of business ability. You will say these are great and searching qualifications. They are, but nothing less befits a great profession.

Side by side with this advance in training the public is at long last taking a more enlightened interest in our art. The reason is not far to seek. We have become more worthy of their interest. Our work, in fact, begins to arrest their attention. Yet even so the average citizen does not *fully* realize the range of beneficial advice and help that is available to him or to her from the properly qualified members of our profession. The ethics of our profession preclude us from making use of public advertisement in order to enlighten and instruct the public. This I consider in the main to be a good thing, leaving only our clients as the medium for the circulation of such information. Such a medium must of necessity be slow, but am inclined to think it has the advantage of being sur It therefore behoves us to render to our clients the be service in our power.

When first consulting an architect clients frequent exhibit a tendency to understate the amount they a prepared to spend upon the proposed work, feeling that might produce a more costly scheme, and as business m they consider it wise to reserve to themselves a margin f safety. We should always frankly request clients n to do this, for two especial reasons. Firstly it is an indic tion that they are not sure of us, and secondly such a meth is liable to result in the production of a design less sati factory for its purpose than might otherwise have bee the case, involving the making of subsequent additions variations to the plans which do not fit quite happi into the original scheme. If however our clients state sum which they desire to spend upon the proposed wor which sum we know to be *inadequate* for the purpose, is wise as early as possible tactfully but frankly to sta so; it secures both ourselves and our clients against su sequent disappointment and possibly bad feeling. Havi then persuaded our clients to accept what we think to the likely cost of the proposed building it might sha their confidence in us and in our profession if ultimate this sum is largely exceeded. We must therefore do o utmost to guard against such an event.

We architects are sometimes inclined to consider th our services are at an end when the building is complete We can however to advantage go a step farther and off our services in connection with the furnishings and decor tions. This is a province which the architect has not explore or studied as much as he might have done, and I have four that clients are most grateful for any help in this directicn.

University College Pavilion, Oxford

CLOUGH WILLIAMS-ELLIS, Architect

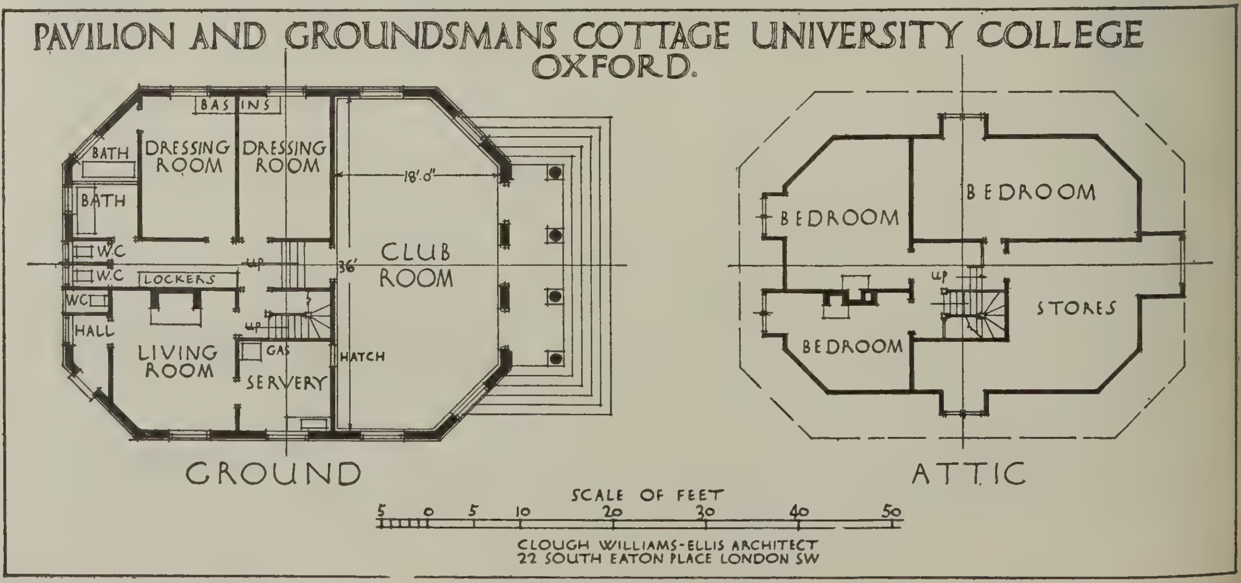
UNLIKE most structures of the kind, the pavilion here illustrated contains within its walls a roomy cottage for the groundsman and his family.

Besides the general club-room and its refreshment buffet, the requisite changing-rooms, baths, and lavatories are all grouped on the ground floor, the upstairs being occupied by the scoring-box, locker, and box-rooms, and the greater part of the groundsman's accommodation.

Low doors give access to the space under the raised ground floor, where mowing and marking machines, net goal-posts, and other gear find a convenient storage place

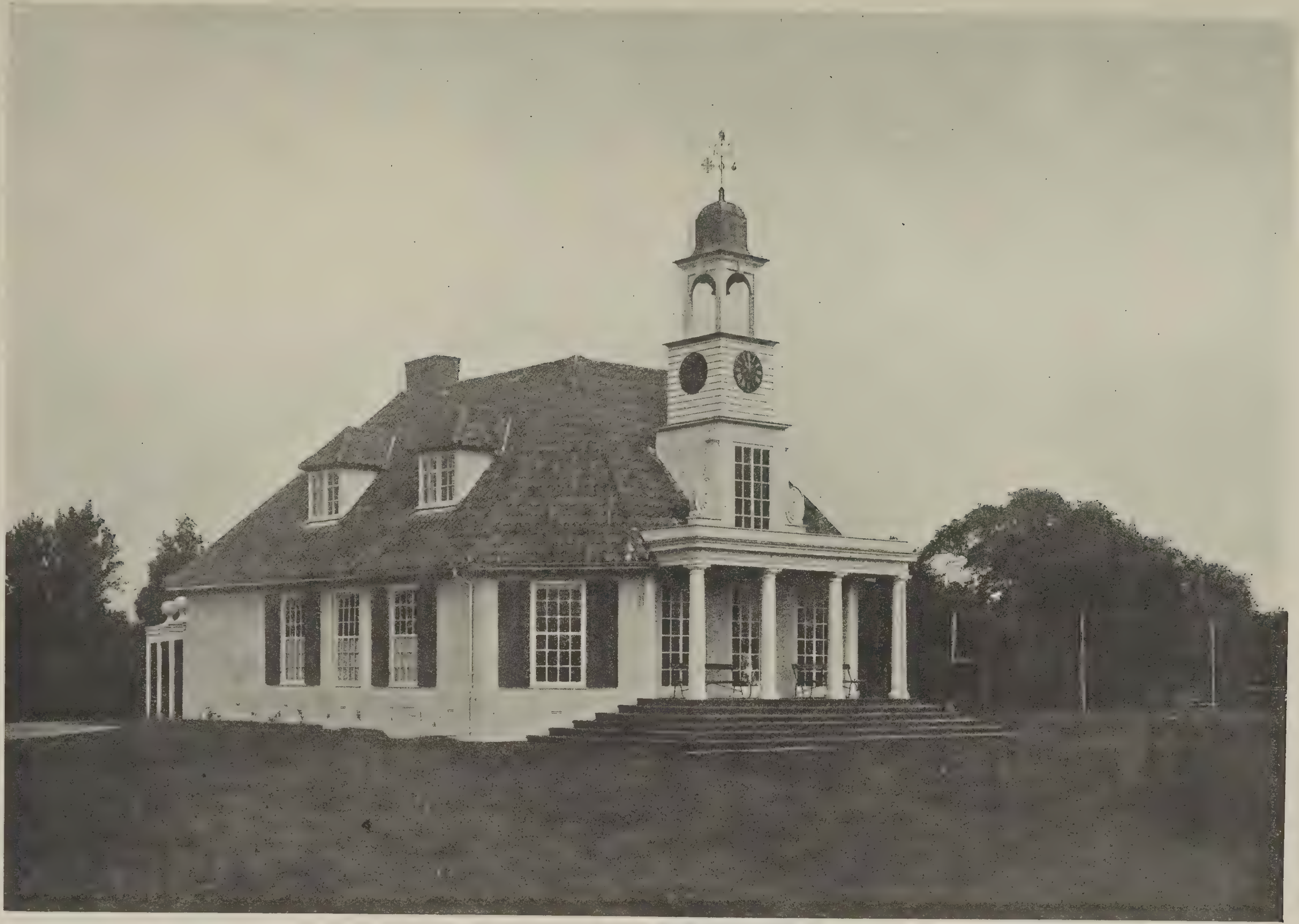
Built of stuccoed brickwork, tile, and timber, the litt building has an individual flavour not commonly associate with sports pavilions, its wide Doric portico and thre staged belfry, ending in a green copper cupola, giving it i deed something of the air of an old colonial meeting-hous

The weathervane that tops the cupola embodies t college arms—five martlets and a cross.



Current Architecture: 220.—University College Pavilion, Oxford

Clough Williams-Ellis, Architect



Besides the general club-room and refreshment buffet, dressing rooms, etc., the pavilion here illustrated accommodates the groundsman and his family, space being found on the ground floor for the living room, and three bedrooms being arranged on the upper floor.

OF THE
UNIVERSITY OF ILLINOIS

Correspondence

The Cambridge Collegiate Buildings Competition

To the Editor of THE ARCHITECTS' JOURNAL.

SIR,—I did not intend to enter into this controversy again, but I notice a number of your correspondents assume that the conditions of the Cambridge competition were broken by the winners.

Anyone who has seen their design and has studied the conditions will know that that is not the case. Statements to the reverse effect were originally issued to the Press by a group of the beaten competitors, but on the very points they raised the conditions were in each instance permissive. The fact that a different impression has evidently got abroad is exceedingly unfair to the winners. I would suggest again that the matter is one which clearly calls for the intervention of a committee of the Institute—whichever one may be the competent authority. C. H. REILLY.

To the Editor of THE ARCHITECTS' JOURNAL.

SIR,—The results of two recent competitions have caused considerable discord in the professional mind, especially in the mind of some of the competitors themselves, and now I wish to voice complaints with regard to a third competition. Criticism is good for all, and for this reason alone, if for no other, I agree with Messrs. Tait, Holt, and Rees in regard to the Cambridge Collegiate Buildings Competition. Criticism and free thought should be encouraged, whether for or against an award. What harm can it do? Is one to calmly sit down under known wrongs and allow things to slide? This is the real fault of most of our wrongs. No one troubles, it is no one individual's business to stir, and yet in nine cases out of ten the wrong is not an imaginary one. Upon what grounds of criminality are Messrs. Tait, Holt, and Rees to be pilloried by the Standing Committee of the R.I.B.A.? They have not, as suggested, infringed any standard of loyalty or etiquette, neither have they damaged the prestige of the profession. I maintain this is fair criticism, and on no account should it be possible to censor it to the point of unfairness. No one is more capable of offering fair criticism than a competitor who has been steeped for weeks and perhaps months, in every word, condition, and possibility relative to the design engaged upon. He knows far better than the assessor what he is up against.

Now for my personal growl. In the JOURNAL for November 28 you published the successful design, out of seventy-nine submitted, for the Kingston-upon-Hull Art Gallery competition, in which I was an unsuccessful competitor.

What must be surprising to all us poor beggars who wasted so much time and energy, not forgetting the seventy-seven (the second design received £500) times hard earned cash expended and wasted, is, what a poor lot of designs must have been submitted if those of the winners are any criterion upon which one can with any degree of confidence base an opinion. Probably this is what the assessor means when he refers in his short report to "the final assessment has been a matter of much anxiety." One must relegate the whole question of competitions as at present conducted "to a gamble with far less chance and worse consequences than horse racing."

Competitions as now adjudicated upon are a failure and menace to the professional conduct and advancement of architecture.

I maintain that it is a wicked procedure (I knew this before I entered the competition) to throw on one side the result of seventy-seven men's brains, laborious efforts, and considerable finance, probably not less than 5 per cent. of the total cost of the building; also the wasted vitality and a period of their too short and valuable lives, all at the whim of one man. The matter is far too serious to be dealt with in this fashion, and I contend, as so many have done in the past, that a jury of three at least should be appointed by the R.I.B.A. It has been put forward upon previous occasions, when this same subject has been under discussion, that three assessors could not be paid a sufficiently remunerative fee. Why not make it a position of honour, and appoint three honorary assessors? There should be no difficulty in doing this; the actual out-of-pocket expenses for three assessors should be met and would not amount to the fees now paid to one. Assessors should also undoubtedly be appointed after the designs have been sent in, and be nominated by the competitors entered for the particular competition—that is, four or six names should be put forward by the R.I.B.A., and these should be voted for by the competitors also after the designs have been sent in. Conditions, in a general way, if good for one competition are good for another, and any special clauses that may have to be included should be drawn up by the R.I.B.A. in conjunction with the architects who may become the assessors. CECIL A. SHARP.

[In his letter Mr. Sharp gives a number of reasons why, in his opinion, the result of the Hull competition is disappointing. We regret that we are unable to publish these owing to the great pressure on our space.—ED.]

The Architectural Shilling

To the Editor of THE ARCHITECTS' JOURNAL.

SIR,—Mr. Overy suggests in your issue for December 5 that architects who belong to professional societies are at a disadvantage compared with members of some other callings who are accustomed to advertise their qualifications in the newspapers. I am particularly interested in his complaint that members of the Institute and of the Society are barred from direct methods of securing publicity, such as advertising on the back page of "The Times."

I have before me the back page of "The Times" for October 12, which I filed for reference in the hope that someone would give me the opening now afforded by Mr. Overy's letter. The page referred to contains illustrated advertisements of several important buildings in course of erection in some of the principal streets in the west end of London, and the name of the architect, who in each case happens to be a member of the Institute or of the Society, is attached to the illustration of the building which he designed. It is obvious that these advertisements were not inserted by the architects, who are to be congratulated on the fact that the merit of their work has secured for them such valuable publicity.

This bears out my contention that the architect, far from being handicapped by professional restrictions on advertising, is by reason of his profession accorded much of the professional publicity which those carrying on other callings endeavour to secure by advertising.

C. MCARTHUR BUTLER.

Secretary of the Society of Architects.

The Strength of a Saucer Dome

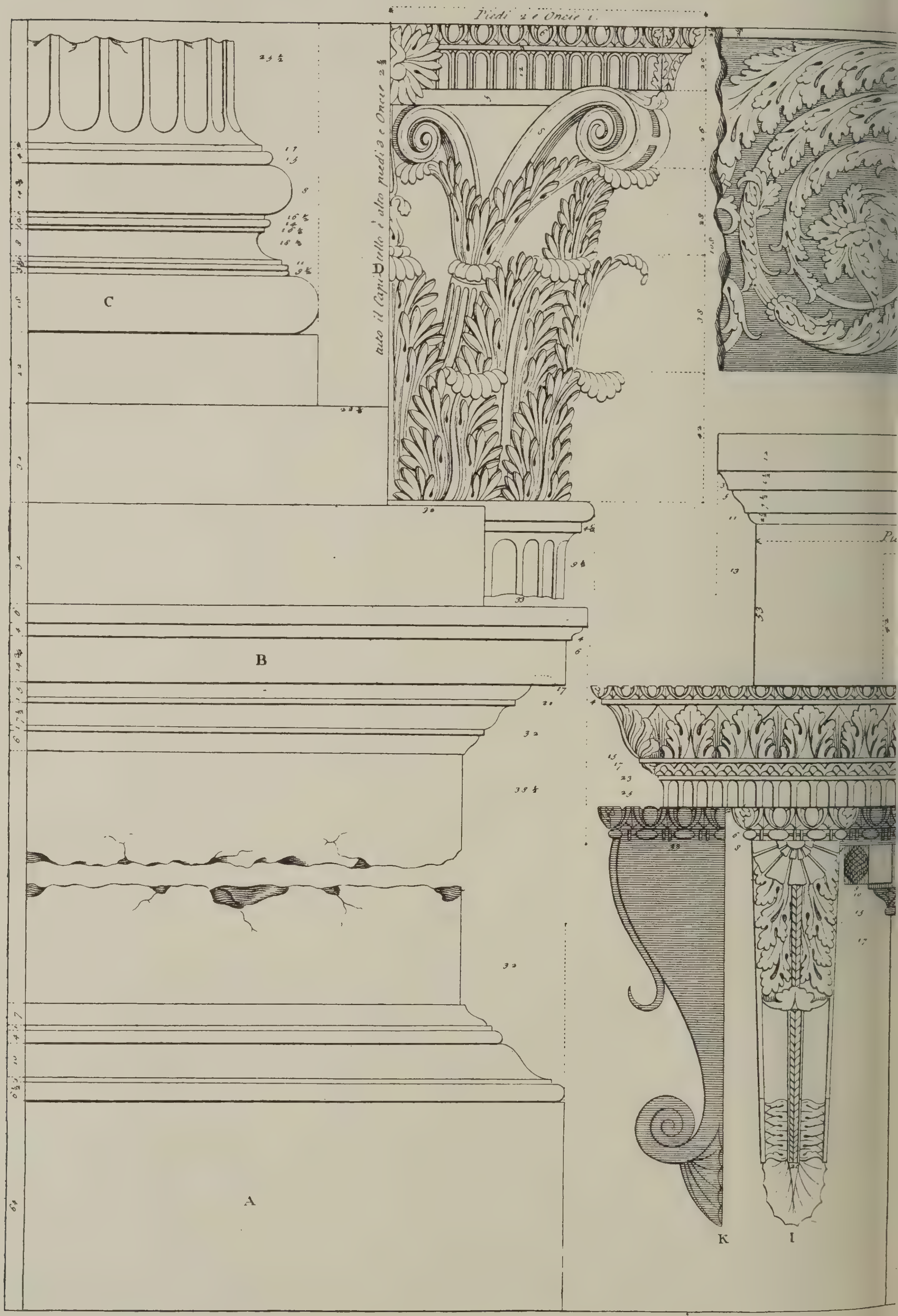
To the Editor of THE ARCHITECTS' JOURNAL.

SIR,—The answer to a query on p. 882 of the current issue states in effect that a saucer dome 60 ft. in diameter, 3 ft. thick at the springing, and 1 ft. 6 in. thick at the crown is wholly insufficient to carry at the crown a cylindrical wall of masonry 8 ft. diameter, 2 ft. thick, and 6 ft. high.

It would be interesting to see the calculations upon which this opinion is based. Our modern method of visualizing constructions solely from drawings instead of, as in the past, from models, often causes a dome to be considered merely from its section, and to be confused structurally with the relatively weak arch which that section resembles. Hence we fail to appreciate the great strength of domes, and are afraid to copy examples of ancient masonry domed construction which have stood for centuries. P. J. W.

Architectural Details. 45.—The

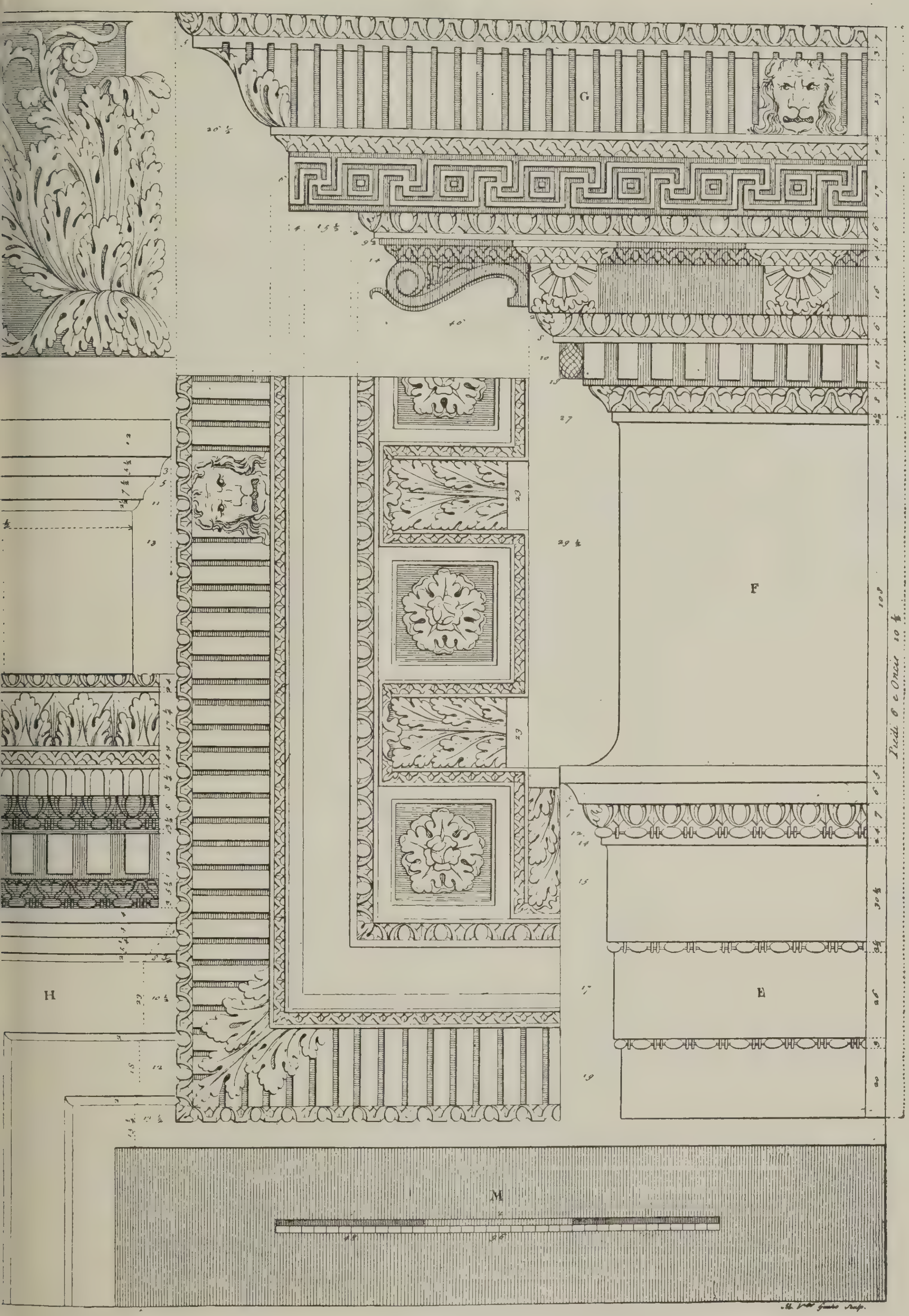
Measured a



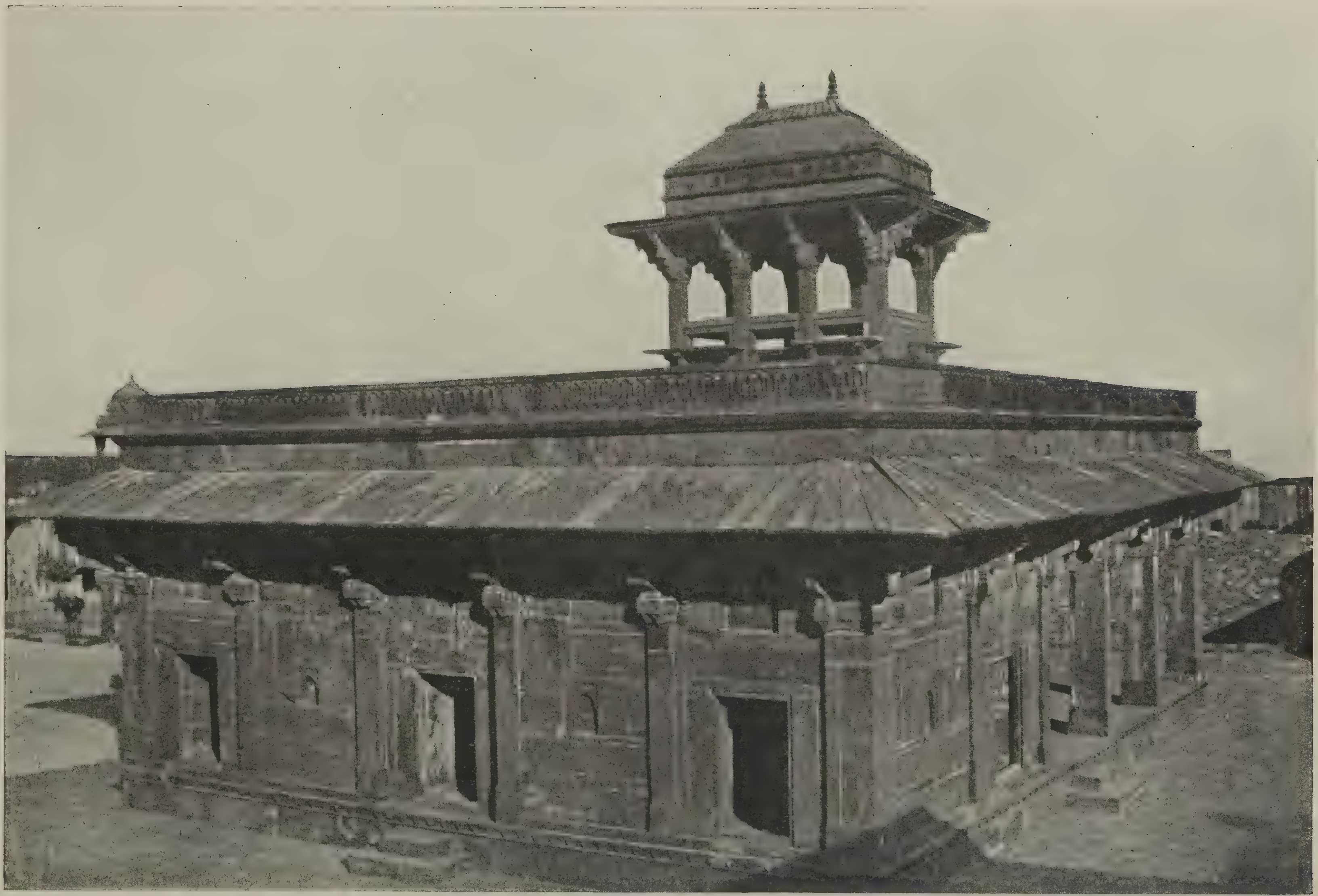
The Two Temples of Nimes, of which that known as La Maison Carrié, or the Square

# of Nimes : La Maison Carrié

by Andrea Palladio

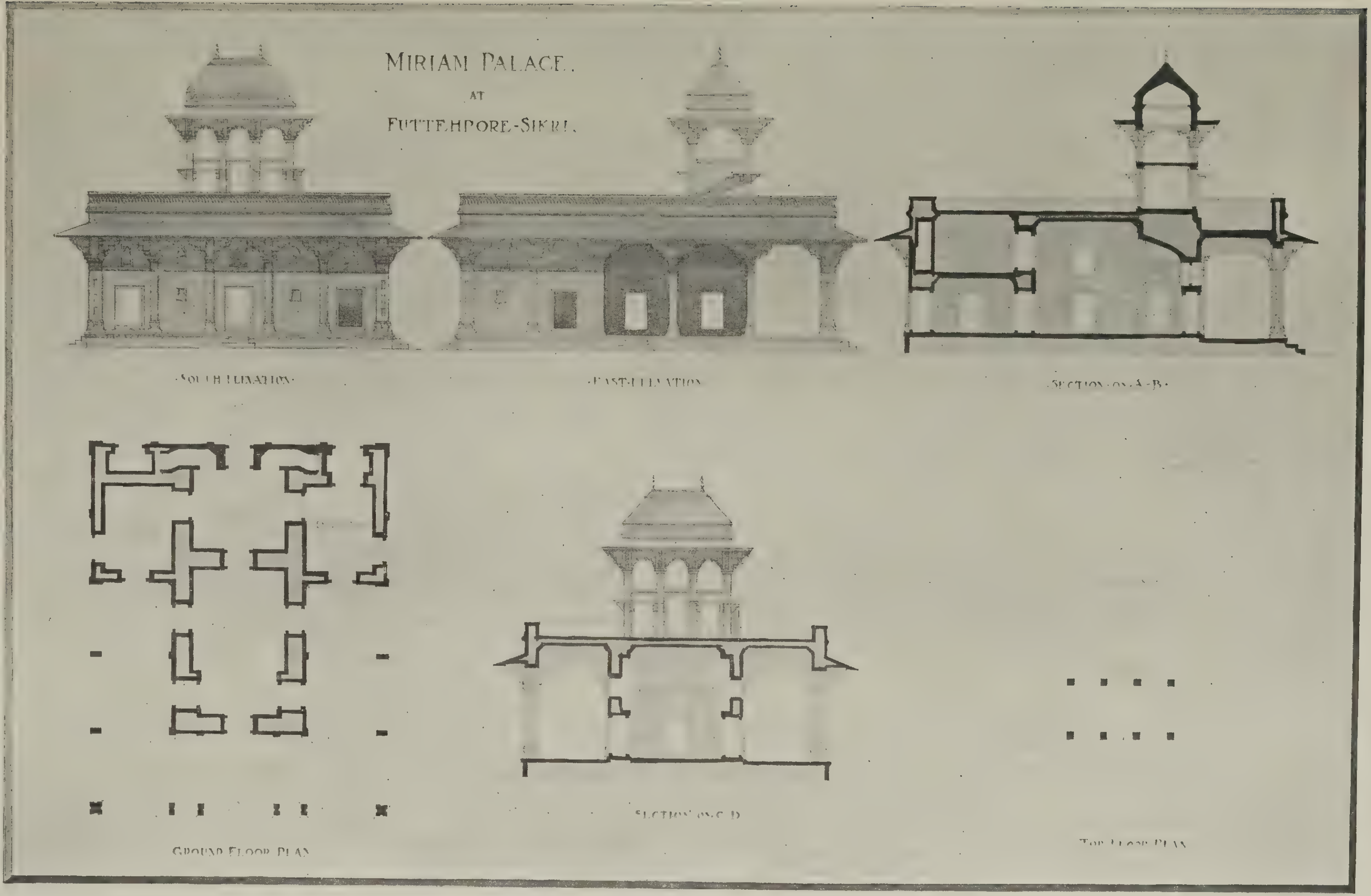


ppear in Palladio's Fourth Book. The plate here reproduced gives details of the members.

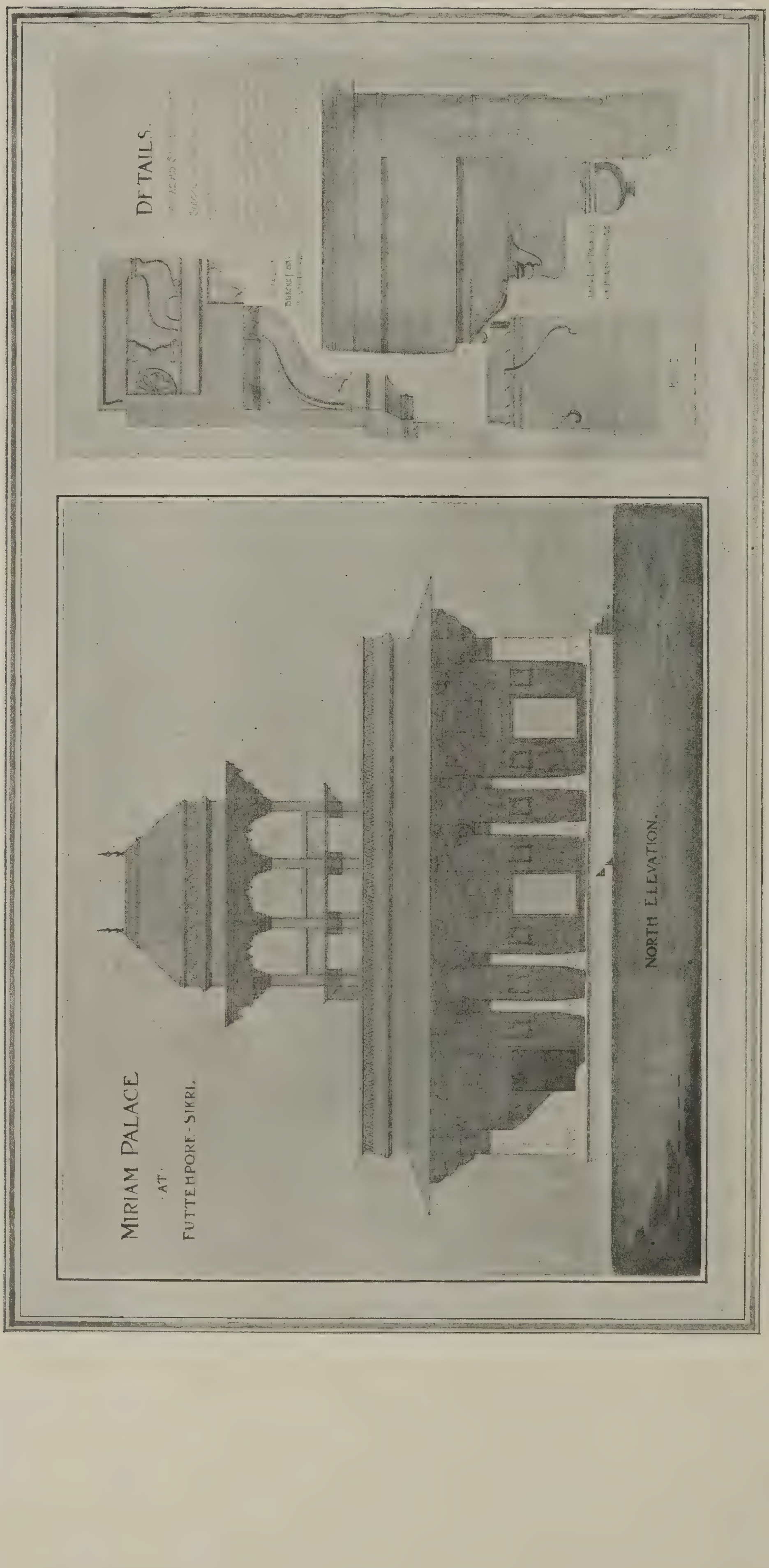


THE MIRIAM'S PALACE, FUTTEHPORE, SIKRI.

At Futtehpore, Sikri, King Akisar (1556-1605) erected a group of important buildings, one of which is the Miriam's Palace. This is a strong structure, measuring about 48 ft. by 60 ft., containing a drawing room, retiring room, and library.



THE MIRIAM'S PALACE, FUTTEHPORE SIKRI.
MEASURED BY SAMSON A. ELIJAH, G. M. BHUTA, B. V. RAO, AND C. CASTELL, AND DRAWN BY SAMSON A. ELIJAH.



THE MIRIAM'S PALACE, FUTTEHPORE, SIKRI.

MEASURED BY SAMSON A. ELIJAH, G. M. BHUTA, B. V. RAO, AND C. CASTELL, AND DRAWN BY SAMSON A. ELIJAH.

Glasgow University Students' Welfare Scheme

Review of Designs Submitted in Sports Pavilion Competition

THERE was a comparatively poor response to the invitation issued to Glasgow architects to compete for this work, the cost limit of which was fixed at £10,000. In saying this we refer not only to the number of designs submitted—sixteen in all—but also to the quality of much of the work. Mr. A. N. Paterson, A.R.S.A., F.R.I.B.A., was the assessor, and the conditions were thoroughly satisfactory except, we think, that a little more definite information as to the required areas, etc., of the component parts would have made for a clearer understanding of the problem by the competitors, and would also, possibly, have encouraged a larger and more representative response.

While making the foregoing observations we would, however, like to state at once that we think the promoters of the scheme have been successful in obtaining a very suitable design for their pavilion. The scheme placed first, that of Mr. James M. Honeyman, has a well-arranged plan with a good balance between its various parts, the convenience of male and female students being well studied, and the controlling aspects kept well in view. It is economically arranged both in general bulk and for service requirements and, while we are not able to check the cost, would appear to be within the limits of the sum allowed.

As the site is evidently made-up ground, Mr. Honeyman has placed a good deal of his accommodation in a lower ground floor, or half basement, by excavating down to the original level, the result being that he gets his principal floor well raised from the finished ground level, and the pavilion should therefore gain in general appearance, while the view from it over the sports ground will be better than in those schemes which have accepted the made-up ground as the controlling level of their principal floor. The external treatment of the design is somewhat commonplace in character, but as the plan is quite good in massing there should be no difficulty in getting a thoroughly satisfactory result externally.

Mr. Will. J. B. Wright's design, which has been placed second, has an L-shaped plan, with the hollow side of the L facing diagonally across the site towards the playing fields. He, like Mr. Honeyman, adopts the device of placing most of his dressing-room accommodation in a lower ground floor, or half basement, but his detail planning does not work out so well. The tea-room is on the ground floor, and the lounge on the first floor. The latter forms an isolated central feature, octagonal in plan, with a staircase rising to it in the centre from the entrance hall, and it opens on the side towards the playing fields on to a large balcony with terraced seating. We think that the arrangement of the lounge on the ground floor and the tea-room above, which is adopted in the design placed first and in practically all the others, is the better one. Externally Mr. Wright's scheme is more symmetrical and has, possibly, somewhat more character than that placed first, but we consider that the author has sacrificed convenience of planning in the endeavour to get strict balance and architectural emphasis.

The design placed third is by Messrs. John Burnet, Son and Dick, and is of a distinctly different type from the other two premiated schemes. In it the existing ground level is accepted and the accommodation provided practically all on one floor except the tea-room. The result is that the plan, like others of the same type, occupies most of the available site and gives, we think, a more expansive scheme which any advantages in convenience would scarcely justify. The shape of the plan is roughly square with a two story strip along the principal front accommodating lounge, etc., on the ground floor and tea-room, service, etc., above. The lounge is somewhat poorly lit and the staircases too numerous. Externally the building has a more substantial character than those placed first and second.

The names of the authors of the remaining designs are not given and we can only refer to them by the numbers put on them by the assessor for identification. Taking them as a whole the only distinctly different type from the premiated schemes are those which adopt a diagonal line through the site as the main axis, and thereby gain the advantage of facing more directly on to the playing field. Examples of this arrangement are Nos. 1, 2, 5 and 15. Of these Nos. 1 and 2 are poor designs. No. 5 shows a radiating plan with three wings. This is shown on alternative plans either as T-shaped or with the two side wings bent back to follow the obtuse angle of the site boundary. This design comes out much better in external treatment than in detail planning. In fact it is the most refined and pleasing exterior submitted, while the drawings are also good. No. 15 is roughly square in shape with two-story wings round three sides. Convenience and economical planning have been sacrificed to obtain external symmetry as in the placing of caretaker's house on the upper floor wing to balance the wing accommodating the tea-room service. As the caretaker or his wife will presumably run the catering they should we think be adjacent to the service-room. The lounge, placed in the heart of the building without any outlook over the playing fields, is also a defect. Externally the design is effective if somewhat heavy in character.

Of the remaining schemes submitted No. 3 resembles the design placed first, in general conception and in certain

MR. JAMES M. HONEYMAN, A.R.I.B.A.: THE WINNER OF THE COMPETITION.

points of detail, the principal difference being the breaking up of the main front with two wings placed at an angle of 45°. If it is as we suspect an earlier alternative design by Mr. Honeyman then we can congratulate him on improving his first idea considerably. No. 7 is a design resembling in general arrangement the third premiated scheme. It is more symmetrical in detail but the author has not considered the relation of the building to the playing field or he would have reversed the positions of the Lounge and the Caretaker's House and given the former the view over the field. The main front of this design is one of the best pieces of work submitted, and the drawings are also good. None of the remaining designs calls for special comment except that several of them show an extraordinarily poor knowledge of the requirements and appropriate architectural expression of a sports pavilion.

The Winner.

Mr. James MacLaren Honeyman, whose design was placed first in the competition, was born and trained in Glasgow. He comes of an old architectural family, his grandfather, the late James MacLaren, of Dundee, having been one of the earliest winners of the Soane Medallion. Entering the office of Mr. H. E. Clifford, F.R.I.B.A., Mr. Honeyman served a five years' apprenticeship and also passed through the Glasgow School of Architecture with distinction, gaining the Whitelaw Medallion of Architectural Design. Thereafter he was in H.M. Office of Works, Edinburgh, and for a fixed period during the war was building superintendent at Alnwick Camp, Northumberland. He acted later as assistant to Messrs. Bradshaw, Gass and Hope, of Bolton, and Messrs. Brierley and Rutherford, of York. He became an A.R.I.B.A. in 1921, and qualified for the diploma of the Glasgow School of Architecture in 1922. Mr. Honeyman commenced practice in Glasgow at the beginning of this year and was recently awarded the second premium for his design for the Kirkcaldy War Memorial. Mr. Honeyman's design for the Glasgow Sports Pavilion was illustrated in our last issue.

The Renaissance of Birmingham

Mr. Rupert Savage in his presidential address, entitled "The Renaissance of Birmingham," to the Birmingham Architectural Association, said that when they came to survey the programme of future developments they quickly came up against the fact that they were dealing with a full-grown (if badly developed) town. In the centre of the town particularly it was impossible ruthlessly to demolish whole thoroughfares and extinguish old-established commercial interests. Courage and foresight were requisite in preparing a scheme for controlling the future development of the town, but there was also need for a judicious blend of idealism and common sense. Unrestricted idealism might become a serious obstacle to actual achievement. The City Council had been engaged for some years on the task of town planning Birmingham, and much useful work had been done. While they recognized the effort that had been made, they, as architects, were inclined to feel that the work done had been influenced solely by technical considerations, and that the æsthetic aspect of town planning had been insufficiently recognized. What they might hope for and plan in the future development of the city was a complete and comprehensive town plan of the town and suburbs, with due regard to the architectural and artistic aspect of the subject. They also hoped to see the erection of a public hall adequate to the needs of the city, and the provision of a really fine exhibition hall. They might see the renovation of the fine Market Hall and the rearrangement of the wholesale markets on a coherent plan. Something ought to be done in utilizing the rivers to form an agreeable adjunct to the street scenery, and in the outlying districts the streams and watercourses might be made pleasant features of the public open spaces. The question of slum clearance and provision of new homes for workers was a matter of urgent necessity.

Harlequinade

The Architectural Association boasts, in addition to its dignified monthly journal, a sprightly magazine called "Harlequinade," which is run entirely by the students. It is a delectable compound of prose, verse, and pictorial art. Its chief virtue is that it shows no respect whatsoever for its elders. The number before us, for example, has a very witty page entitled "Who's Who in Drofdet Square," in which some entirely apocryphal biographical particulars are given of some of the more famous men who haunt the precincts of No. 34—Trebor Soniatkin, and others. The magazine is not, however, merely flippant, for it contains an entertaining record of the lighter side of school life and a fair amount of serious criticism of passing events. A clever production that deserves to flourish.

"The Smoke Inspector's Handbook"

In writing this book[*] Mr. Herbert G. Clinch has been prompted by the difficulty experienced by the public health official and the engineer alike in obtaining a book dealing with the combustion problem, without at the same time overburdening the mind with engineering technicalities. No effort has been spared to present the whole theory of smoke abatement in an interesting manner, and such illustrations as have been found necessary have been included, whilst they are not present in such numbers as to cause the book to resemble a maker's catalogue. It has been the aim throughout to assist sanitary inspectors and other public health officials to a proper understanding of the sequence of events in the furnace, and much of the information should be useful to those who have charge of, or are employed in connection with, boiler plants. The work should also prove of great assistance to those studying for smoke inspectorships.

[*] "The Smoke Inspector's Handbook, or Economic Smoke Abatement." By Herbert G. Clinch, M.R.San.I., M.I.H., with a foreword by Cyril Banks, M.B., B.Sc. (Lond.), D.P.H. (Sheff.). Price 7s. 6d. net. H. K. Lewis & Co., Ltd., 28 Gower Place, London, W.C.

A New Home for Lloyd's

The members of Lloyd's have approved a contract for the purchase of nearly an acre of ground in the East India Avenue estate in Leadenhall Street as a site for a new building. After the general meeting plans of the proposed new building were exhibited, which had been prepared by Sir Edwin Cooper. It is believed that the demolition of the existing buildings in the East India Avenue estate and the construction of the new Lloyd's can be carried out within a period of two or three years.

The Bartlett School of Architecture

Three entrance scholarships tenable in the University of London, University College School of Architecture, and two Bartlett exhibitions are available for award to students entering the school in October 1924. The value of these scholarships and exhibitions is not less than £40 a year, tenable in some cases for three years and in some for five. The value of any scholarship or exhibition may be increased by the grant of a supplementary bursary if the circumstances of the scholar or exhibitioner make such a grant necessary.

Coming Events

Wednesday, December 19.

L.C.C. School of Arts and Crafts, Southampton Row.—Lecture XIII. "Theatres, Tombs," etc. 6 p.m.

Thursday, December 20.

British Museum.—Lecture XII. "The Pre-Homeric Period in Greece." By Miss Claire Gaudet. 4.30 p.m.

Little Things that Matter. XXIII—Gas Lighting and Heating

By HARVEY R. SAYER, Assoc.M.Inst.C.E., A.R.I.B.A., F.S.I.

UNFORTUNATELY the architect is often content to put a provisional sum in his specification for the running of the gas supply and the supply of the fittings both for lighting and heating, leaving the whole matter to the specialist who is called in later. This frequently means a greater expense than if the architect went into the matter of the gas services before he had finished his plans, and prepared special plans showing the run of all gas services, and instructed the general contractor in his specification accordingly. For example, a borough council carried out a housing scheme in London where the lighting was to be electric, as the borough council owned the electricity supply, while the local gas company had to run their pipes for gas supply to gas coppers and cookers. The excavations were commenced, and before the surface concrete was laid over the site the architect ordered the gas company to lay in their supply pipes. The gas company thanked the architect for his early notification that they could lay their pipes, as being able to run their mains into the houses before the surface concrete was put in, and the brick walls carried up meant a great saving to the gas company in not having to cut away concrete or brickwork.

Sometimes, however, a house is practically completed before the architect turns his attention to the gas supply, in which case the gas fitter has to rush his work, otherwise he may get in the way of other trades, and at the same time has to take up floors already laid or do extra cutting away, this being an additional expense both to the gas fitter and the general contractor which has indirectly to be borne by the owner.

It is not reasonable that an architect or a general builder should be expected to be so competent as to deal with the matter of the gas supply in its entirety unaided by expert advice.

A few examples are here quoted, showing defects which occasionally occur in builders' carcassing :—

(1) The supplies are frequently too small.

(2) Points not provided in their proper places.

(3) No foresight shown in providing for future extension.

(4) Lack of supplies near the hearth for gas fires.

(5) The only means of disconnection often entails cutting supply in unsuitable places.

(6) The carcassing is not tested upon completion, with the result that often escapes go undetected for long periods, thereby wasting a large amount of gas, besides rendering the rooms unhealthy.

Carcassing.

Generally speaking, it is advisable that the main outlet should be a one-inch service of iron barrel laid to the meter position, and after entering the house should be exposed as far as possible, falling throughout the distance from meter to main.

The position of the meter should be decided for each case, bearing in mind the following facts :—

(1) The meter should be as close as possible to the place where the gas supply enters the house or building.

(2) In the case of a prepayment meter the money box should be placed in a safe position, not too near the front or back door.

(3) Prepayment meters should be placed at a convenient height for insertion of coins.

The cupboard usually provided under the stairs provides a suitable place for the meter.

The meter shelf has been condemned by the Women's Housing Sub-Committee appointed by the Ministry of Reconstruction. In their report they state :—

"A gas meter shelf is a frequent vermin harbourer; it should be made of concrete in preference to wood."

A concrete shelf is not always satisfactory owing to its heavy weight: it would therefore be better to have the meter fixed to the wall by means of spikes or iron brackets.

The gas should be conveyed from the meter by means of 1 in. iron barrel as far as the first branch, which consists, as a rule, of a 1 in. by ¾ in. tee. From this a ¾ in. supply pipe should be run to supply the cooker, copper and water heater, and ¾ in. by ½ in. tees should be inserted and a ½ in. point left in a convenient position for each of these.

The remaining ¾ in. outlet should be extended to supply the gas fires and lighting points.

It is frequently necessary for a geyser to be placed in the bathroom. Should this be considered at all likely, a separate ¾ in. pipe should be run to that room.

The heating and lighting pipe should form the rising main to the upstair rooms, and should run from the meter up to and across the first floor. It will be necessary in larger houses for the riser to be of 1 in. and upwards. From the rising pipe ½ in. barrel supplies should be taken to each fireplace, even if it is not proposed to fix a gas fire there at once. They should be terminated with an elbow looking upwards and plugged.

It is advisable that the pipes rising or dropping to bracket positions should be of ⅜ in. bore or a ½ in. branch can be taken from the rising main to each room for both lighting and gas fire points, ⅜ in. point to every fireplace (½ in. for larger rooms), ⅜ in. for pendant lighting points, and ¼ in. for bracket points. Generally speaking, the position of the lighting points should be arranged according to the purpose for which the rooms are to be used in order to get the best lighting power. This will usually be found to work out as follows :—

Hall or Lobby.—A bracket or pendant with 30 candle-power burner placed in the best available position for distribution of the light, having regard to the fact that the light should fall full upon anyone wishing to enter the doorway, and the person facing the door (from the inside) should be in the shadow.

Living Room.—Pendant with 80 candle-power burner placed central or over the table.

Parlour.—Pendant with 60 or 80 candle-power burner according to size of room, placed central or near fireplace.

Scullery.—Pendant or bracket with 30 candle-power burner placed in best available position for distributing the light for cooking, washing up, etc.

Bedrooms.—Pendant with 60 candle-power burner not placed centrally, but about 2 ft. 6 in., in front of the centre of window frame to light up the dressing table. If the room is large a second fitting in the shape of a bracket should be placed over the head of the bed for reading by. Care must be taken that the fitting does not inconvenience people while dressing.

Bathroom.—Bracket with 30 candle-power burner placed in the most suitable position having regard to the run of the pipes, but avoiding any chance of the bather having to place himself between the source of light and the window.

Staircase.—Bracket or pendant with 30 candle-power burner placed in a suitable position for avoiding any shadow being cast on the stairs when a person is ascending or descending.

Since it has become the custom to use inverted burners to a far greater extent than upright ones, it is now necessary for the bracket position to be somewhat higher than in the past. In order to bring the mantles to their correct height, the elbow should be left about 6 ft. from the floor. The elbow which is to take the bracket should look square into the room, and the wall should be safely plugged.

Pendant points should be formed of $\frac{3}{8}$ in. iron barrel, and be brought to $1\frac{1}{2}$ in. below the under surface of the joists to enable an easy connection to be made after the plaster is completed.

In examining the carcassing for the gas supply to a house the architect should look for the following points :—

Small screwed-down traps should be left in the flooring over the pendant points for the rooms below and over gas fireplaces, in order that the subsequent work of connecting the equipment or dealing with possible defects may be promptly carried out without any damage to the floor.

Pendants or inside lamp points should never end with elbows looking downward. A "T" piece should always be fixed, and if the pipe is not to be carried beyond this point, a short piece of barrel should be fitted to the end not required to carry the pipe across to the next joist, to act as a support. This pipe, capped or plugged, will be useful if future extension is desired.

Rising pipes should be placed in as convenient a place as possible for getting at them, especially where they arrive under the boards on each floor.

A slightly larger pipe than would at first seem necessary should always be run if there is any reason to believe that it may be called upon later to supply additional points.

Pipes and fittings should always be examined in order that they may be guaranteed in proper order. All sockets should be taken off every length and be reversed, and the barrel threads should be painted on the outside before they are screwed up. The lack of a rub with a paint brush over the threads of a piece of barrel, bend, or fitting has often cost a lot of time, trouble, and money in tracing a leak. Bends should always be used where possible in preference to elbows. Where elbows are inevitable, they should be rounded instead of square.

When the carcassing is completed it should be tested before being connected to the main gas supply, by all the points being carefully plugged, and the pipes put under a pressure of air of about six-inch column of water which is about an inch higher than the ordinary low pressure gas usually supplied. After this test has been applied and everything proved satisfactory, as soon as the meter is connected and the installation completed, the pipes should again be tested, this time under gas pressure. This should also be made an opportunity for the burners to be regulated.

Owing to the increased cost of timber, architects are now specifying the minimum strength of joists allowed for the various spans, therefore great care should be taken that the gas fitter should not cut into and so further weaken the joists. It is well for the architect to specify that the gas fitter may not cut into any joist under any conditions without the special consent of the architect or district building surveyor.

Gas Lighting Fittings.

The last thirty years have seen a steady progress in the science of illumination, due to the competition between the various methods of lighting. The old flat-flame burner has now nearly been entirely superseded by the upright incandescent gas mantle, which has in turn been supplanted by the inverted form of incandescent mantle. Oculists have proved these mantles to be a great advantage over the old flickering light. There should be a correctly placed shaded steady light of sufficient power for the purpose required, and when required for working by should never be allowed to strike directly upon the eyes.

Not only has the actual source of light been improved but the design of the fittings has undergone a complete change. The by-pass and more modern "distance lighter," which enables the light to be turned on or off without the use of a match and from the door or elsewhere in the room without touching the fitting itself, has also notable improvements.

Following the inverted incandescent gas mantle burner comes what may be stated to be at the present time the latest development in gas lighting, namely the "superheater" burners, claimed to give 50 per cent. more light per cubic foot consumed than with the ordinary low-pressure inverted incandescent gas burner. The particular features of this type of lamp are as follows :—

(1) The provision of a superheater through which the gas and air mixture passes to the burners in a pre-heated condition.

(2) The employment of small gas mantles in "cluster" form.

(3) The use of a single gas and air regulator to adjust, by one turn, the whole of the burners.

It has been found that the pre-heating of the gas and air mixture leads to a higher flame temperature, and this higher flame temperature in turn results in increased mantle luminosity, an advantage which is further enhanced by the fact that the whole area of the small mantle is brought to a state of full incandescence. The use of a series of small mantles in preference to a single big mantle is beneficial, too, from the maintenance point of view, because the average life of small mantles is greater than that of large ones.

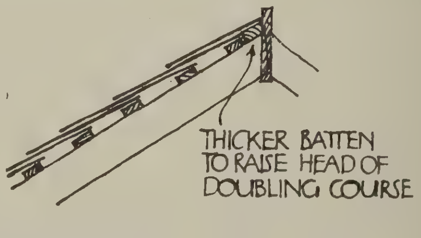
The "semi-indirect" gas lighting (bowl) fitting gives a well-diffused light and is a dignified fitting. For the direct system of lighting silica-ware globes and shades which successfully withstand all heat from the burners without breaking can be obtained in simple and attractive designs.

Little Things[*]

Little Things that Matter, has its pages filled
With notes on many problems facing those who build,
Footings, raft foundations, how to set a grate,
How to hang a casement, how to hinge a gate.

Do things really matter ? Is there aught worth pains ?
That's too philosophic : let us keep to drains—
Doors and floors and windows, things we understand,
Lime, cement, and concrete, aggregate and sand.

Little Things that Matter !—ah, but who shall say
What there is that *doesn't*, building the right way !
Things there are that matter plain folk wouldn't dream,
There are snags and pitfalls in the simplest scheme.



Little Books that Matter—there are many such,
Bound in calf and vellum, costing overmuch ;
But for men in practice, this is surely one,
Thanks be to the author. Praise to Edwin Gunn !

H. J.

---

[*] "Little Things That Matter. For those who Build." By Edwin Gunn, A.R.I.B.A. London : The Architectural Press. Five Shillings net.

Royal Academy Schools Prize Distribution

A LARGE number of students and their friends were present at the prize distribution at the Royal Academy Schools on December 10. Sir Aston Webb, P.R.A., presided and presented the prizes. The following awards were made in architecture :—

R.A. Gold Medal and Edward Stott Travelling Studentship, value £200.—Subject : "A Railway Terminus." John Cyril Gladstone Knight.

Landseer Prize, Silver Medal and £20.—"A Design for an Art College." Richard George Cox.

Silver Medal and £10.—Basil Marriot.

Bronze Medal and £5.—Edwin Herbert Horsley Williams.

Measured Drawing Prizes: Silver Medal and £10.—"Church of St. Giles-in-the-Fields, W.C." Ronald Owen Vine. Bronze Medal.—"St. Leonard's Church, Shoreditch, E.C." Allan George McFarlane.

Perspective Prize: Silver Medal and £5.—"St. James's Church, Piccadilly." Allan George McFarlane.

After the prize distribution Sir Aston Webb congratulated the keeper—Mr. Charles Sims—on the great progress made by the schools during the year. The schools were now full, and they were again in the position to select the best students for admission. Speaking of the painting school, he emphasized that good drawing was the basis of all good work, and he congratulated the school on its high standard. Students, he said, were inclined to give too much attention to parts, instead of the relationship of those parts to the whole. Certain subjects were too often used instead of fresh fields being exploited, and the figures introduced lacked dramatic expression. He considered the railway terminus, set for the gold medal in architecture, a fine modern subject, suitable for a simple and dignified treatment, as it was the gateway to the city. The designs submitted did not come up to expectations, but the general schoolwork was excellent. After referring to the centenaries of Sir Christopher Wren and Sir Joshua Reynolds, he spoke of the importance of following tradition in art. Art expressed the spirit of the age. Buildings should express their purpose. Why was it necessary to go abroad for art, when there was such an abundance around us in London, and many opportunities for study in the museums? He had noticed that some of our buildings, even when surrounded with scaffolding, formed beautiful subjects. He anticipated more connection between harmony of tones in music and the harmony of proportion in art.

Contemporary Art

Chinese Sculpture

THE winter exhibition at the Yamanaka Galleries in Bond Street is distinguished by an important wooden statue of Kuan-Yin, 5 ft. 4 in. in height, painted on a gold ground in blue, green, and red, on a circular lotus base. It is a superb figure wearing celestial vestments and a crown, the torso uncovered. It is a product of the Sung dynasty; a typical example of the work of the eleventh to the thirteenth centuries, naturalistic and full of inspired decorative quality and distinguished by an intense plastic conception. A stone head of Kuan-Yin, different as to facial expression but wearing the figured crown, is hardly less interesting, and this and the small stone figure of the same subject are useful as showing the development from the Sui period, 350 years earlier. Even earlier still, the Wei dynasty of the third century yields two small stone figures of Kuan-Yin, one of them in cavo-relievo. The delightful curling hair treatment, that looks as though the scalp was a tightly-itting cap made of berries, is seen in a large stone head of Sakya-Muni of the Sui period, and again in a stone head of a Bodhisat of the Sung dynasty. Two very early examples of oxen carved in stone are interesting, and other animal orms are represented in bronze—fishes, birds, the rhinoceros, and there is an ox in silver. In the pottery section human and animal figures are plentiful, the glazed horses of the Tang dynasty being very prominent objects. A group of a pair, harnessed and saddled, and highly coloured, are not very pleasant objects, but attract attention by heir suggestion of Staffordshire ware. There is a fine collection of Ming vases with their ever-wonderful shapes, designs, and workmanship.

The Seven and Five

There is some of the same primitive plastic sense as that which emanated from China two thousand years ago in the sculpture shown at Paterson's Gallery, but it is contaminated by association with the smaller feeling of the later vory carvers. In point of fact there is a good deal of ivory arving in small space in the relief panels with which Alan L. Durst has decorated his pair of ebony candlesticks, an authentic example of the real decorative passion which ay at the base of later Oriental art. In his relief in grey stone "The Creation," which is specified as a decoration for an overmantel, there is more universality than its author claims for it. It is in itself an isolated design executed in the purely idealistic spirit which prompted the early Chinese carvers, and taken by itself would seem to have no ulterior aim. It is, nevertheless, eminently fitted for the purpose suggested, as indeed would be a piece of Chinese plastic ornament dating long before the birth of Christ. There is something of the ceramic instinct of long ago, too, in "Festa," by A. J. Oakley, who shows only the plaster cast, but offers the work in carved wood, bronze, or pottery. I should like to see it in any of these media, but fancy it most in majolica, like the horses mentioned above. It is a bull and an intriguing fat faun and a faunesse riding on it; a festal bull, and the whole group rises to its title. Allan Howes shows a bronze torso with a beautiful blue patina that must have occupied him for days, and E. S. Frith a bust of "An Old Man," a bronze with a yellow surface which is ably and feelingly modelled in a way which is wholly modern and has no trace of any instinct from the past except that of literal truth.

On the graphic side of the exhibition Lena Pillico floods the gallery with naïve, lush ornament. Her mind dwells on pattern, her brush refuses to work except at pattern, and her colour-sense is just as demonstrative. An uncontrolled desire that turns every landscape view into a decoration; that treats a problem picture as a suggestion for decoration; that sees in every space on wall and ceiling and floor an opportunity for decorative ingenuity and activity could hardly fail to produce striking results that will be searched for vainly in Owen Jones's "Grammar of Ornament." Only a Russian artist could work with such fervency. Claude Flight is an original painter, too, his sea things are delightful, and it is interesting to turn from his modernizations of "Dancers," "Round and Round," and "Paris Omnibus," to see how far he has gone from the normal as exampled in "Deepdene," "Chalk Pits," or "Near Gloucester," by Norman Janes. This society, with its numerical title, is certainly catholic in its selective function, for one could hardly expect more antagonistic works in one small exhibition than those I have mentioned, and the studies of P. H. Jowett, of London and the suburbs, admirable in their sensitive place portraiture.

KINETON PARKES.

Law Reports

Fees as Architect—A Curious Case

Cracknell v. *Young.*

November 23. King's Bench Division. Before the Lord Chief Justice.

This was an action by the plaintiff, Mr. Reginald Cracknell, of Maddox Street, W., against Mrs. E. Young, of Station Road, Hendon, to recover the sum of £65, fees said to be due for professional work done.

Plaintiff's case was that though he was an estate agent and surveyor, and not a qualified architect, he was assisted by a qualified man, viz., Mr. Hansom. Plaintiff had sold land on an estate at Hendon, and in October, 1922, he came into contact with the defendant, who desired to erect a house and shop at that place. She had a blue print plan, but as it did not comply with the by-laws, plaintiff's case was that she requested him to get out another set of plans, and also to get in touch with a builder and sell her land. Messrs. Staples, builders, gave an estimate for the buildings at £1,300, and the cost of the land was £350. The defendant paid a deposit of £40. A receipt was given, and plaintiff's counsel said that document gave the defendant her defence to the action. It stated that the deposit was in part payment of the agreed purchase price of £1,650, but it was never intended that the amount should include plaintiff's fees as architect. Plaintiff assumed that defendant would pay those fees in the usual way.

Plaintiff gave evidence in support of his case, and said he promised to prepare plans and watch the building as architect, and always expected fees for that. He denied that he agreed to erect the building, prepare the plans, and see the thing through for £1,650.

His lordship said Mr. Cracknell had given his evidence with great candour, but his case was difficult to prove in the circumstances, especially seeing that Mrs. Young had said in the early stages that she could not afford to pay more than £1,650. In the circumstances the plaintiff ought to have told her about fees he would charge. His lordship added that he thought the defendant agreed to pay a lump sum of £1,650 to cover the whole matter, and the receipt given by plaintiff for the deposit seemed to support that agreement, as did other contemporary documents. It was not until the building was practically completed that plaintiff said anything about fees. Therefore his lordship held that there was no promise to pay the plaintiff fees as architect; in fact, documents excluded the plaintiff's claim for fees. Judgment would be entered for defendant with costs.

Right of Way Over a Yard

Ball and others v. *Smith.*

November 27. Chancery Division. Before Mr. Justice Lawrence.

This was an action by Mr. F. J. Ball, Mr. F. Parkes, and Mr. H. E. Dawson, owners and occupiers of premises at 407b West Green Road, Tottenham, against Mrs. E. F. Smith, claiming a declaration that they had a right of way leading to a stable at the rear of the premises over a yard owned by the defendant.

Mr. Jenkins, K.C., and Mr. W. Hunt appeared for the plaintiffs, and the defendant was represented by Mr. Ward Coldridge, K.C., and Mr. E. Brown.

On behalf of the plaintiffs Mr. Jenkins said the plaintiffs' premises were a shop and dwelling-house, and the adjoining two houses were corner premises, and at their rear was a yard over which the plaintiffs claimed a right of way for vehicles and other purposes to their stable, leading from Derby Road, a side thoroughfare. There was no other access, and access was now completely blocked by the defendant, the owner of Nos. 407 and 407a, having locked the gates leading from Derby Road. The premises in question were completed for occupation about October 1898, and on February 9, 1899, the owners of both properties granted a mortgage of 407b to one set of mortgagees, and a mortgage of 407 and 407a to another set.

Mr. Ward Coldridge submitted that there was no definite evidence that the right of way claimed was in fact occupied or enjoyed with the property on February 9, 1899.

His lordship said in his opinion the right of way passed to plaintiffs by virtue of the express grant contained in the mortgages under the Conveyancing Act, Section 6 (2). He was bound to come to the conclusion, as a matter of fact, that upon February 9, 1899, the right of way claimed was in fact occupied and enjoyed with 407b. Upon December 12, 1921, the defendant agreed to buy 407 and 407a, and it was clear that she took with full notice of whatever rights the owner of 407b might have. He granted the declaration asked for, with costs.

Builders' Yard — An Alleged Breach of Covenant

Drakers, Ltd. v. *David King, Ltd.*

November 29. King's Bench Division. Before Mr. Justice Bailhache.

This was an action by the plaintiffs against defendants to recover possession of certain land and buildings in the Carshalton Park Road, which they held under a lease of April, 1922.

Mr. Schiller, K.C., appeared for the plaintiffs, and Mr. A. Grant, K.C., for the defendants.

Mr. Schiller stated that under the lease defendants were not to assign or sub-let without permission or use the premises other than as a builders' yard while the usual repairs were to be done. Those three covenants had been broken by the defendants, who had sub-let to a person who used the premises for motor engineering and had not effected repairs when called upon to do so. Notices specifying the breaches were served upon the defendants on November 8 and 11, 1922, but the defendants had failed to make good the breaches. Counsel said there was a proviso to the lease, which was one for a term of seven years, by which either party, at any time during the term of the lease, could call upon the other to buy or sell the freehold for a sum of £400. After the issue of the writ in the action defendants purported to exercise that option under the proviso and they counterclaimed in respect of that matter. Counsel submitted, however, that the term was determined by the issue of the writ and the defendants therefore could not exercise that option when they sought to do so.

Mr. Grant submitted that if a landlord called a man his tenant with the knowledge of breaches of covenant he could not rely upon those breaches in claiming forfeiture. In their specifications of repairs sent to the defendants they had been described as the tenants by the plaintiffs at a time when they were well aware of the breaches. Counsel also argued that if specifications were sent to the tenants with the knowledge of breaches forming the basis of the claim for forfeiture then the landlord's notice acted as a waiver of his claim.

His lordship said it was settled law that if a landlord with notice of a breach of covenant unequivocably recognized a lessee as his tenant that would operate as a waiver of the forfeiture. In this case on November 8, 1922, there was an unequivocal admission by the plaintiffs that the defendants were still their tenants. But there was no evidence, and nothing in the correspondence to show that at the time that admission was made the plaintiffs had notice or knowledge that the covenants as to user and assignment had been broken. He could not see anything which would enable him to say that there was a good and sufficient notice given to the landlord that there had been an assignment or sub-letting. The action thus succeeded, and plaintiffs would have judgment for possession, for mesne profits at the rent of £30 a year, and costs.

The R.I.B.A. Kalendar for 1924

The R.I.B.A. Kalendar for the coming year is made of eater use in at least one respect—a carefully compiled t of members, arranged according to local distribution, kes its appearance for the first time. We have long t the need of such an index, for prior to its publication, it were required to find the name of an architect practis-g, say, in Tadcaster, it could be found only by a lengthy rch through all the pages of Fellows, Associates, and entiates of the Institute. London and provincial men n now be located at a glance. Such a list is of use to a tential client, too, and in these hard times the client ould be helped all we can! The preponderance of the ndon men is great. About 1,500 members of the Insti-te are in London; whilst Manchester has about 110 mbers, Birmingham and Liverpool have less than a ndred, and, surprising though it may seem, such well-own places as Warwick and Rugby have but one and two mbers respectively. A scale of towns showing the num-r of architects practising in each, set against the popula-n of each, might be worth drawing up. The total numbers Fellows, Associates, and Licentiates are as follows: llows, 958; Associates, 2,352; Licentiates, 1402; making total of 4,712. Two hundred and fifty students are also on the register.

he R.I.B.A. Kalendar, 1923–24. London: The Royal Institute of British hitects. Price Three Shillings and Ninepence.

R.I.B.A. Council Meeting

Appended are notes from the minutes of the last Council eeting of the R.I.B.A.

R.I.B.A. Examinations :—

(*a*) The Board of Architectural Education reported that two candidates had passed the intermediate ex-amination in Sydney and one candidate the special ex-amination in Cape Town.

(*b*) The Overseas final examination qualifying for the Associateship will be discontinued after January 1924, and in place of the Overseas examination the inter-mediate, final, and special examinations of the R.I.B.A. will be held in the Dominions overseas by arrangement with the allied societies concerned.

(*c*) The following schedule of subjects has been laid down for the examination in professional practice for students of recognized schools exempted from the final examination :—

(1) Professional conduct; duties and liabilities of client, architect, and builder; architect as agent of client; architect as arbitrator.

(2) Forms of contract and contract documents, including general clauses in specifications.

(3) Law of easements; rights of landlord and tenant, including dilapidations.

(4) Buildings acts and by-laws.

University of London.—Mr. Paul Waterhouse, F.R.I.B.A., d Mr. Arthur Keen, F.R.I.B.A., were reappointed to present the R.I.B.A. on the University of London Archi-ctural Education Committee for the year 1924–1925.

Mr. Joseph Pennell's Etchings of New York.—The uncil have received from Mr. Joseph Pennell (Hon. ssociate) a gift of six etchings of new buildings in New ork for the R.I.B.A. library.

Provincial Conference, 1924.—The Provincial Conference 1924 will be held at Oxford in July.

British Confederation of Arts.—Mr. H. V. Lanchester, R.I.B.A., was appointed to represent the R.I.B.A. at a eeting of the British Confederation of Arts.

The Ideal Classroom.—Mr. G. H. Widdows, F.R.I.B.A., as appointed to represent the R.I.B.A. on a joint com-ittee appointed by the Medical Officers of Schools Asso-ation to investigate the design of classrooms.

The British Waterworks Association.—On the recom-endation of the Practice Standing Committee the Council have informed the authorities concerned that the R.I.B.A. is strongly opposed generally to the enforcement of the Association's model by-laws (1) because they are not framed so much for the prevention of waste of water or for the public benefit as for an increase in the power of the water authorities which are the constituent bodies of the Association; (2) because the standardization of taps and other fittings and the fixing of minimum weights for such fittings does not necessarily minimize waste, but does increase the cost of production; and (3) because such standardization is liable to destroy all incentive to invention.

Professional Conduct.—Under the provisions of by-law 24 a Licentiate was censured and suspended for six months for quoting fees lower than those prescribed by the R.I.B.A. scale when applying for appointment as architect to a public authority.

Competition News

Swansea Masonic Temple.

The designs of Messrs. Willmott and Smith, of Cardiff, have been placed first in the competition for a new masonic temple at Swansea. The assessor was Mr. Arthur Keen, F.R.I.B.A.

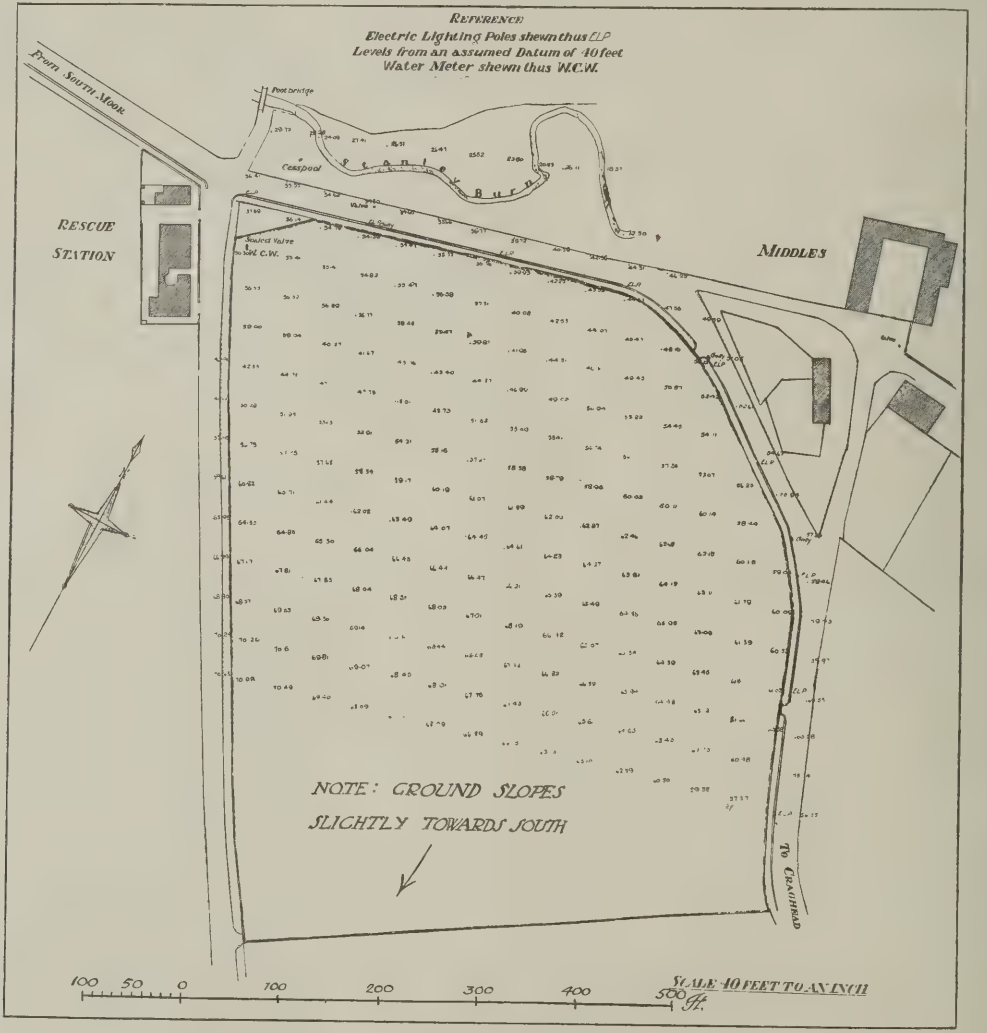
Cairo New Law Courts Competition.

With reference to the warning notice already issued in regard to the above competition, the Competitions Committee of the R.I.B.A. desire to inform Members and Licentiates that they have requested the promoters, by cable, to give some assurance that the conditions would be amended so as to conform with the regulations for international competitions. No reply to this cable has been received. The attention of the European and American architectural bodies has been drawn to the un-satisfactory state of the conditions, and it has been suggested to them that they should take similar action in support of the R.I.B.A.

List of Competitions Open

Date of Delivery.	COMPETITION.
Jan. 1	The Imperial War Graves Commission invite architects who served during the war as members of the Military, Naval, or Air Forces raised in any part of the British Empire to send in their names for admission to a competition for the designing of memorials to the missing to be erected by the Imperial War Graves Commission at Bethune, Armentières, Cambrai, and Soissons. Applications for particulars of premiums and other regulations from those desiring to compete are to be addressed to the Secretary (Works Branch), Imperial War Graves Commission, 82 Baker Street, London, W.1, and must be received there not later than January 1, 1924, and must be accompanied by a statement giving particulars of the war service and professional career of the applicant and clearly stating which of the memorials it is desired to compete for. Deposit, two guineas for each set of plans. The Assessor is Sir Aston Webb, K.C.V.O., P.R.A.
Jan. 5	Memorial Building and Tower, Dudley. The Council of the County Borough of Dudley invite Competitive Designs from duly qualified Architects for the "Brooke Robinson Memorial" Building and War Memorial Tower comprising a public hall, coroner's court, small museum, and a new sessions court. Premiums £300, £200, and £100. Mr. W. Curtis Green, A.R.A., F.R.I.B.A., Assessor. Conditions of competition, together with a copy of the site plan, can be obtained on application to Mr. E. W. Tame, Town Clerk, Town Clerk's Office, Dudley, with deposit of £2 2s.
Feb. 1	Proposed Concert Hall and Public Baths for Newcastle-upon-Tyne. Premiums £750, £250, and £100 respectively are offered, the first premium to merge into the commission or other payment to be made to the author of the successful design. Assessor, Mr. Alfred W. S. Cross, M.A. Apply, with deposit of £2 2s., to Mr. A. M. Oliver, Town Clerk, Town Hall, Newcastle-upon-Tyne.
Feb. 14	Proposed New Cottage Hospital for Durham. The Holmside and South Moor Collieries Welfare Scheme Committee invite designs for a new cottage hospital, and premiums of £75, £50, and £25 respectively are offered. Mr. T. R. Milburn, F.R.I.B.A., is the assessor. Apply not later than December 26. Joint Secretaries, Welfare Scheme Committee, South Moor Colliery Co., Ltd., South Moor, Stanley, S.O., Co. Durham.
Feb. 29	Architects practising in the West Riding of Yorkshire are invited to submit designs for the City of Leeds Branch Public Libraries, Cardigan Road, Burley, and Hough Lane, Bramley. Premiums, £35, £20, and £15. Assessor, Mr. Percy S. Worthington, M.A., Litt.D., F.R.I.B.A. Apply Mr. Robert E. Fox, Town Clerk, 26 Great George Street, Leeds, with deposit of one guinea.
April 3	A competition has been promoted by the Canadian Government for designs for a full-length statue of the late Sir Wilfrid Laurier to be erected in the grounds of the Parliament Buildings, Ottawa. The winner will be commissioned to carry out the work. Second premium, $1,000. Apply the Secretary, Public Works Department, Room 784, Hunter Buildings, Ottawa.

The Durham Cottage Hospital Competitio


REFERENCE
Electric Lighting Poles shewn thus ELP
Levels from an assumed Datum of 40 feet
Water Meter shewn thus W.C.W.
From South Moor
Foot bridge
Cesspool
Stanley Burn
RESCUE STATION
MIDDLES
Sluice Valve
W.C.W.
NOTE: GROUND SLOPES SLIGHTLY TOWARDS SOUTH
To Craghead
100 50 0 100 200 300 400 500 ft.
SCALE 40 FEET TO AN INCH

PLAN OF THE SITE.

THE Holmside and South Moor Collieries Welfare Scheme Committee invite designs for a new cottage hospital, proposed to be erected on a site in the South Moor and Craghead Road. Mr. T. R. Milburn, F.R.I.B.A., is the assessor, and premiums are offered of £75, £50, and £25 respectively for designs placed first, second, and third.

The accompanying plan of the site shows the levels of the ground, and particulars of the water mains and electric cables. The whole or any part of the land included within the inner line on the plan is available for the erection of the hospital. The main entrance may be placed at any point in the South Moor—Craghead Road. It is suggested that about two acres of the land available would be sufficient for the site and grounds of the hospital. It is, however, left entirely to the discretion of the competitors as to how much of the available land they appropriate for the hospital. Economy in plan and elevation is essential, but it is desirable that the building should be of pleasing appearance. It can be assumed that a good foundation is available at a depth of 2 ft. below the surface of any part of the site. The materials of which the hospital will be constructed are left to the discretion of the competitors.

No sewers are available and competitors must provide for a septic tank on the northern boundary of the site. The effluent from this tank must be led into the Stanley Burn. The method of heating is left to the discretion of competitors. Lighting is to be by electricity. The grouping of the accommodation in one or more buildings is left to the discretion of the competitors. The number of floors is also left to the discretion of competitors, but it is suggested that the main rooms should be on the ground floor.

The accommodation required is as follows: One ten-bed ward for male patients; one six-bed ward for male patients; one six-bed ward for female patients; one four-bed ward for female patients or children; one single-bed ward for mal patients; one single-bed ward for female patients; veranda for male and female patients; sanitary, bathing and lavator accommodation for male and female patients; sink rooms duty room; food store; linen room; patients' clothes stores operating room (400 super. ft.); anæsthetizing room (13 super. ft.); X-ray room (300 super. ft.); surgery (250 super ft.); dispensary (250 super. ft.); small waiting room close t entrance; small office for matron; medical staff sanitar accommodation and lavatory; sitting room for nurses, fou bedrooms for nurses, bath and sanitary accommodation; bedrooms for three maids and bathing and sanitary accommodation; kitchen, scullery, larder and store; garage for two cars ambulance shed for one motor ambulance; coal stores (large) lodge or quarters for porter (married); small hand laundry; mortuary.

The sizes of rooms where specified are suggestive only, and where not specified are left to the discretion of competitors. In the large wards the wall space per bed should be 8 ft., the floor space 100 super. ft., and the cubic space 1,200 cubic ft. per bed. It is suggested that the sanitary accommodation need not necessarily be dissociated from the building by cross ventilated lobbies, provided efficient ventilation is provided. It is suggested that a bay in the large wards to act as day room space might be provided. The estimate of cost must not exceed the sum of £12,500, which sum is inclusive of quantity surveyor's, but exclusive of architect's fees.

Designs are to reach the Joint Secretaries, Welfare Scheme Committee, South Moor Colliery Co., Ltd., South Moor, Stanley, S.O., Co. Durham, and endorsed "Design for Cottage Hospital"—not later than February 14. Any questions which the competitors desire to ask must be addressed to the Joint Secretaries, on or before December 26.

Societies and Institutions

National Monuments

"Our ancient monuments and public buildings were a gnal record of a previous social tradition which brought wn to our mechanical and competitive age a suggestion a saner spirit and finer method of life," said Sir Frank ines, in a paper read before the Royal Society of Arts. he expression of national greatness and the rivalry tween local communities in the erection of monuments ore magnificent than those erected by their predecessors as, he said, always in the past considered a sufficient cuse for the total destruction of earlier work, nor would appear that any sense of guilt existed when this destruction was undertaken. Even when archæology was studied entifically, Lord Elgin would seem to have had no comnction in removing the treasures of Greece to this untry, while as late as 1877 Cleopatra's Needle was ought to this country and set up by the Thames to decay der the acid-laden atmosphere of modern London. wards the close of the eighteenth century and in the ginning of the nineteenth century the writings of Sir alter Scott and the drawings of Salmon Trout assisted in reading interest in the mediæval architecture in this untry, with the unfortunate result that in many cases e work of a later period, even then of some historic value, as ruthlessly swept away to give place to lifeless replicas mediæval work and handicraft. In England, as in France, e damage done owing to over-prodigality of expenditure d been serious and irreparable. The restoration of orcester Cathedral between 1857 and 1874, which inlved an expenditure of considerably over £100,000, sulted in handing down a building that was externally, all intents and purposes, a modern structure. During e first fifty years of Queen Victoria's reign well over ,000,000 was spent on twenty of our cathedrals, with sults that the judicious can only deplore; many of these ildings were now largely modern, particularly in the ses of Worcester, Chester, and Lichfield.

The Renaissance and Modern Point of View

The fourth and concluding lecture of the autumn course lectures on architecture, arranged by the Reading ciety of Architects in conjunction with the Workers' lucational Association, was given at University College, eading, under the chairmanship of Mr. W. M. Childs, M.A., P., the Principal of the College. The lecture, on "The enaissance and Modern Point of View," was illustrated numerous lantern slides. The lecturer, Mr. W. E. ernon Crompton, F.R.I.B.A., before proceeding with e consideration of the Renaissance and modern point view when applied to architecture drew attention to ree points which must be borne in mind: firstly, it as to Greece and Greco-Roman thought that we must ok for a true conception of the nature of architecture as activity in which order and beauty were the chief lues; secondly, that architecture was fundamentally e expression of an attitude of mind, and consequently as the best example of man's activity that was available hereby the value of civilization might be tested; thirdly, e lecturer went on to enquire how it came about that e style of architecture previous to the Renaissance, hich we called Gothic, was displaced with such apparent se, the change we witnessed from Gothic to Renaissance ing more of the nature of a break than an evolution, the ason being that the Mediæval scheme of thought was tentionally incomplete. During the Middle Ages certain enues of thought were forbidden; there was consequently joy in the untrammelled pursuit of knowledge as an d in itself: such an attitude towards life contained the ments of decay. Further, we must remember that there existed an enormous mass of ancient learning which only awaited discovery: it was the task of the Middle Ages to resume this heritage of knowledge and in so doing it absorbed that which was eventually to blossom as the Renaissance. The lecturer, with the help of slides of various buildings in Italy, France and England, then proceeded to consider the Renaissance point of view with its scheme of values, laying particular stress upon those humanistic qualities of order, reticence and fastidiousness as to the form and shape of things which were so prized by the masters of the Renaissance.

The chairman, in proposing a vote of thanks to the lecturer, expressed the hope that the Reading Society of Architects would arrange other similar lectures, as they were invaluable in educating the public in architecture.

Regent Street and the Strand

Professor C. H. Reilly lectured before the Leeds and West Yorks Architectural Society on the subject of "New Buildings in Regent Street and the Strand." Dealing in illuminating fashion with the character of Nash's great scheme, Professor Reilly likened the modern transformation of Regent Street to a tragedy. The Strand, however, was comedy.

The old Regent Street was something of which all England could be proud, and which neither France nor modern America could quite equal. Its character as a happy shopping centre had brought pleasure-loving people and money, just as did the gardens of Paris. Into this Norman Shaw had introduced an alien spirit, a heavy municipal feeling. The lecturer had trenchant criticism for the modern Regent Street, and dealing with the Strand, a street that did not pretend to be architectural, he said that here the Colonial might feel that at last he was at home. As a nation we permitted ugliness that no other nation would tolerate.

Professor Reilly said that the London squares, for which the ground landlord was responsible, were the constant admiration of American visitors. A vote of thanks was proposed by Mr. T. Butler Wilson, F.R.I.B.A., and seconded by Mr. J. Addison, A.R.I.B.A. Mr. Eric Morley, F.R.I.B.A., presided.

Urban Amenity

In his ninth lecture on town planning at Birmingham University, Mr. William Haywood, F.R.I.B.A., said that the amenity of town structure was not easily analysed; and it was difficult to indicate ways of actually producing that quality of attraction in cities. They agreed that certain towns were pleasant; that others were imposing; and some so ugly and depressing that they saw them as little as possible. Yet the residents of ugly towns did little to prevent further unpleasant developments, although—if they considered the matter—it was chiefly by avoiding preventable ugliness, that they could best prepare conditions favourable to greater amenity. Before that negative approach towards amenity could be made, however, it would be necessary for communities to think more collectively than at present; and since collective thought had usually been favourable to everything that made for urban improvement, the increase of amenity in city life became largely a matter of arousing public conscience to an appreciation of its environment. In various ways that change of outlook was now taking place. The Town Planning Acts had been helpful indirectly by stirring people to a new knowledge of their surroundings; and in that new interest—now rapidly extending—they would find the opportunity they needed for giving to our towns that uplift in outward expression which so many of them lacked.

The Week's News

Change of Address.

Messrs. G. Wyville Home and Shirley Knight, AA.R.I.B.A., architects, have moved to No. 37 Russell Square, W.C. Telephone Museum 3283.

£500 for Waterloo Bridge.

Following a report on the subsidence of a pier of the central arch of Waterloo Bridge, the London County Council Highways Committee have recommended a preliminary expenditure of £500.

A New Block of Dwellings for Bermondsey.

A five-story block of dwellings will be erected in Tower Bridge Road to accommodate 160 of the persons displaced by the clearance of Hickman's Folly slum area, Bermondsey.

A Nottingham Architect's Estate.

Mr. John Howitt, of Nottingham, principal of the firm of Messrs. J. Howitt and Son, who died on June 9 last, aged seventy, left estate of the gross value of £6,768, with net personalty £236.

South Shields Development.

The Ministry of Health have sanctioned the application of the South Shields Corporation to borrow £39,000 for the development of the south foreshore by the construction of promenades, shelters, etc.

Proposed New Church for Bournemouth.

Sir Charles Nicholson has submitted plans to the Building Committee of a new church to be erected in the Springbourne district, in the place of the present St. Mary's Church, at an estimated cost of £13,000, the seating accommodation being for 600 persons.

A New Thames Tunnel.

A £100,000 tunnel is to be constructed under the Thames to link up the power station of the County of London Electric Company at Barking with the districts south of the river. The contract has been placed with a Westminster firm of engineers.

A New Thames Bridge.

The Thames Conservators have approved plans for a new bridge over the Thames at Reading, to take the place of the present Caversham Bridge. The new bridge, which is to be constructed by the Reading Corporation under its Act of 1913, will be constructed of reinforced concrete, and will have two spans.

Canadian Scholarship for Architecture.

The Royal Canadian Academy of Arts offer a travelling scholarship for architecture valued at $1,500 (nominally £300). The scholarship is restricted to Canadian citizens of at least six years' residence in Canada and under 30 years of age. The object of the scholarship is to encourage the study and understanding of architecture as a fine art.

An "Old London" Memory.

Montague Close, at the foot of London Bridge on the Southwark side, is to be built on by the owners of the Bridge House Restaurant. It is named after a mansion built by Sir Anthony Browne, Viscount Montague, on the cloisters of St. Saviour's Church, now Southwark Cathedral. Sir Anthony was here in 1605, when he received the anonymous letter warning him of Gunpowder Plot.

Earthquake-proof House.

A special type of building to resist earthquake shocks is, it is understood, being designed in San Francisco, and tests are to be made at Valparaiso. According to Professor Bailey Willis, of Stanford University, the foundations of this 'quake-proof building will consist of two broad slabs of reinforced concrete with ball-bearings between, so that when the lower slab moves the upper will remain stationary. Springs and shock-absorbers will also be employed.

Lord Leverhulme and Hampstead Heath.

The Hampstead Borough Council have accepted Lord Leverhulme's latest proposal for an exchange of land. Lord Leverhulme offered to give, in exchange for the footpath and the strip of heath land (in all 2,696 square yards), a strip of land 3,096 yards in area at the north-west portion of his Heath Lodge estate. He further offered to present to the public the paddock, North End Road, to be thrown open to the heath, and to form part of the heath for ever. The paddock is slightly over an acre in area.

University College, Cardiff.

The Finance Committee of the University College of Sout Wales and Monmouthshire recommend that the erectio in Cathays Park, of the new science wings (the physics labor tories), which are to cost about £250,000, be proceeded wit It was pointed out that with the money already subscribe and the promises made at the recent luncheon given by th Earl of Plymouth, they would be justified in proceeding wit the erection of the new wing, the foundations of which ha already been laid. Out of the £250,000 required over £150,0 has already been subscribed or promised.

The Roman Scholarship in Painting.

Mr. A. K. Lawrence, a student of the Royal College of Ar South Kensington, has been awarded the Prix de Rome f painting. Mr. Lawrence was an art student at Armstron College, Newcastle-upon-Tyne, until he joined the Army as private in the Northumberland Fusiliers in November, 191 He was commissioned in 1915, was mentioned in dispatche and served until February, 1919. Another Kitchener Schola Mr. C. H. O. Scaife (St. John's College, Oxford), who won th Newdigate prize, has just been elected President of the Oxfor Union.

Newcastle and Slum Demolition.

Newcastle City Council are to be asked to push on with th big Liverpool and Prudhoe streets slum demolition schem The total value of the site originally taken into consideratio by the Health Committee is £95,000. Other land, it is e pected, will now have to be secured to get the full efficienc of the scheme, and the Committee now asks for sanction expend £1,050 on the services of an independent valuer. scheme is also afoot to reorganize the power, heating an cooking arrangements at Walker Gate Hospital at a cost £13,775.

The Origin of the Ionic Order.

In a lecture at the Central School of Arts and Crafts, Si Banister Fletcher traced the origin of the "Ionic Order" architecture, as used by the Greeks, more especially in the colonies in Asia Minor. It was slighter and more graceful tha the sturdy Dorian, and so it came about that the capital wa widened by the addition of the Ionic volute above the echinu and the base was added to the fluted column to supply a appearance of strength.

A Village of Flats.

A big scheme for the building of a self-contained village flats at Hove is projected. If the scheme matures three four hundred flats will be built in a quadrangle over an are of 30 acres, having nearly a thousand feet frontage on Kingswa Each flat will contain a hall, dining-room, drawing-roon four bedrooms, bathrooms, kitchen, etc. The rents will va from £175 to £250 a year. All the flats will have lifts, will centrally heated, and supplied with hot water. A club-hous containing a dance and concert hall and suites of visitor rooms is also proposed, while the lawns in the quadrangle wi be laid out for tennis, croquet, bowls, and badminton. Th village will have its own shops, its own taxis, two rows garages, and probably its own fleet of motor-buses.

L.C.C. and City Churches.

At the last meeting of the London County Council M Andrew Taylor, chairman of the Local Government Con mittee, stated that he had no knowledge of any decision dispose of a number of churches in the City of London. Th body of St. Alphage's Church, London Wall, had been d molished and office premises erected on the site. St. Katherin Coleman Street, was to be taken down. Under the Union Benefices and Disposal of Churches measure, 1923, now befo the National Assembly of the Church of England, it was pr posed to set up machinery for dealing with proposals for th disposal of churches in the metropolis, and the County Counc were now in active communication with the assembly i regard to the amendment of the measure. Some three yea ago, when powers were taken to demolish nineteen church in London, the Council passed a resolution stating that it wa opposed to such destruction. He (Mr. Taylor) was sure tha whatever measures the Council would take would be on th same lines.

(*Continued on page* xxi.)

The Week's News—*continued.*

New Music Hall for Swindon.

The "island site" adjoining the County Court buildings and the Empire Theatre, in Clarence Street, has been definitely decided upon for the new hippodrome and palace of varieties. It will have two tiers, stalls, pit stalls, grand circle, and upper circle, with tip-up seats throughout, and there will be seating accommodation for not less than 1,600. Ten dressing-rooms are to be provided, and the building will have a sliding roof and every modern improvement for the comfort of the audience. The Empire Theatre, when reconstructed, will also have two tiers and an increased holding capacity of nearly 800.

Modern Steam Heating.

Mr. A. J. Assheton, speaking at a meeting of the Institution of Heating and Ventilating Engineers, appealed to his hearers not to confuse the early faltering stages in steam heating with the much advanced methods of to-day. Before describing the various systems of steam heating he remarked that it should not be classed as a cheap make-shift; it deserved the same engineering skill and study as was paid to other branches of the heating profession. The growth of the heating industry had proved that the many advantages of central heating more than compensated for any slight defects.

Stained Glass at the Victoria and Albert Museum.

The Swiss Minister, Monsieur C. R. Paravicini, has lent to the Victoria and Albert Museum seven panels of early stained glass which are now exhibited on the stairway leading from room 131 to room 112 on the first floor. Three of the panels, originally in the Cathedral Passau, belong to the Salzburg School and are dated 1494. The remainder are rare early Swiss work—two representing the Virgin and St. John the Evangelist, of either the Constance or the Zurich School of about 1430; and two are heraldic panels of the School of either Constance or St. Gall, dating from about 1440.

Devon School Improvements.

The Devon Education Committee have instructed the county architect to prepare plans for a new school to accommodate sixty children at Boasley Cross, at an estimated cost of £1,300. Approval has also been given to an estimated expenditure of £8,000 and £7,000 respectively for the building of new schools at Colyton and Totnes, £3,500 for the enlargement of the East Street boys' school, Okehampton, and the installation of central heating, and improvement of the playground, £3,400 for the enlargement of Crownhill County School, St. Budeaux, and the installation of central heating; and £1,350 for the enlargement and alteration of schools at Moretonhampstead.

Proposed New Bridge for Cumberland.

A scheme which may involve building the longest bridge in the world, to connect Millom, in Cumberland, with Barrow-in-Furness, is being discussed at a conference of Cumberland and Lancashire local authorities at Barrow-in-Furness. The Tay Bridge in Scotland, and the Ohio Bridge in the United States, each more than two miles long, are far shorter than the new bridge which some of the local authorities have proposed. Other authorities, however, are in favour of a shorter bridge, from Crab Marsh, in Millom, to a point on the Lancashire coast between Dunnerholme and Askam-in-Furness. It would provide a favourable alternative railway route from Carnforth to Carlisle.

Town Planning in East Kent.

A meeting of the East Kent Regional Joint Town Planning Committee was held at Canterbury, with representatives of the local authorities concerned, under the chairmanship of Mr. H. E. H. Rice. A motion by the Mayor of Dover was proposed to approach an eminent town-planning expert with a view to preparing a regional outlying scheme and report, and the name of the President of the Town Planning Institute was mentioned. Mr. Pepler, head of the Town Planning Department of the Ministry of Health, who was present, was asked to negotiate with the President and report to a sub-committee elected at the meeting with a view to action being taken as soon as possible.

Bradford Slum to be Cleared.

The proposal of the Bradford Corporation to rebuild a slum area in the city known as the White Abbey district formed the subject of a Health Ministry inquiry at Bradford by Mr. E. Leonard. It is estimated that an actual expenditure of £235,766 will be needed to clear the site, of which it is expected the Government will contribute half. The scheme involves the clearing of over 14½ acres, of which 10½ acres comprise the really unhealthy area, the remainder of the land being included in the scheme to make it complete. The houses involved are occupied by 2,300 people, for whom it is proposed to build other accommodation while the area is being cleared.

Morocco Public Works.

His Majesty's Vice-Consul at Tetuan informs the Department of Overseas Trade that by a Royal decree important credits have been granted for certain specified public works in the Spanish zone at Morocco. The works comprise roads, railways, water supply, drainage and improvement of the main entrance to Tetuan (above the station). Works on public buildings include sanitation, schools, dispensaries, customs and postal offices, and restoration of the Khalifa's palace, offices of the civil and military control. The total credit allotted is 54 million pesetas. Contracts for the port, railway, and water supply and drainage works as well as for the supply of railway material and rolling stock will be tendered for, notice being given in the Official Gazette and in the Official Bulletin of the Spanish zone of Morocco. Such tenders when issued, except in respect of the towns of Melilla and Ceuta, will be open to British firms.

City Courts and Alleys.

With the coming of new and huge buildings in the City of London, a number of courts and alleys have been closed and built over by those who have acquired surrounding property. To this objection has been raised on several occasions lately in the Court of Common Council. At the last meeting the Midland Bank asked permission to close Chapel Place in the Poultry, they having acquired all the interests in adjoining property. Mr. W. W. Green objected to the proposal, on the ground that the Corporation was giving up public rights which had existed for a long period. He moved the recommendation back, urging that, if the ground was to be surrendered the Bank should pay for it. Mr. A. C. Knight, in seconding, said that Chapel Place had been a public highway for certainly over three hundred years. At one time it was the entrance to the Poultry Comptor and Chapel. The ground was exceedingly valuable. The amendment to refer back was carried.

Trade and Craft

The Vitrolite Construction Co.

The Vitrolite Construction Company ask us to state that the architects for the building illustrated in their advertisement in the November 28 issue of THE ARCHITECTS' JOURNAL were Messrs. Clemence & Co., of St. Mary's House, 59 Quarry Street, Guildford.

Messrs. H. R. Vaughan & Co.'s Trade Mark.

Messrs. H. R. Vaughan & Co., Ltd., roofing felts and damp course manufacturers, of South Shore Road, Gateshead-on-Tyne, have adopted a trade mark to distinguish their manufactures. A design embodying the sphinx and the slogan "made to endure," has been registered for this purpose, and each roll of the company's felt now bears this mark.

A New Showroom for London.

Messrs. Chas. P. Kinnell & Co., Ltd., of 65 and 65a Southwark Street, London, S.E.1, ironfounders, engineers and contractors, have opened an extensive showroom in which they exhibit the most modern types of heating and domestic supply boilers, combined boilers and cookers, radiators, and other heating requisites.

"The Roadmaker."

"The Roadmaker" for December contains among other interesting literary features an article on "Village Signs," by Charles G. Harper; "Some Candid Remarks on Highway Matters," by George S. Barry, F.S.I.; and a portrait and some biographical details concerning the career of Mr. E. J. Goodacre, A.M.I.C.E., borough engineer of Gosport. There is also a cartoon by F. J. Watson Hart, and illustrations are given of roads in Newport, Chelsea, Whitehall, and Rochdale, in the construction of which B.R.C. Fabric has been used. "The Roadmaker" is issued on behalf of the British Reinforced Concrete Engineering Co., Ltd., of Westminster and Manchester. In connection with the Public Works and Road Congress, a special number of "The Roadmaker" was issued under the title "The Use of Reinforced Concrete in Road Construction."

New Inventions

Latest Patent Applications.

28747.—Cuypers, M. E. J. A.—Buildings. November 14.

28944.—Debongnie, E. E.—Roofs. November 16.

28783.—Liversedge, J. W.—Machine for placing and securing steel rods, etc., in reinforced structures, etc. November 15.

28678.—Row, S. S.—Heating buildings. November 14.

29519.—Andrews, E. S.—Portable buildings. November 22.

29423.—Blanchford, E. H.—Means for making concrete walls, &c. November 21.

29634.—Bright, W.—Concrete, &c., building blocks. November 24.

29179.—Hagerty, A. and G.—Building brick. November 19.

29347.—Humpleby, J. W.—Imitation marble. November 21.

29429.—Jones, J.—Accessory for building structures. November 22.

Specifications Published.

206173.—Kindstrom, C.—Hollow building blocks.

195070.—Forssell, C. A.—Framework for buildings.

200512.—Boussiron, S. J.—Reinforced concrete bridges.

206669.—Heymann, M.—Metal coverings for walls and ceilings.

206742.—Ames, R. Y., and Scott, G. G.—Roofing-tiles.

206765.—Dixon, R.—Sheet-metal buildings or the like.

204673.—Herrera, M.—Construction of staircases.

190470.—Robertson Co., H. H.—Building material or like articles of manufacture.

207110.—Jones, D. Palmer.—Means or devices for connecting together members of permanent or temporary structures, buildings, scaffolding, and the like.

Abstracts Published.

204487.—Roofing.—Akerman, W. S., The Mount, Burnham, Somerset.—Key-tiles of T-cross section are adapted to be laid in rows which alternate with rows of curved or hollowed tiles laid in overlapping formation across and in engagement with the battens, the wing portions of the key-tiles being directed downwards on to the main tiles. The key-tiles are each provided with a nib on the stem to engage the battens and also with a recess to engage the nib on the tile below. The double wing portion is extended at one end to provide for overlapping the adjacent tile, a corresponding recess being provided at the other end.

205031.—Building-blocks.—Palanti, M., 695 Avenida de Mayo, Buenos Aires.—Building-blocks are formed of two parts, which may be constructed integrally or separate, each part having a hollow in the form of a truncated pyramid, surrounded at the top by a continuous or interrupted projecting ledge and at the base by a corresponding recess. One of the parts is provided with projections on each of the four sides of less height than the ledge, and the other part has a notch at one end for uniting integrally constituted blocks, or a notch at each end when the parts are separate.

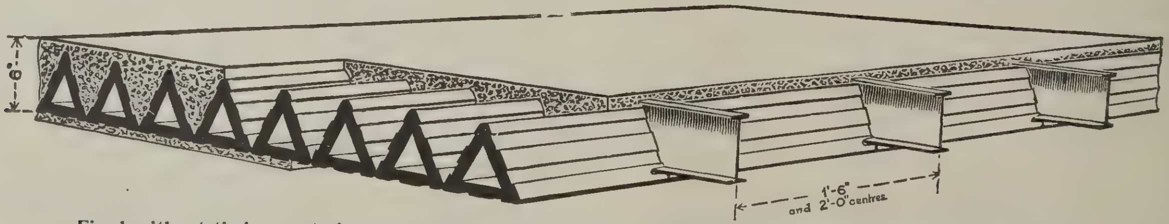
205016.—Cores for moulding walls.—H. Rustad, Winnipeg, Manitoba, Canada.—An expandable core for forming hollows in cast walls, comprises a fixed side plate stiffened by edge horizontal angles and vertical angles and a movable side member similarly stiffened and hinged by links to the fixed member so that it moves facially and upward to collapse on the fixed member. Brocket stops are provided on the fixed member to support the links. Retractable end members formed of bent sheet metal are supported by vertically swinging links from the fixed side member, in such a manner that when the links are horizontal, the end members close the gaps between the inturned ends of the side members. Handles are provided on the members for ease of handling.

The above particulars are specially prepared by Messrs. Rayner & Co., registered patent agents, of 5 Chancery Lane, London, W.C. 2, from whom readers of the JOURNAL may obtain all information free on matters relating to patents, trade marks, and designs. Messrs. Rayner & Co. will obtain printed copies of the published specifications and abstract only, and forward on post free for the price of 1/6 each.

G. JACKSON & SONS, Ltd.,
49 RATHBONE PLACE, LONDON, W. 1.
FIBROUS PLASTER,
FRENCH "STUC," CARTON-PIERRE, WOODWORK, &c.

SUSPENDED SCAFFOLDING | TUBULAR SCAFFOLDING AND CRANE STAGINGS. | "SCAFFIXER" SCAFFOLD TIES
(For Sale) BUILDERS' PLANT (For Hire)
SCAFFOLDING (GREAT BRITAIN) LTD.
Incorporating—
The Tubular Scaffolding Co., Ltd., and The Patent Rapid Scaffold Tie Co., Ltd.
Telegrams: "Scaffixer, Claproad, London."
43 LANSDOWNE ROAD, STOCKWELL, LONDON, S.W.8.
Telephones: LONDON—BRIXTON 330. BIRMINGHAM—VICTORIA 187.

HOMAN'S Fire-Resisting Floor
SIMPLE AND RAPID CONSTRUCTION.



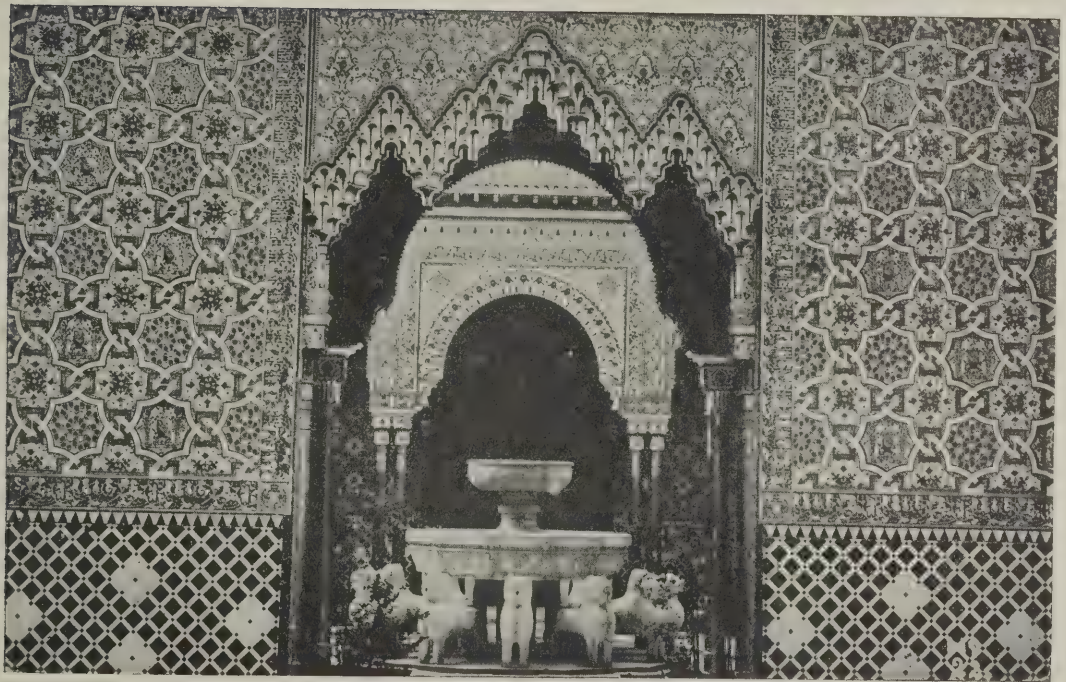
Fixed without timber centering. Excellent key for plaster. Sound and heat resisting. Light in weight.
Dries out quickly. No discoloration of plaster ceilings. Joists protected by projecting underlip of Bricks.
HOMAN & RODGERS LTD.
Constructional Engineers
17 GRACECHURCH STREET, LONDON, E.C.3.
Works: WARE, HERTS.
Telephone: Avenue 106.
Telegrams: "Homan Rodgers, Stock, London."
STEELWORK OF EVERY DESCRIPTION.

Wednesday, December 26, 1923.

Vol. LVIII. No. 1512.

THE ARCHITECTS' JOURNAL & Architectural Engineer

With which is incorporated "The Builders' Journal."



THE ALHAMBRA COURT AT THE CRYSTAL PALACE.

27-29 Tothill Street, Westminster, S.W.1.

Monikendam, Holland : A Detail of a Doorway and Window

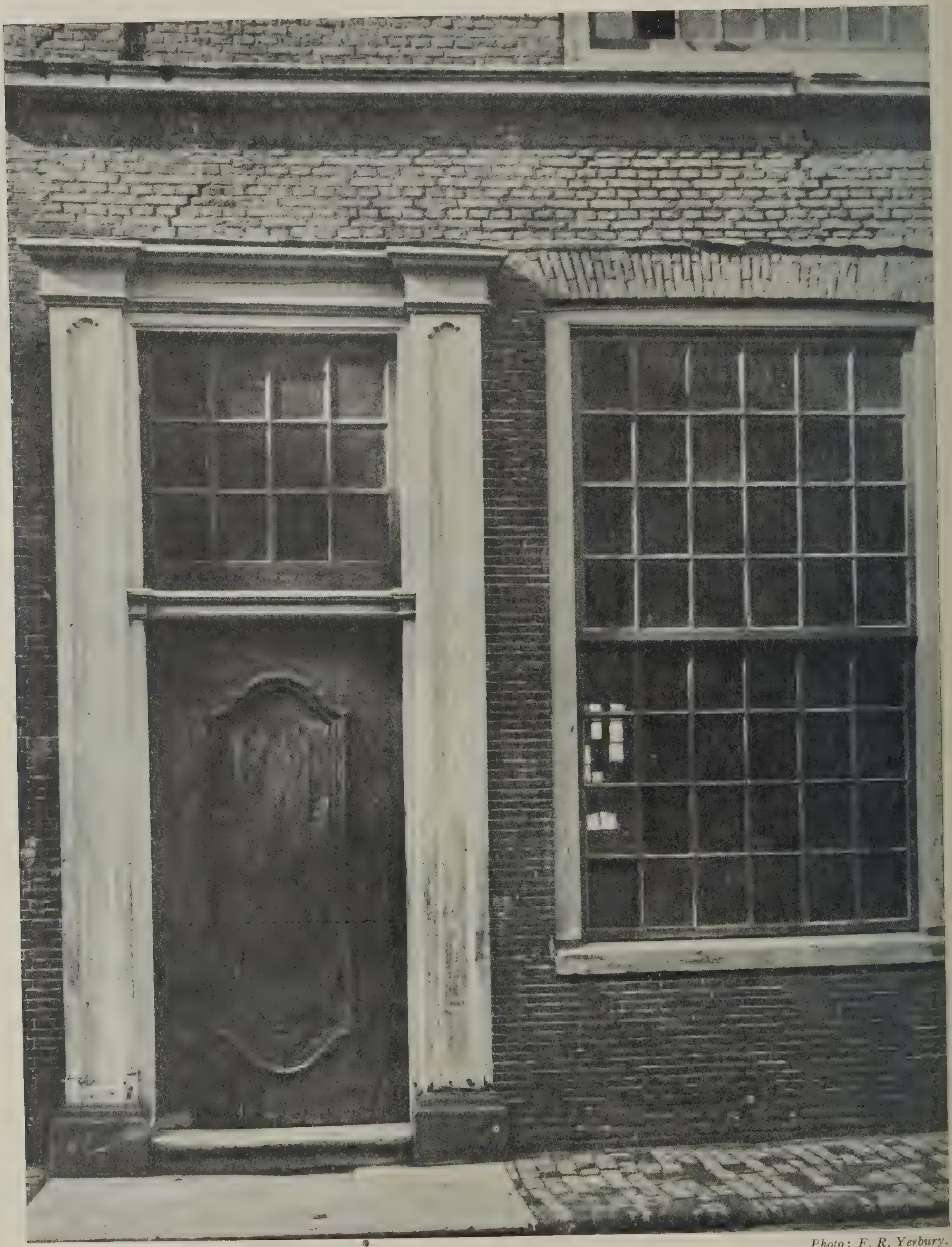


Photo : F. R. Yerbury.

Such examples as the above are common in Holland, and are reminiscent of some of the work executed in England during the period of transition at the end of Late Georgian era.

THE

ARCHITECTS' JOURNAL

27-29 Tothill Street, Westminster, S.W.1.

nesday, December 26, 1923

Volume LVIII. No. 1512

The Assessing of Competitions

A Plea for System

AS architectural competitions in this country seem of late to have been producing some unsatisfactory results, and consequently not a little discord, it seems reasonable, at this juncture, to give the tter a few moments' dispassionate consideration. The t that poor and stodgy designs are rather too often prented, when others counted superior both in conception l skill have been submitted in competition, is a serious , not calculated to inspire much enthusiastic endeavour m competent designers. This being the case, it is to the erest of the profession generally, irrespective of proters, competitors or "would-be" competitors to find e reason for the phenomenon and earnestly to seek a edy which may safeguard all interests alike for the ure.

he onus for a weak award is naturally enough laid at door of the assessor, when it is primarily the system, or her lack of it, which is the more to blame.

he faults of the present arrangement, whereby the whole tter rests in the hands of a single adjudicator, may be forth thus :—

n the first place the method of appointment of assessors uch that it is entirely a matter of chance whether the tleman selected has any special knowledge of the type building forming the subject of the competition.

econdly, competitors are in this country placed in a ch more difficult position than is the case in others, and this reason, in England, we pride ourselves upon being ividualists—we work to no stock rules—and in architure this is truer perhaps than in any walk of life. For ance, if we wish to describe the style of a building to a nd, we find ourselves saying "It is a 'Tom Jones' or a ll Smith' type of thing," rather than a Renaissance, sic, or what-not design.

ow it is psychologically absurd to suppose that a comtion design in the "Bill Smith" manner will not awaken siderable sympathy in "Bill Smith's" mind (perhaps n unknown to himself), and this quite irrespective of its its as a solution to a given set of conditions. An unpulous competitor, working under these conditions, will eavour to discover what are Mr. Smith's pet weaknesses, having done so, serve them up. Surely a retrograde ness !

ow in both France and America, the one with a very old onal style and the other with a very young ditto, there nmediately provided a definite background of attaint against which to view new productions. Moreover, ese countries certain theories of design are well thumbed familiar, to assessor as well as to the competitor, and competitor is free to get down to a solution of his blem unhampered by extraneous considerations.

he general use of a jury system provides a third "factor afety" to ensure a sound choice. Under the above umstances the single assessor scheme would be a far harmful arrangement than it is with us.

As advancement in architecture depends (as with anything else) not upon "doing what grandfather did," but upon *learning* what grandfather did and then setting forth to better things, it is only reasonable that experienced men of a younger school should be more often asked to adjudicate. As it is, grandfather still has the last word in very many cases.

Now in regard to remedies, there can be, on the face of it, no real objection to the adoption of the jury system by our own Institute.

(1) Its formation can conceivably include authorities on sound planning, on tasteful design, and on specialist considerations if necessary.

(2) It ensures against designs being assessed on a minority of points, which to the single individual may appear all important.

(3) It makes more possible the discovery of discrepancies between conditions and submitted designs.

(4) It forms a much greater safeguard to the interests of the promoters, engenders confidence on the part of competitors, and gives them some reasonable belief that their expenditure of time, energy, and money will at least guarantee a thorough adjudication.

Take, for instance, a competition in which possibly 100 firms compete, and each spend, say, ten weeks upon it. Salaries of two or three draughtsmen, principals' time, materials, light, etc., may be reckoned at £30 per week—as a low estimate—and we are faced with the enormous expenditure of £30,000, the result of which rests in the hands of one unaided man. The position would be comic were it not so terrifying !

The only feasible objection to the jury system can be the difficulty of making adequate remuneration to several men instead of one. Whereas the position could be an honorary one, and for several reasons should be, an exception being made perhaps in the case of international competitions. There would be found many members of the profession who would deem it an honour and a duty to act on a jury once or twice in their career. To meet the out-of-pocket expenses of three or four or half a dozen joint assessors would need a lesser sum than that usually paid to one.

An equally important innovation to that of the jury system, should be the publication of a short general report (at present not favoured at the Royal Institute), or at least a *schedule* of points gained by competitors under various heads. Even with the single assessor method this would serve a very important purpose.

(1) It would afford some small compensation to unsuccessful competitors by acquainting them with those points deemed most fundamental to a solution, and thus allow them to reconstruct their mistakes.

(2) It would force the assessor or jury to make a conscientious and thorough examination of all designs, and to satisfy themselves that their predilections had some concrete reason behind them. If a man has reasons which he

is satisfied with, he is strengthening his position by stating them—this is obvious!

The real crux of such a report, or if necessary the whole report, is bound up in the idea of a schedule, and the whole competition should be assessed on some such framework. To thoroughly analyse and compare numerous sets of drawings, it is necessary to split the requirements up under several heads and allot to the various designs the points they merit under each. The scheme obtaining the highest total should win.

A rough example of such a schedule is given herewith :—

	General Solution	The Plan.	The Elevation.	Interior Treatment.	Special Requirements.	Draughtsmanship.	Total.
Poss. full marks.	30	25	20	10	10	5	100
Design No. 1	15	15	10	7	10	2	59
,, ,, 2	25	15	20	9	5	4	78
,, ,, 3	20	20	15	10	8	3	76
,, ,, 4	20	25	3	2	6	2	58
,, ,, 5							

According as the competition is more particularly for a planning or an elevational result, etc., so the corresponding "possibles" are given a higher or lower value, e.g., in a purely planning subject that section might have a possible of, say, sixty points.

Another important point in favour of the schedule is this: There is a possible cause of danger even in the jury system, where a more forceful or bombastic member may overrule the judgment of his fellow jurors. Without question, to obviate this possibility and incidentally to save delay and muddle, each member should have a "blank" schedule containing the total possible points agreed upon under the various heads, and should fill in opposite the index numbers of the designs submitted those marks which he himself considers they deserve. The points allowed by each member of the jury would then be compared and an average struck on the totals. This seems to afford the nearest approach to a sound and scrupulously just method of assessment, viz., *A jury working independently on a schedule basis.*

It is not an unknown fact that reputable assessors, in an endeavour to safeguard the promoters, and their own reputation, sometimes try to limit their choice to those designs which by their style and presentation appear to be the work of older firms. Conditions can easily be framed to provide that winners considered lacking in practical experience, should carry out the work in conjunction with an advisory architect to be proposed or approved by the jury. No one would object to this. A.

Lambeth Bridge: Why not an Open Competition?

We note that the L.C.C. has now decided to rebuild Lambeth Bridge, and that Sir Reginald Blomfield has been invited to collaborate in the preparation of a design. We have always held that the rebuilding of Lambeth Bridge is a matter that could well be allowed to remain in abeyance pending the building of other bridges in places where they are really wanted. The L.C.C. in its wisdom has decided otherwise, so with the reflection that a virtually useless bridge is better than no bridge at all, the critics of the Lambeth scheme must remain for the time being content. That the L.C.C. has thought fit to take architectural advice before producing an engineering design (the process in the case of Vauxhall and Southwark Bridges was, if we remember rightly, reversed, the architect being called in to decorate a structure after its form had been irrevocably laid down by an engineer) is a sign of grace, and it may seem ungrateful to cavil at the method of putting this admirable principle into effect. It must, however, be said that more satisfaction would have been felt if the L.C.C. had decided to hold a public competition among architects to secure a design for the bridge. This was the method adopted by the City Corporation in the case of St. Paul's Bridge, so there is no question of precedent. We need hardly say that our criticism has no personal reference to the selection of Sir Reginald Blomfield for this important work. If the appointment is to be a direct one, the choice could fall upon no one better fitted for the undertaking. We maintain, however, that important public projects of this kind should be the subject of open competition. May we not have some unrecognized Rennie among us whose genius must languish for want of opportunity to express itself? The official explanation of the matter is that there is no time to hold a competition. This really will not do. For fifteen or sixteen years Lambeth Bridge has stood derelict, and no vehicle has been allowed upon it. How comes it to be suddenly discovered that the need for rebuilding is so imperative that there is danger in waiting a few weeks longer? We hope that even now it may not be too late to rescind the existing resolution. The L.C.C. must be pressed to institute a public competition.

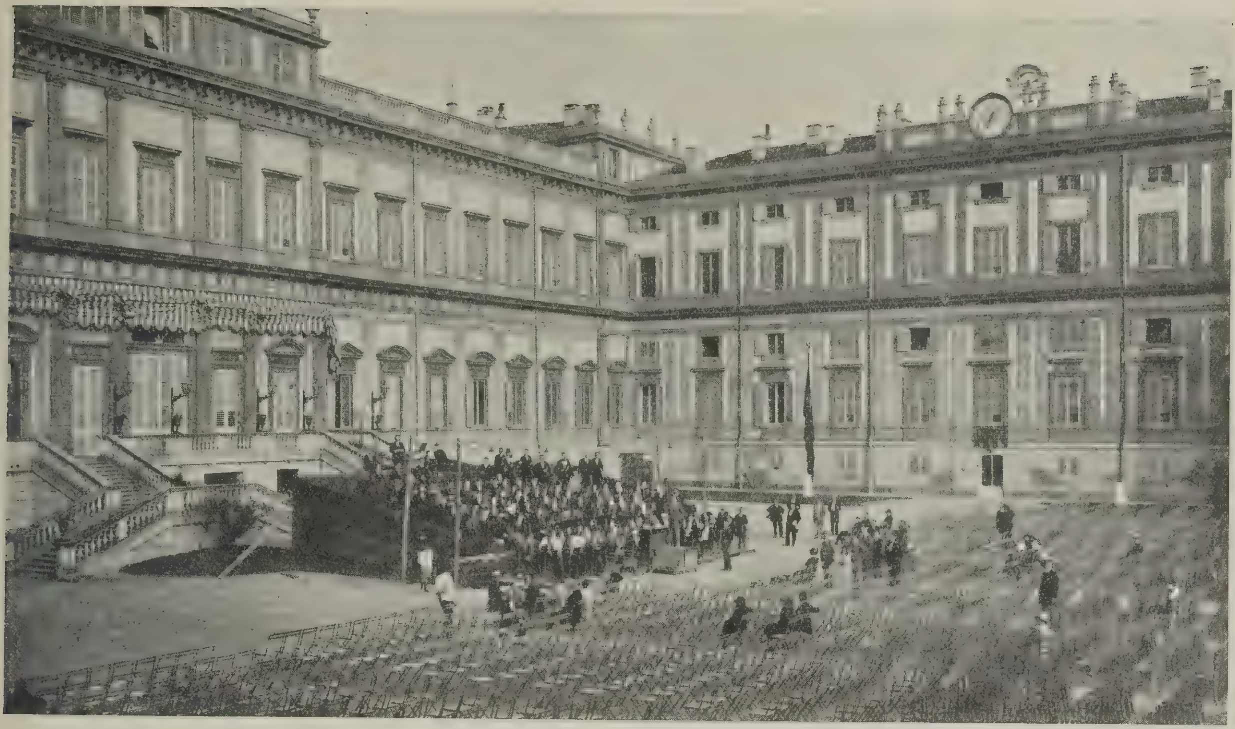
Modern Indian Architecture

> The cities are full of pride,
> Challenging each to each—
> This from her mountain side,
> That from her burdened beach.—*Kipling.*

When Mr. Kipling wrote his poem on the City of Bombay he may not have had architecture prominently in mind as one of the things that gave the city its proud pre-eminence In any case, at the time that Mr. Kipling wrote, the city did not possess the fine modern buildings that it now has some of which, designed by Messrs. Bhedwar and Bhedwar Indian architects, were illustrated in our last issue. The mother country will have to look to her laurels, for her far flung legions are rapidly gaining upon her in the arts especially in the art of architecture. Messrs. Bhedwar and Bhedwar have produced some really magnificent buildings indeed, we should be hard put to it to find their equal here No longer does the British architect hold undisputed sway in India. His native colleagues are competing with him more and more. They are eager to attain a perfect command of their art, as witness their coming to Europe for their architectural education. Europe can still provide the finest architectural education in the world, and it is a source of satisfaction to see the fine use that is made of it

Our Special Issue

Next week we shall publish our special New Year's Issue It is one that, we believe, will fully maintain, if it does no surpass, the level of achievement reached by its forerunners. The peculiar conditions of the time have strongly influenced the character of this issue. Though at th present moment there is a great quantity of large-scal architectural work going forward, not only in London, bu in all parts of the country, the general practitioner i engaged upon work of no great magnitude; he is occupied with unspectacular things, such as shop fronts, sma houses, and so forth. Our Special Issue has accordingly been framed to suit his needs. It contains photographs and working drawings of a great number of modern sho fronts—English, French, and American; indeed, it is n exaggeration to say that London, Paris, and New Yor have been ransacked for their best examples. These w claim to have secured for our Special Issue. A very usefu section is that devoted to small houses, a number o specially selected examples of the work of distinguishe domestic architects being included. The interest of bi work is not, however, overlooked; it is adequately represented by some of the most important buildings that hav been completed during the present year in London an the provinces. The issue will be published at the price o 2s. 6d. net. Subscribers will receive it in the usual wa without extra charge.



COURTYARD OF THE VILLA REALE ARRANGED FOR THE GRAND CONCERTS.

First International Exhibition of Decorative Art at Monza

By SELWYN BRINTON

THE exhibition held recently, in the spacious rooms of the Villa Reale at Monza was the first of a proposed series of biennial exhibitions of decorative art, which from their International aracter ought to prove valuable and suggestive, especially the architect and to all who are concerned directly or directly with internal decoration. The "locale" itself of exceptional beauty and interest, and, as such, a most ecious asset to the success of the exhibitions. Towards e end of the year 1776 Archduke Ferdinand of Austria rmed the idea of a villa in Lombardy which should be a ooting-box and something more, a charming place r "villegiatura" and escape from the heats of Milan. e entrusted its design to the architect Piermarini, to om we also owe the present Royal Palace at Milan d the Teatro della Scala.

But Piermarini here designed for his patron not merely villa, but a most wonderful palace, situated at the entrance a vast park, which extends for miles in the direction the Lambro. Between the palace itself and this vast rk, which was reserved for hunting, he created (and re he had the help of the architect Vanvitelli who had signed the Royal Palace of Caserta with its beautiful rdens) that beautiful garden which still exists—cool, freshing, a welcome relief and rest when our brains d eyes are tired with visiting the countless rooms of e exhibition. Classical in its design, the Palace has gnity of style; and the interior decorations by Andrea piani, who painted here among other subjects, the lightful legend of Cupid and Psyche, are fully in aracter with the building. The Palace was appreciated d used by Napoleon during his stay in Milan, and by brother-in-law Eugéne Beauharnais, who extended e garden which Piermarini had designed. Its charms re evidently known to the late Kaiser, for I was surised to find there a suite of rooms which he habitually cupied when he came for shooting. It has now been handed over by the King of Italy for the use and enjoyment of his people, and selected for the "locale" of this series of decorative exhibitions.

In a sense one can scarcely help regretting the change, for these decorations by Appiani and others of that time are so perfectly in keeping with the building itself and so typical of what is called Empire style, that it seems a pity they should have ever been disturbed. On the other hand, wherever possible, they were treated with respect; for instance the Hungarian rooms, which were covered, both walls and ceiling, with most interesting and characteristic national decorations, had these arranged on laths and canvas so that they could be removed after the exhibition, leaving the original decorations intact; and the "Mostra del Libro" (Display of the Book) was located in the charming library arranged by Queen Margarita, which formed in itself the most perfect setting without any appreciable alteration. This "Room of the Book" was one of the most successful here. In binding of choice books the Italians have for some time been excellent, as we find in some of Alinari's publications and in the work of that clever Florentine binder, Signor Bruscoli. There were some admirable specimens of the binder's art here; but I was no less delighted with the quality of the printing, imitating, as had been done by the late Mr. Herbert Horne, the best Renaissance founts, and with the beauty of some of the illustrations. In connection with the advance in fine printing, the "risorgimento grafico"—the revival of the graphic arts—in Italy, the name of Raffællo Bertieri should be mentioned as well as the "Scuola del Libro," which helped materially in the successful display arranged here.

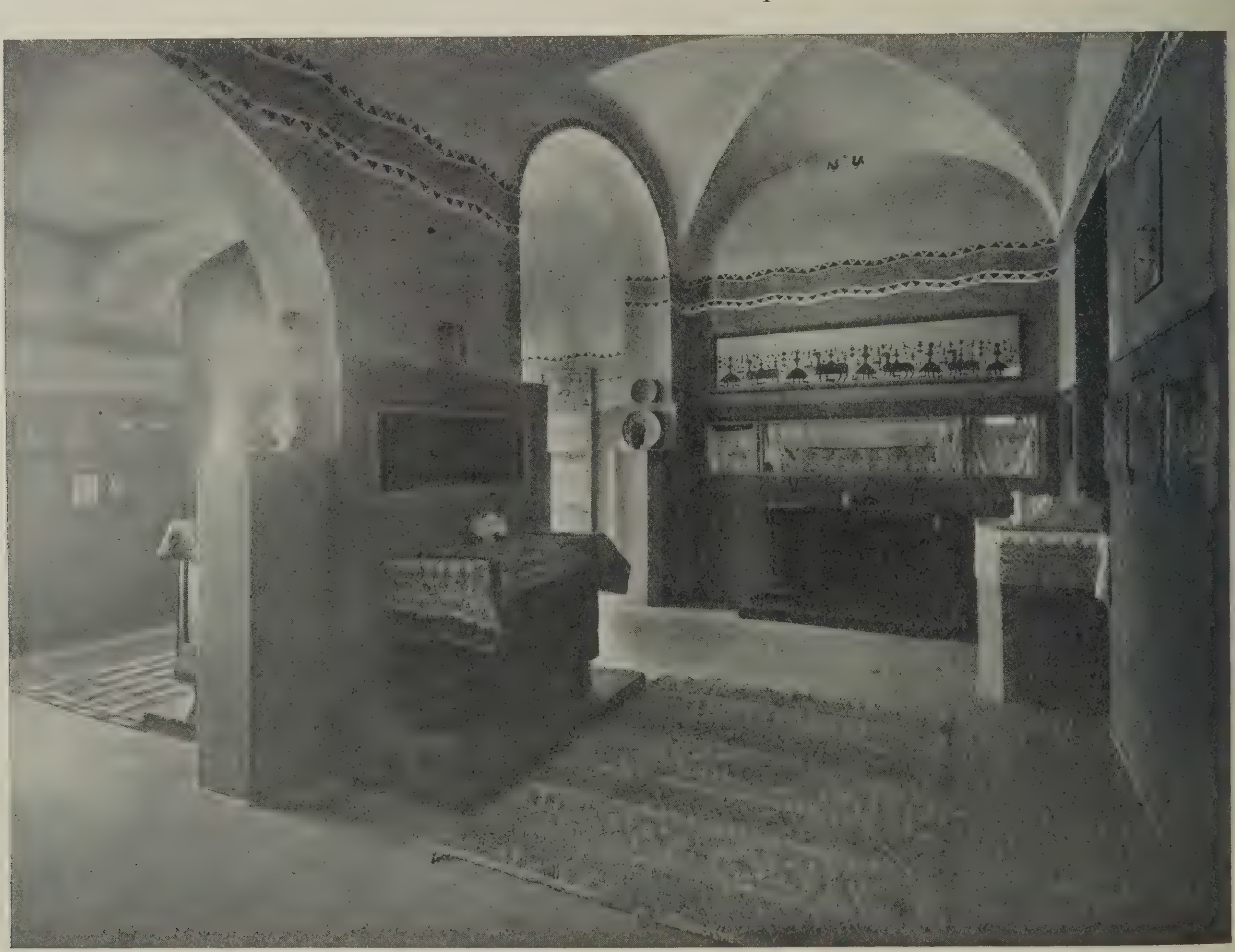
Near this room the display of the jeweller's art was no less successful. The Committee here sought to bring together only those works which possessed special features of workmanship, design or novelty of style; and—as I gathered from the Secretary of the Exhibition, Signor

Raffæle Calzini, who took me personally through these two last-mentioned sections—exercised here very severe choice, making the display one of quality rather than quantity, its commercial side subordinated very properly to the artistic. Among the most notable exhibits here were two vases in silver and glass, sent by Leopold Janesich of Trieste; and here I may instance the generous handling of this admirable section by the organizing Committee. It was felt that these remarkable vases needed supports appropriate to their design: the figure which I was told was paid for these surprised me, but there was no question that it was money well spent, for they were absolutely right.

The Memorial display arranged of the art of Hans Lerche had a special interest for me, for I had the privilege, in years before the war, of knowing that brilliant craftsman, who had made Italy his home, and who treated almost every side of decorative art with fine perception and success. Born at Dusseldorf, the son of a Norwegian artist, Lerche after some training in industrial art found his way to Italy in 1884, where he worked in the majolica workshops at Florence, and at Naples studied the decorations of Pompeii and Herculaneum and those wonderful bronzes of the Museo Nazionale. Then he went to Paris, where he studied under Eugéne Carrére and Saint-Marceau; but in 1902 he had definitely settled in Rome, where I remember his studio in the Via Flaminia, and was invited by him to visit his glass furnace at Venice. His ceramics were wonderful in their inventive quality, and were well represented here as well as his work in glass, some in the Sala del Libro, others in the goldsmith's room and in the special Sala Lerche. He excelled too in small bronzes, and had invented a system of coloured prints, whose technique remains, I believe, unknown, and of which he only left some fifteen. A creative master of his art, his death at Rome in 1920 was an irreplaceable loss to modern decorative art.

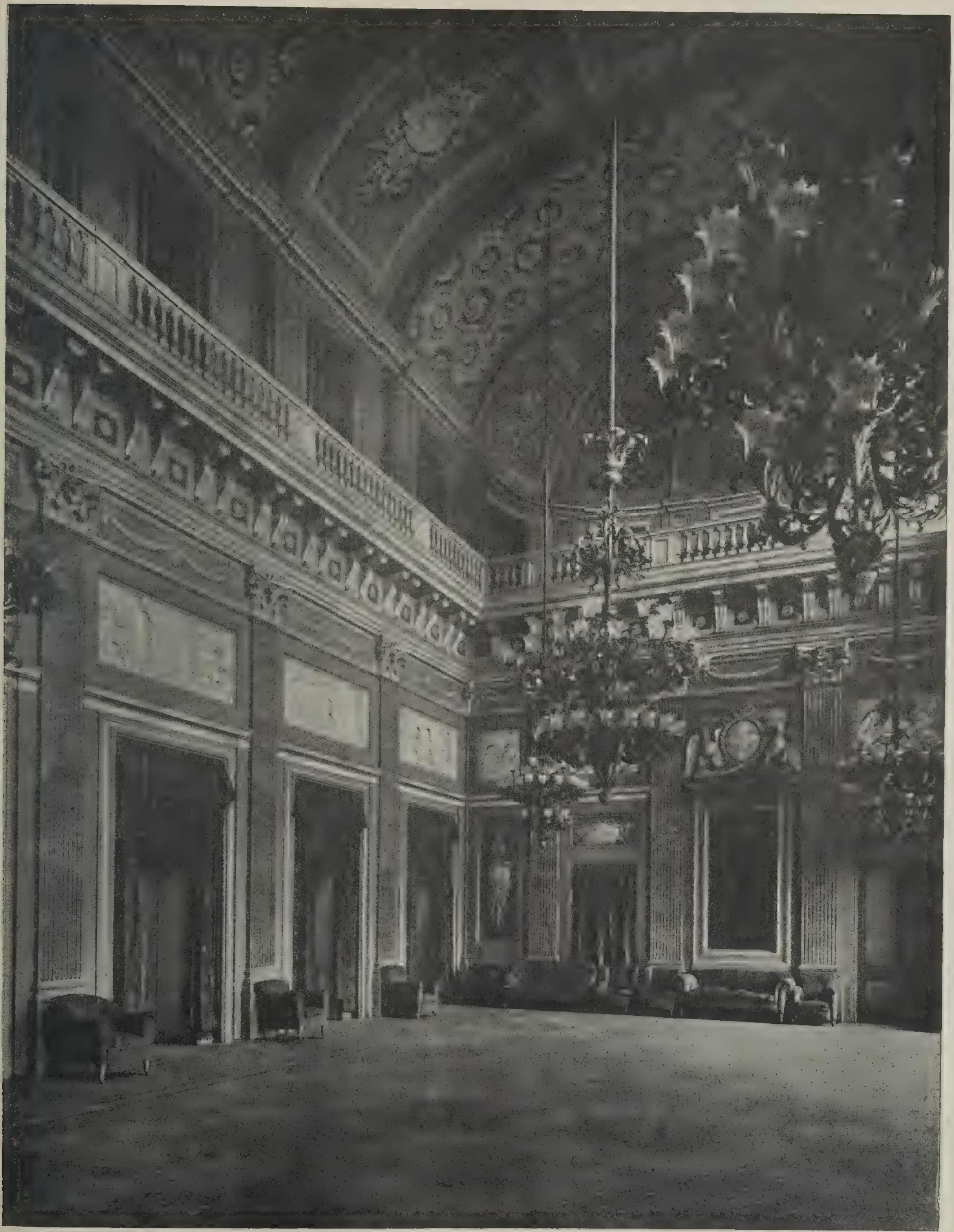
The best way to approach the study of the Exhibition—whose fault, if it be a fault, was that it was almost too extensive to be fully seen even in a long day—was to divide it into the Italian and the foreign sections. The "regional" art of Italy was very fully represented in her different provinces, including Piedmont, Lombardy, Tuscany and Liguria, Venice, the Abruzzi and Sardinia, and special cities with art traditions or manufacture, such as Bergamo, Trieste, Volterra, famous for her alabaster, and Faenza for her ceramics. The foreign sections were contributed by France, Belgium, Sweden, Czecho-Slovakia, and Hungary, England and our Empire being represented, very inadequately, by an exhibition of poster designs in one of the corridors. I should like to call special attention in the Italian sections to the embroidery, and needle-work from Sardinia and the Abruzzi. In these regions, especially in that interesting island of Sardinia, these designs are frequently—generally in fact—traditional, handed down from mother to daughter for generations, and often peculiar to each separate village or town. They possess a spontaneous quality which is most attractive, natural forms having been rendered decoratively with no conscious effort or influence of school training.

The school of alabaster work in Volterra is now more than a hundred years old, and dates its creation at the end of the eighteenth century to Cav. Inghirami, to aid the local industry of alabaster by the study of plastic design. Some of the exhibits, with beaten iron work holding up the vase to contain the light were simple in form and in good taste, but we felt there was room here for more originality and variety in treatment. Faenza is, of course, the ancient home of majolica, having given her name to the French word "Faïences," and her "botteghe" or workshops—the Ca Betini, Ca Pirota and others—were famous throughout Europe in the fifteenth century: the old tradition of her native art is kept up in the Royal School of Ceramics at Faenza, at present under the direction of Dr. Ballardini,



THE SWEDISH SECTION.

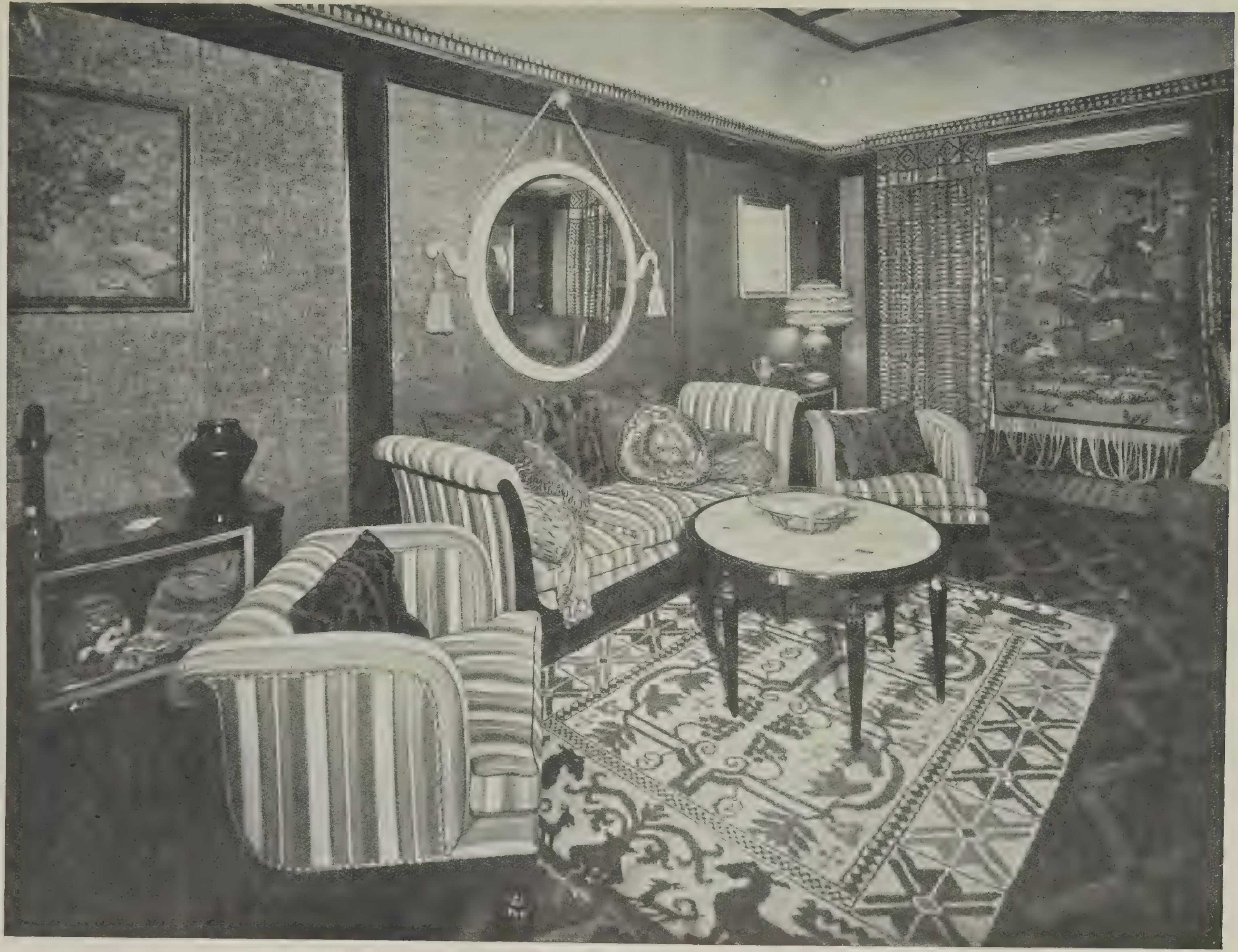
The First International Exhibition of Decorative Art: The Great Reception Room of the Villa Reale



The Villa Reale at Monza is not only a villa, but a most wonderful Palace, situated at the entrance of a vast park, which extends for miles in the direction of Sambro. Its architect was Piermarini

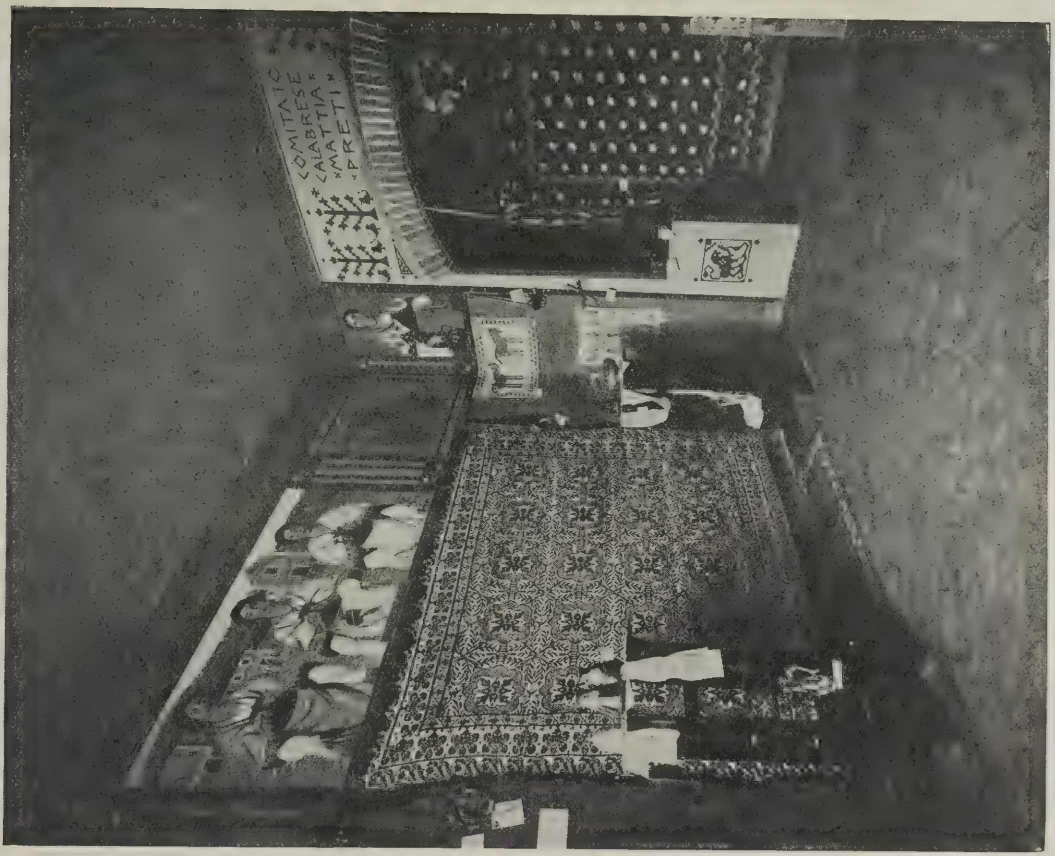
THE LIBRARY
OF THE
UNIVERSITY OF ILLINOIS

The First International Exhibition of Decorative Art : Interior of a Room in the Venetian Section

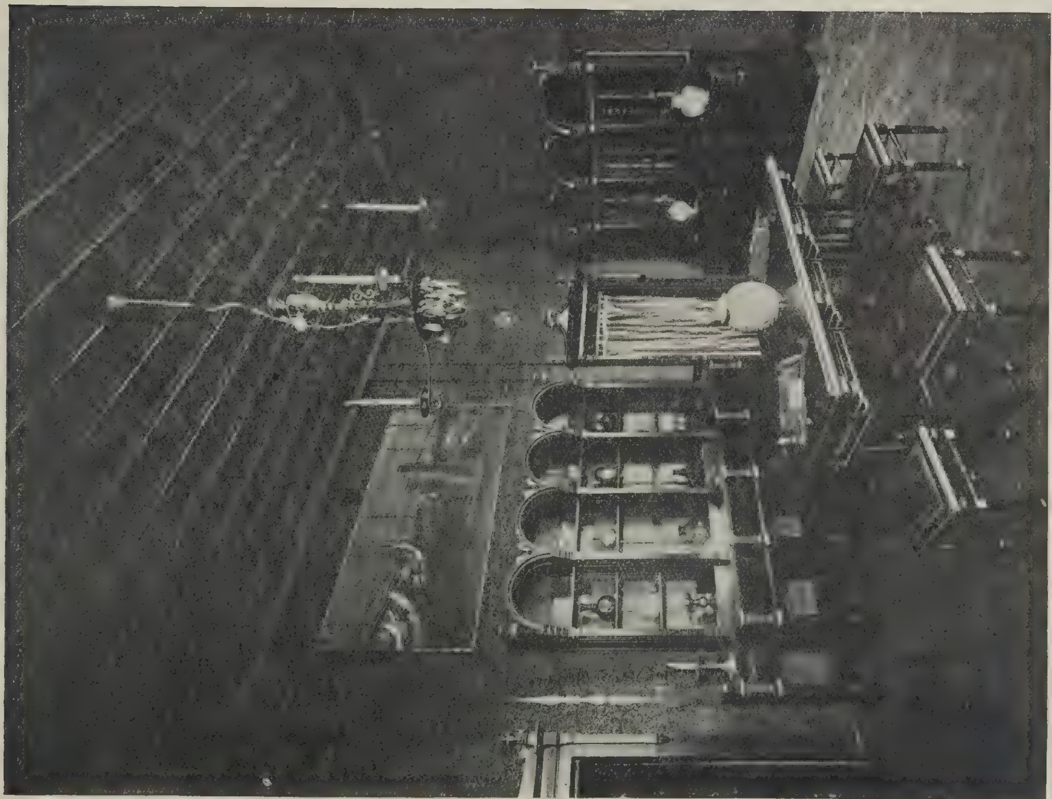


The "regional" art of Italy was very fully represented in her different provinces, including Piedmont, Lombardy, Tuscany, and Liguria, Venice, the Abruzzi, and Sardinia.

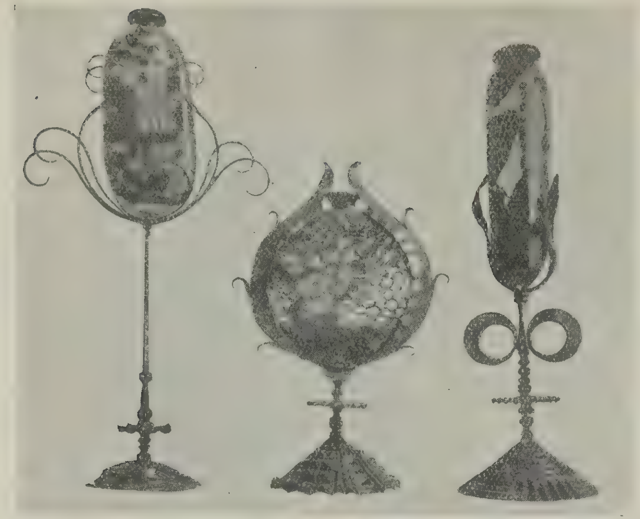
THE LIBRARY
OF THE
UNIVERSITY OF ILLINOIS



DECORATIVE TREATMENT OF A ROOM EXHIBITED BY CALABRIA.



THE INTERIOR OF A ROOM IN THE VENETIAN SECTION.



BEATEN IRONWORK. BY PROFESSOR BELLOSSO

A VASE IN MARBLE.

who has organized the display at Monza. The vases and plates sent by his care were well designed, and held their own against the ceramics from Florence, Rome, or Laveno. In the section of Piedmont the idea which the suite of rooms in that section sought to express was the home of a connoisseur of art. Entering through a vestibule with a charming fountain and windows of stained glass we passed into a music-room, admirably planned out by the sculptor, A. Stagliano, with panels of decorative character painted by Mario Reviglione. There followed a billiard-room almost equally attractive, then two bedrooms and the children's room, where the dolls, produced by Enrico Scavini, had not been forgotten; and lastly, as the proprietor, being a man of taste, might not improbably collect pictures, there was added a very charming little picture gallery. Some bronzes added to the effect of these rooms, in which I must not overlook the studio or work-room arranged by the "Gruppo Artefici Moderni," and the Piedmont Regional Committee, at whose head is the famous sculptor, Leonardo Bistolfi, are to be congratulated on the success with which they carried out their general scheme. No less effective in treatment was a separate display which, under the title of the "Sala Della Mensa," showing us the scheme of an ordered dining-table with glass, linen, and ceramics of fine quality. The room selected for this display was the old banquet hall, the "Salone dei Banchetti" of the Villa di Monza, with its fine stucco decorations by Albertolli, and the glass used was supplied by the well-known Cantagalli "fabbrica" of Florence, while the ceramics and embroideries were from the Scuola di Perugia. Lastly, I would mention the five rooms devoted to Tuscany, where Florence in the ceramics of the Cantagalli Company, the bronzes of Andreotti, th sculpture of Antonio Maraini, and the wood-cuts of Ettor di Giorgio kept up her great tradition in decorativ creation.

Among the foreign sections that of France in its choic selection of works claimed a front place, but the sections c Hungary and Sweden were important—the former in it characteristic national decoration of the rooms, which owe much in its preservation and development of the old design and colours to the Hungarian Society of Decorative Ar this school of decoration being responsible for all the wor shown here; just as in Sweden, the Society "Svensk Slojdforeningen," founded in 1845, has constantly develope the arts and crafts, bringing decorative work to the hig level shown in the fine glass and simple well-designe furniture of this section at Monza. Of course in glass wor Czecho-Slovakia, which possesses the great tradition c Bohemian glass, preceding in time even that of Venic showed very well in this exhibition; and Belgium an Austria were effectively presented.

We have surely something to learn from the way suc countries who exhibited, are carefully developing an bettering their national elements of decoration; and shoul be fully ready, when such an opportunity as this Inte national Exhibition comes forward, to take full advantage c it. With our own fine tradition in furniture and craft England ought to claim for herself and her Empire a fror place in such an exhibition, if she is to appear at all; an if these displays can become a biennial event then the matte ought to be considered in time and not left till the last fe months for preparation.

The A.A. Pantomime

THE students of the Architectural Association, on Thursday night last, took hold of architecture, and, in their annual pantomime, turned it upside down, so to speak, and squeezed as much humour as they possibly could out of such a thing. With the mercilessness that only belongs to students they attacked, among others, juries, secretaries, and a certain Mr. Riba, and showed to an appreciative audience exactly what they thought of such things.

When it is explained that "So This Is Architecture" consisted of a series of dreams of a student whose efforts in a competition had proved too much for him, it can be imagined that he dreamt many strange things concerning the profession. From witnessing "a demonstration of a much lauded jury system," his disordered imagination led him to Paris; and after Paris a melodrama worthy of Drury Lane took place as well as a lifelike scene from Russia. He pictured a remarkably good scene, and much good acting, in the year 1852; he witnessed the stran proceedings of a certain secretary in a certain associatio he came into contact with the aforesaid Mr. Riba, and th from a descent to hell and a visit to the quarters allott to erring architects, he awoke from his troubled sleep.

It is difficult to discover who wrote, produced, and ev acted the pantomime, as librettists, producers, and artis and artistes, either from excess of modesty or perha fearing the effect of their views of architecture on t audience, refused to have their names printed in the pr gramme. The A.A., however, are to be congratulated c possessing a brilliant comedian with brilliant supporte other brilliant actors, and a brilliant tenor and brillia soprano, who all did their part in producing a really go show. The scenery and dresses, which were all made b students, cannot be left out, and those who were responsib for colour-effects, designs, etc., should have praises showere on them.

A. H.

Higher Buildings in Relation to Town Planning

Mr. Raymond Unwin at the R.I.B.A.

MR. RAYMOND UNWIN, F.R.I.B.A., delivered a lecture on "Higher Buildings in Relation to Town Planning" before a meeting of the R.I.B.A., held at the Royal Society of Medicine, on December 17. Mr. J. Alfred Gotch, F.S.A., the president, occupied the chair, and the Council guests of the evening were: the lecturer; Col. C. H. Bressey, O.B.E., F.S.I., chief engineer, Ministry of Transport; Sir Martin Conway, M.P.; and Messrs. H. C. Gooch, J.P., chairman of the London County Council; Harold Swann, chairman of the Town-Planning Committee of the London County Council; Walter Reynolds, chairman of the London County Council Building Acts Committee; I. G. Gibbon, C.B.E., Ministry of Health; E. R. Forber, C.B.E., Ministry of Health; and Andrew T. Taylor, F.S.A.

MR. RAYMOND UNWIN.

(From a Caricature by H. de C.)

Mr. Raymond Unwin, in the course of his paper, said: There was once a great controversy which, I believe, profoundly moved the theological world of its day, if it did not even threaten the peace of empires, as to how many angels could stand on a needle's point. To-day we look back with wonder, not perhaps untinged with some slight contempt, that serious people could have spent their energies in such a discussion. But examining, as I have been constrained to do during the last twenty or thirty years, the attempts which mankind is making in various parts of the world to find out, not how many ethereal angels, but how many ponderous people and still more ponderous motor-cars can occupy the same square yard of ground at the same time, I begin to wonder whether the superiority of our intelligence to that of our theologically minded forefathers is as obvious as we should like to think! Twenty or thirty years ago in this country it was generally assumed that great gains could be secured by overcrowding dwellings upon the land; that some dire economic necessity arising from these reputed gains compelled us so to develop our towns. That fallacy has now been pretty well exploded.

Most of those who have examined the matter are agreed that, if people so will, land can be developed at a density of ten or twelve houses to the acre at little, if any, more, and sometimes at even less, cost per house than the same land can be developed for the same type of house at a density of twenty or thirty to the acre; that so far from there being anything to be gained from overcrowding dwellings on land, the fact is that such overcrowding yields less total return to the landowners, and affords a dearer plot for the occupant. So that apart from other disadvantages, congestion of dwellings is an expensive luxury.

Unable to believe, however, anything so simple as that there is plenty of room for everybody—that it is crowding, the attempt of two people to stand on a space that is only large enough for one, which causes most of our urban difficulties; modern business intelligence is now proposing to adopt vertical overcrowding. Unless we are careful, it will not be content without actual and disastrous demonstration that this particular form of overcrowding has even less to be said for it than the horizontal kind.

The fact that this method has been fairly well tested in America; that it has created there urban problems of a difficulty exceeding anything which we know even in this great city; that 183 American towns containing 40 per cent. of their urban population have already adopted zoning ordinances, and that the remaining cities are hurrying after one another pell-mell to adopt regulations limiting the height of buildings, as drastic as the vested interests already created will allow, does not seem enough to convince some of our urban theologians that many men cannot stand on the same flagstone at the same time, or more than one car move at one time on an identical piece of roadway. Nevertheless, in the hope that it is not too late to save our London from copying mistakes which New York, Chicago, and other American cities now regret, and the evil results of which they are now desperately struggling to remove, it seems worth while to examine somewhat carefully the conditions which prevail in those cities, and to realize what would be the effect in London if we now adopted the method of expansion upwards which the Americans are trying to discard.

The conclusive argument against high buildings is that no real gain to the community is secured by adopting them. If they could be spaced so far apart as to allow proper light and air, and if the streets could be laid out at such widths as to carry their concentrated traffic without congestion, the total area covered would then be little, if any, less than that required to provide for the same community with buildings of normal height.

This more general or town planning aspect of the problem has acquired a special degree of urgency for us during the last few years, because we appear to be following another lead of our American cousins in regard to the extensive use of the private motor-car. In that country there are something like twelve millions cars, or an average of about one car for every ten people, including men, women, and children. There are, moreover, several individual towns in which the number of cars registered has risen to one for every five of the population.

It is not yet apparent what will prove to be the saturation point in regard to ownership of motor-cars. The industry in America is at the present time turning out approximately half a million cars per month. While they export a good many, the majority are for the supply of their own population. We in this country have little idea what this means. We must reckon with a rapidly extending use of the private motor-car as one of the conditions which must be dealt with in the future. There is little evidence that this condition is likely to be accompanied by any diminution in other kinds of vehicles, such as the motor omnibus, which is already threatening to present one of our most serious traffic problems.

The central area of Chicago, locally known as the Loop, is one of the most congested in the world; although many of the buildings exceed twelve, and some of them exceed seventeen stories in height, there are no skyscrapers rivalling the Woolworth and the Equitable of New York; the average height for the whole area has been estimated as equal to seven stories.

In this district there can be no question that the streets, although they represent about 40 per cent. of the total area of the ground, are quite inadequate to carry the present traffic with reasonable dispatch, let alone comfort. I am satisfied that they would be taxed to the limit of comfortable conditions if the average were five stories instead of seven.

The difficulty of accommodating the pedestrian and the moving traffic is great, but the case of the standing motor-car is even worse. Of the 60,000 motor-cars which the present occupants of the Loop own among them, only 3,500 can find places where standing is permitted within the Loop area. If the whole of the road space were packed solid with cars, there would still be only standing room for 11,000 cars, or something like one-fifth of those owned. As a matter of fact, the car owners of the Loop area have appropriated the large open space between Michigan Avenue and the Lake, set aside for Grant Park, and it is no uncommon thing to see 25,000 motor-cars, or more than twice the number that would fill the streets of the Loop, parked at one time on this gigantic motor garage.

Increased height means increased traffic congestion. It is urgent that we in London should realize this while there is yet time, and most important that we should compare our circumstances with those in America, where we may observe the traffic conditions which are likely to arise here in a few years. The City of London contains about 638 acres, the Loop in Chicago only about 212 acres; the day population of the City of London is about 416,000, or 614 persons to the acre; the day population of the Loop is about 600,000, or 2,830 persons to the acre; in Chicago the total streets represent about 40 per cent. of the area; in London, including private back streets, only about 28 per cent.; in Chicago few of the streets are less than 46 ft. wide, some of them are over 100 ft., and the average width is 86 ft.; in the City of London the average width of the streets is about 28 ft. In spite of the relatively liberal provision of sidewalks on these wide streets in Chicago, it is quite common at busy times to see the foot passengers swarming off the footway until they occupy the whole of the street area from side to side, and completely stop for the time being all vehicular traffic.

These conditions have arisen from the intensive use of a limited number of tall buildings from ten to twenty stories high, sufficient only to raise the average height over the whole area available for building to seven stories. If the land in the City of London should ever be used to the same degree of intensity, and sufficient high buildings were allowed to give an average of seven stories as in the Loop, I estimate that the day population would be 1,845,000, instead of the present 416,150. In that case the narrow streets of the City would have to carry four or five times the present volume of traffic, which is already far in excess of their comfortable capacity. We must realize that if not one single story is added to any building in the City of London, the increased use of the private motor-car and other causes will increase the traffic in the area to a very serious extent. Unfortunately, I have come across no evidence that the increasing use of the private motor-car causes a diminution in the patronage of public means of conveyance. On the contrary, experience shows that this demand for public transportation facilities is still rapidly growing. The advocates of high buildings suggest that their policy would at any rate reduce the general traffic problem. I find no evidence to support this, and much that tends the other way.

The haphazard growth of our towns has encouraged haphazard thinking about them. The owner of a building site is naturally obsessed by the importance of securing the most intensive utilization of it. When he has fully occupied existing buildings he will want to crowd it with others, and when these in turn are occupied he will seek to pile more stories on the top. The town planner, surveying the territory as a whole, may take a very different view: he sees that it is often less costly to acquire a second site than to overcrowd the first; he realizes that midst the scarcity of many things there is no want of space, and that whatever the cause of congestion it is not due to lack of land.

Oppressed as we are, too, with the miseries of overcrowding and housing shortage, how hesitatingly does the simple remedy of building plenty of good houses secure full recognition? Similarly, the towns being already unbearably congested, and the traffic in their streets in danger of being reduced to crawling pace by its excessive volume, the idea that congestion would best be relieved if we desisted from crowding or traffic most effectually be reduced by better distribution of people and buildings, is much too simple to be readily accepted. Indeed, many seem bent on piling more building on the top of that we have, and boring more subways or erecting more elevated tracks to pour their additional multitudes into the already swollen torrent in the streets. To the town planner this looks like sheer madness.

Discussion.

Mr. H. C. Gooch, in proposing the vote of thanks, said that he agreed with everything the lecturer had said. In London, which was some miles north of New York, all the difficulties due to high buildings would be magnified to a large degree. If we had New York conditions our roads would never get dry and it would be impossible to steer the traffic unless it was on fixed lines. He thought that the expansion of London should take place, not upward, but outward.

Mr. E. R. Forber, in seconding the vote of thanks, said that the lecturer had made it clear that high buildings were the cause of the traffic conditions. He emphasized the importance of examining a problem of this kind.

Sir Martin Conway, M.P., disagreed with many of the conclusions reached by the lecturer. If higher buildings were erected they would be placed suitably apart. No one as far as he was aware had suggested that they should be close together. If on an acre of slum land the miserable property was replaced by a high building, the people displaced could be accommodated, and more open space could be provided.

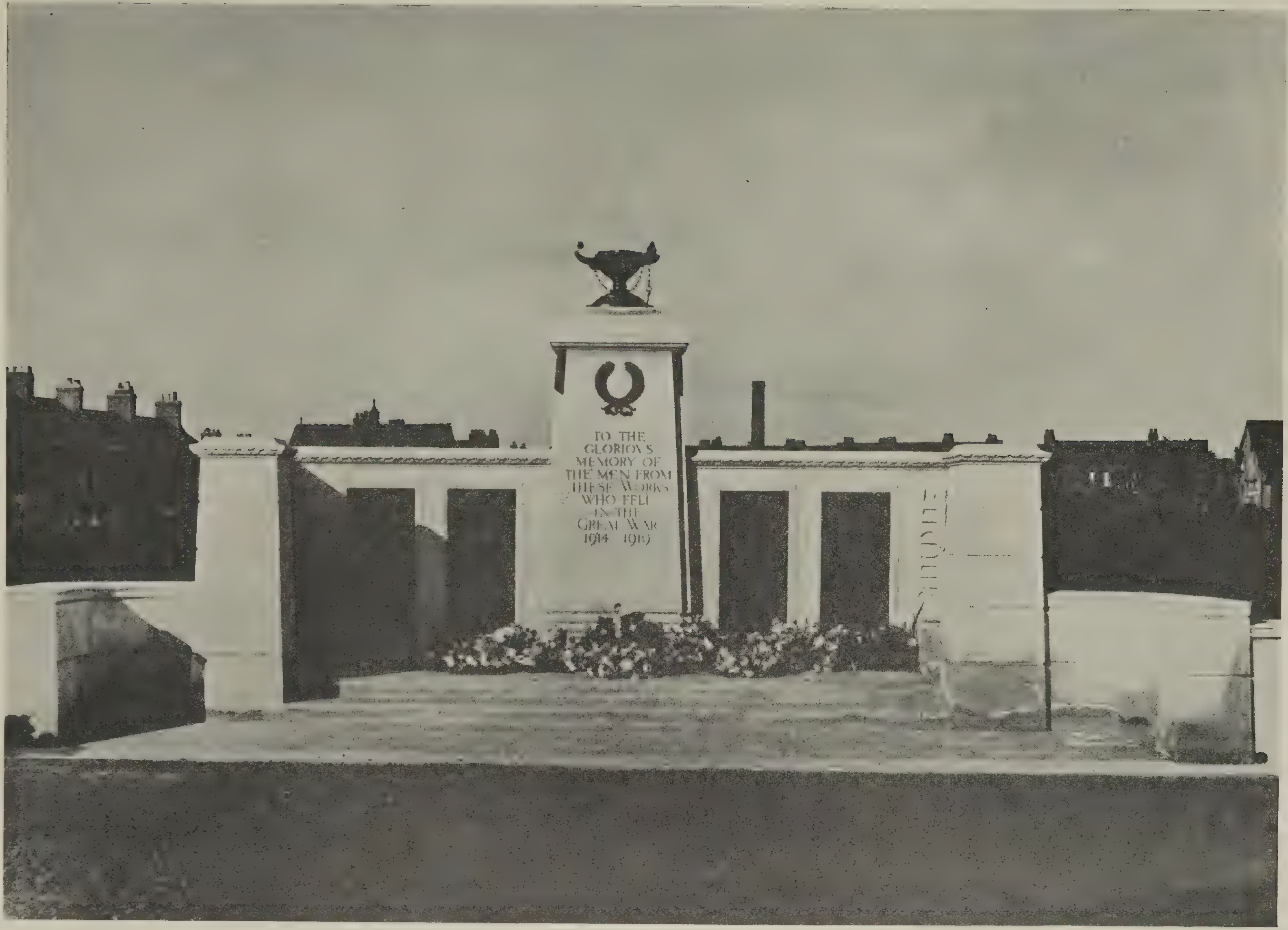
Mr. Delissa Joseph thought that in many cases where the term high building was used in Mr. Unwin's lecture, it should have read skyscraper. No one, he said, had argued for skyscrapers in this country. To-day, owing to the grotesque by-laws, we were building lower, and we now had basements and sub-basements. Surely it would be better to build higher. Mr. Unwin, he thought, had dealt with the problem in terms of motor-cars.

Mr. Andrew T. Taylor thought that traffic was an important part of the problem. Many of the buildings of London did not reach the full height allowed by the by-laws. He suggested that they should consider building London to that height before they considered going higher.

Colonel Bressey said that the whole problem of town development resolved itself into one of traffic control. He hoped a Bill would soon be passed to set up a traffic authority in London. The difficulty of transport could hardly be exaggerated.

War Memorials. 40.—Bostock War Memorial, Cheshire

Darcy Braddell, F.R.I.B.A., and Humphry Deane, Architects



This monument has been erected on one side of the main entrance to the works of Messrs. Brunner Mond, and has a bowling green at the rear. At the junction of the main walls and the wing walls are carved the battle honours, and a cornice ornament of oak leaf runs round the top of the wall. The stone used is Portland. Mr. Esmond Burton was responsible for the bronze work, carved stonework, and letter cutting.

THE LIBRARY
OF THE
UNIVERSITY OF ILLINOIS

The Architectural Societies

5.—Sheffield, South Yorkshire and District

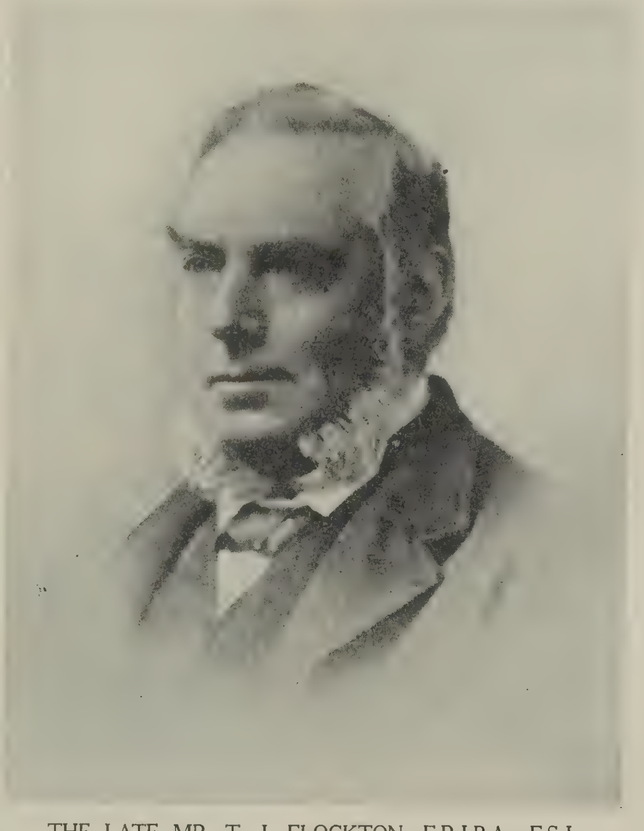
THE Sheffield Society of Architects and Surveyors—to use its original title—was formed in 1887. The need for a bond of union between the various members of the profession practising in the district had been apparent for many years; a few were members of the R.I.B.A., others of the Surveyors' Institution, but the great majority lacked the help and stimulus derived from membership of an organized or representative body. In the hope of bringing this unsatisfactory state of things to an end a meeting was held on May 10, 1887, at which it was resolved to form a society and a provisional committee was appointed to draft rules and to draw up a suitable scheme of procedure. So well did this committee do its work that, except for a few minor alterations to suit changed conditions, the rules then formulated have sufficed the needs of the Society to the present day, and some have been adopted by societies of more recent formation.

The opening meeting of the first session was held on November 15, 1887. A large collection of drawings, paintings, and ancient documents was on view, and the President, Mr. T. J. Flockton, delivered an address, in the course of which he referred to the objects for which the Society had been formed, and the manner in which these objects could be best obtained. "The objects of the Society," he said, "were to advance the profession of an architect and surveyor; to promote and facilitate the acquisition of a knowledge of the various arts and sciences connected therewith; the education of the younger members, and the consideration of questions of professional practice. How were these objects to be attained? First, by social, friendly and unrestrained meetings amongst themselves with a view to a more intimate personal acquaintance, the friendly discussion of matters affecting the profession and the working of the Society. In the second place, by monthly meetings during the session for the reading of papers or lectures, and discussions upon them, by the formation of classes amongst the Associates and Students for the consideration and development of different subjects, and probably by the provision of prizes for proficiency."

The Society has five classes of members: (*a*) Honorary, a strictly limited class, which has never exceeded five at any one time; (*b*) Fellows, who must have been engaged as principals for not less than five years; (*c*) Associates, principals or assistants over twenty-one years of age; (*d*) Students; and (*e*) Lay Members. The last-named class is for those who are interested in architecture, but who do not practise it or follow any of the building trades. From its inception the Society has included both architects and surveyors. These latter are either land or quantity surveyors, and for many years, by an unwritten rule, the Presidents were alternately architects and surveyors. In 1889 the Society became allied with the R.I.B.A., being the first provincial society to take advantage of the scheme of alliance. The province allotted to Sheffield comprised part of South Yorkshire, the whole of Derbyshire, and the northern part of Lincolnshire with the exception of the City of Lincoln, an omission which aroused a vigorous protest at the time. By a recent rearrangement the southern part of Derbyshire has been handed over to the Notts and Derbyshire Society in exchange for the northern part of Nottinghamshire. This has helped to simplify and consolidate the area of the Sheffield Society, but its present extent and unwieldiness may be appreciated from the fact that, in point of time, Sheffield is as near London by rail as it is to some of the towns in its area. This difficulty might be overcome by the formation of a branch society, or a better way would be the formation of a new society with headquarters at Lincoln, and with that county for its province.

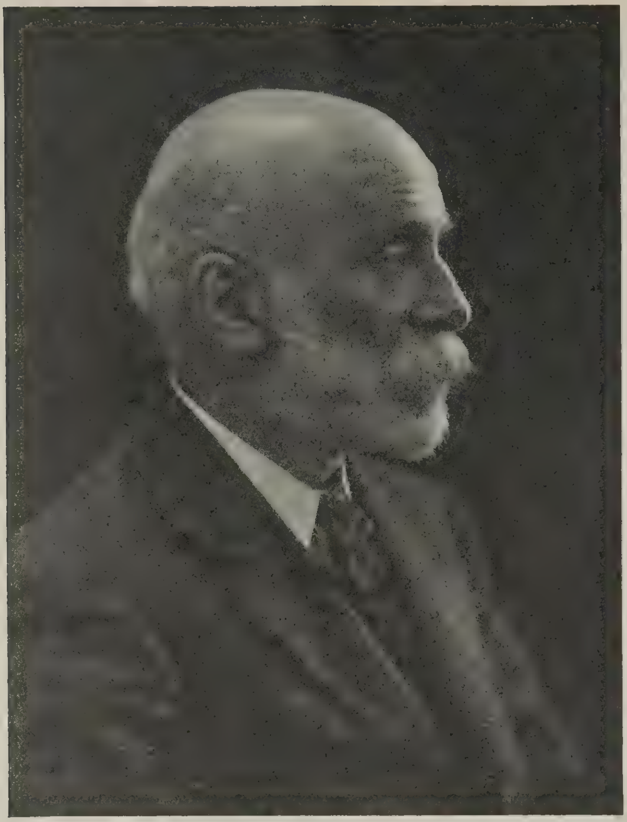
Reference has been made already to the first President, Mr. T. J. Flockton; the other original officers were: Vice-President, Mr. F. Fowler; Hon. Treasurer, Mr. J. B. Mitchell-Withers; Hon. Secretary, Mr. W. C. Fenton; Council: Messrs. E. M. Gibbs, C. Hadfield, E. Holmes, C. J. Innocent, and J. D. Webster. Only two of the original officers survive—Mr. W. C. Fenton, the present Lord Mayor of the city; and Mr. E. M. Gibbs, the doyen of local architects. Both have held the office of President, and both retain an active interest in the Society's work.

In these days of "unification" it may be of interest to record that the first lecture given before the Society, on December 13, 1887, was upon "Registration." It was by Mr. J. W. Connon, F.R.I.B.A., of Leeds, and provoked a lively discussion, although the supporters of registration—as would be the case in the Society at the present time—were in an overwhelming majority. The monthly lectures have always been a strong feature in the Society's work. Except during the later years of the war, they have been given with great regularity, and the list of lecturers contains the names of many prominent architects, well known for their scholarly tastes and artistic powers.



THE LATE MR. T. J. FLOCKTON, F.R.I.B.A., F.S.I., FIRST PRESIDENT.

The Society has striven to advance the interests of its members by all legitimate means, and to support them in the case of differences or disputes with the local authorities when, in the opinion of its Council, the authority was taking up an unfair position. The local authorities also have sought the help of the Society upon many occasions upon such subjects as town planning, the preparation of a zone plan, and more especially in relation to the revision of the building by-laws. On one occasion the discussion of this last subject was continued for a period of twelve or thirteen



MR. J. R. WIGFULL, F.R.I.B.A.,
PRESIDENT, SHEFFIELD SOCIETY OF ARCHITECTS.

years. At first almost as a stern fight, one party demanding—the other denying—the right to impose such conditions as it thought fit. At last a better spirit prevailed, and, at a series of round-table conferences, what was hoped would be a satisfactory compromise was reached. Even then, when the by-laws had been approved by the Local Government Board, it was found that a "somewhat antiquated" requirement, inserted by this authority, prevented the reasonable development of building sites in the more crowded parts of the city.

The relations between the Society and the Local Association of Master Builders have always been cordial. There was a time—when contract forms were under discussion—that the two parties did not see eye to eye, but that feeling soon passed away, mutual help was given in the extended discussion upon by-laws, and members of either Society are always welcome guests at the social gatherings of the other, or at lectures when the subjects are of mutual interest.

It is, perhaps, upon the educational side of its programme that the Sheffield Society has laid the greatest stress. It was only a few months old when the younger men appealed for a class in design. The request was promptly granted, and the subjects were set and criticized by the late Mr. Charles Hadfield. A student all his life, Mr. Hadfield entered with zest into the work, and his criticisms were always kindly and helpful, as were those of Mr. E. M. Gibbs, who conducted the class in later years. The class in design was quickly followed by others on the history of architecture, sketching and measuring, and the study of materials and their application. Some of the classes were restricted to Student or Associate members; others, such as the series of lectures given during two winters by the late Mr. H. H. Stannus, were open to all who cared to attend.

With the elevation of Sheffield to the dignity of a university city, a more systematic course of instruction became possible, and the Department of Architecture at the University was opened in January, 1908. The department was well equipped by the University, and the Society placed its library at the disposal of the students; it also guaranteed the University against loss for a period of three years. The department has afforded means of education of a class denied to the older local men, some of whom, in thinking over the delights of the old, less organized days—when spirits were high and discussions were lively—wonder whether the students of to-day are really the better for having the educational way made so smooth for them, or if the same lifelong friendships will result as did from their own student days. The exchange of ideas amongst young men engaged in different offices, and their frequent and intimate contact with older men, such as was obtained under the old system of visitors, was of infinite benefit to all concerned. It promoted a spirit of mutual help and friendship between young and old, one of the principal objects for which all societies are formed. Further, it helped to abolish the feeling of jealousy and suspicion which prevailed before the Society existed. Those whose memories carry back before 1887 will appreciate to the full the better spirit which is now apparent, due entirely to the better knowledge of each other which has resulted from membership of the same society. In this, as in other matters, the Society has realized some of the precepts laid down by its first President.

Mr. Thomas James Flockton, the first President, was the son of an architect and the grandson of a builder. He entered his father's office at twelve years of age, and there he received a thorough grounding in classical design and sound construction. He was wont to tell his pupils in later years that if they thoroughly studied Palladio and the book on construction by Peter Nicholson, they would meet with little trouble in their architectural work. Not that he considered these two books sufficient, for Mr. Flockton was, in the true sense, a well-read man, endowed with a keen power of observation, and a most retentive memory. Not only was he an adept in classical design, but in his early days he developed a taste for Gothic work, which he sketched and studied in various parts of the country. He was a fine draughtsman with a delicate and suggestive touch in his pencil work. An exhibition of some of his early sketch books, at one of the early meetings of the Society, came as a revelation to many and caused one young man to say to the

MR. H. B. S. GIBBS, A.R.I.B.A.,
HON. SECRETARY, SHEFFIELD SOCIETY OF ARCHITECTS.

present writer: "I always thought the old man was a bit of a fraud, but I shall not do so after to-night." Needless to say, this man was not in Mr. Flockton's office or he would have known better. As a young man Mr. Flockton entered the offices of Sir G. Gilbert Scott and Mr. John Johnson, of London, where he improved his knowledge of Gothic work, and further developed his powers as a draughtsman. On his return to Sheffield he rejoined his father for a time, but in 1864 he began to practise on his own account. From this time onwards to 1899, when he died at the age of seventy-five years, many of the principal buildings in the neighbourhood emanated from his office, the work of his partners or himself. For a number of years Mr. Flockton acted as adviser to the Sheffield Corporation in regard to street improvements. He negotiated the purchase of properties with great success and an almost entire absence of arbitrations. He was also the surveyor to several local public trusts.

Mr. Flockton's youngest son, Major Charles B. Flockton, is the immediate Past President. He was educated in his father's office, qualified as an Associate of the R.I.B.A., and later became a Fellow. For three years he was a member of the Council of the Institute, at whose meetings he was a regular attendant. His architectural work shows the influence of his father, and is characterized by good taste and refined and carefully thought out detail.

The present President, Mr. James R. Wigfull, was articled in 1881 to Messrs. Flockton and Gibbs. After his pupilage he remained as assistant for six years, during the latter part of which time he was head draughtsman. Before commencing practice he spent several months in travel and study in preparation for the qualifying examination of the R.I.B.A., of which he was elected an Associate in 1892; he became a Fellow in the present year. In 1894 he won the Institute Silver Medal for measured drawings, his subject being the North Transept of Lincoln Cathedral. For seventeen years Mr. Wigfull was Hon. Secretary of the Society, in recognition of which his fellow members showed their appreciation by a handsome presentation.

The present Hon. Secretary, Mr. H. B. S. Gibbs, is beginning his second year of office. He served articles with the firm of Messrs. Gibbs, Flockton and Teather, and is now one of the partners. He is an Associate of the Royal Institute, and served in the Army from the outbreak of the war.

One of the founders of the Sheffield Society was the late Mr. Charles Hadfield, who was the son of Matthew Ellison Hadfield, a pioneer in the Gothic revival of the last century. Mr. Charles Hadfield was one of the Hon. Secretaries in the early days of the Society; he also served as President, and much of the early success of the Society is due to his energy and enthusiasm. He was a clever architect, with a thorough knowledge of English Gothic, especially in its later or Tudor period; some of his work was founded upon the Italian Renaissance, for which he had a great admiration. Many local buildings are the result of his fertile brain, and all show the correct use of materials and a keen appreciation of detail and proportion. His practice is now conducted by his elder son, Mr. Charles M. Hadfield, who worthily carries forward the architectural traditions of his family.

[The previous articles in this series appeared in our issues for May 2 and 30, August 1 and September 12.]

Correspondence

The Cambridge Collegiate Buildings Competition

To the Editor of THE ARCHITECTS' JOURNAL.

SIR,—May I again trespass upon your space with reference to the recent action taken by three non-winners in the above competition? At the time when their letter appeared in your columns I thought: "Much more criticism of this sort and authorities will cease to promote competitions altogether, and give their work straight to an architect (a good or a bad one) without giving anyone else a chance." For, after all, though we architects know that the client gets more for his money by employing a good architect, the client usually does not, and he is as content to commission Mr. Jones, whom he meets at the club, as to spend several hundred pounds in competition prizes. Yet here we have young men (who surely do not know how easily the client is frightened away) suggesting that he should spend another hundred or so in appointing *three* assessors. If three assessors are to be appointed, it would be a courtesy on the part of the winner to pay their fees, for, according to Messrs. Holt, Tait, and Rees, if there were more often a jury of assessors, the winner would be a different man.

Let *him* pay for the privilege!

"ONE WHO DID NOT TAKE PART."

To the Editor of THE ARCHITECTS' JOURNAL.

SIR,—I have followed this controversy with interest in the technical Press of the last few weeks, and now I am alarmed, for I feel that this matter may, with careless handling and thought, make a distinct cleavage in the profession.

On one hand we have unsuccessful competitors claiming that the conditions were not adhered to on a specific point in the winning design; on the other we have a distinguished professor of architecture stating: "Anyone who has studied their (the winners') design, and studied the conditions will know that that is not the case." The professor wonders why an impression, different to his opinion, has evidently got abroad; well, it is because we have had the competitors' statement and nothing *tangible* to refute it.

May I ask that the full original particulars and conditions be published, without further comment from assessor, competitors, or any interested person, so that I, at least, and the great majority of the profession may judge for our own peace of mind—we can, I think, be relied upon to form our judgment with the utmost fairness. This would be an honest procedure; for having started, the linen had now better be thoroughly washed—it is not desirable nor right to leave the matter where it is, nor for those responsible to ignore it, especially in view of the wide publicity the matter has been given.

It would seem, at present, that it is perfectly right to select the "best building possible" every time; but if conditions are specifically made, one naturally takes it that (as contended) they are to be complied with irrespective of whether a better result is obtained by ignoring them.

Every right-minded man will deprecate Professor Reilly's demand that the gentlemen who criticized the decision should be pilloried by the R.I.B.A.—a proceeding tantamount to removing the right of free expression from its members, and altogether too autocratic for present-day standards. I hope the assessor himself would not, right or wrong, be so mean as to shelter behind the power of a great Institution or to utilize that power as a punishment to those who should, in opinion, differ with him. He is a man I esteem, as an architect, and irrespective of whatever conclusion I shall eventually arrive at in this matter, I shall always admire his ability, though I am not personally acquainted with him.

R. D. ROBSON.

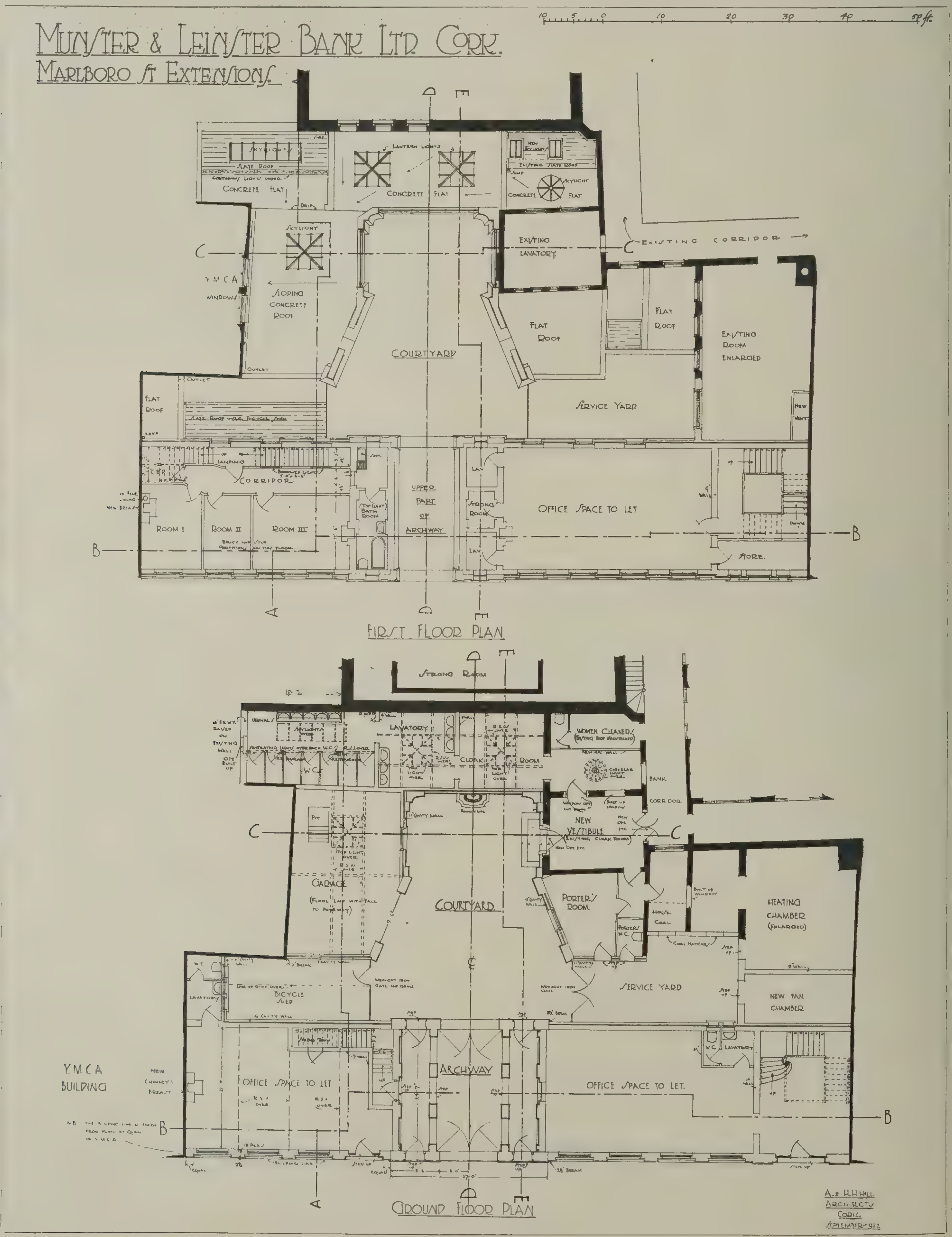
Munster and Leinster Bank Extensions, Cork

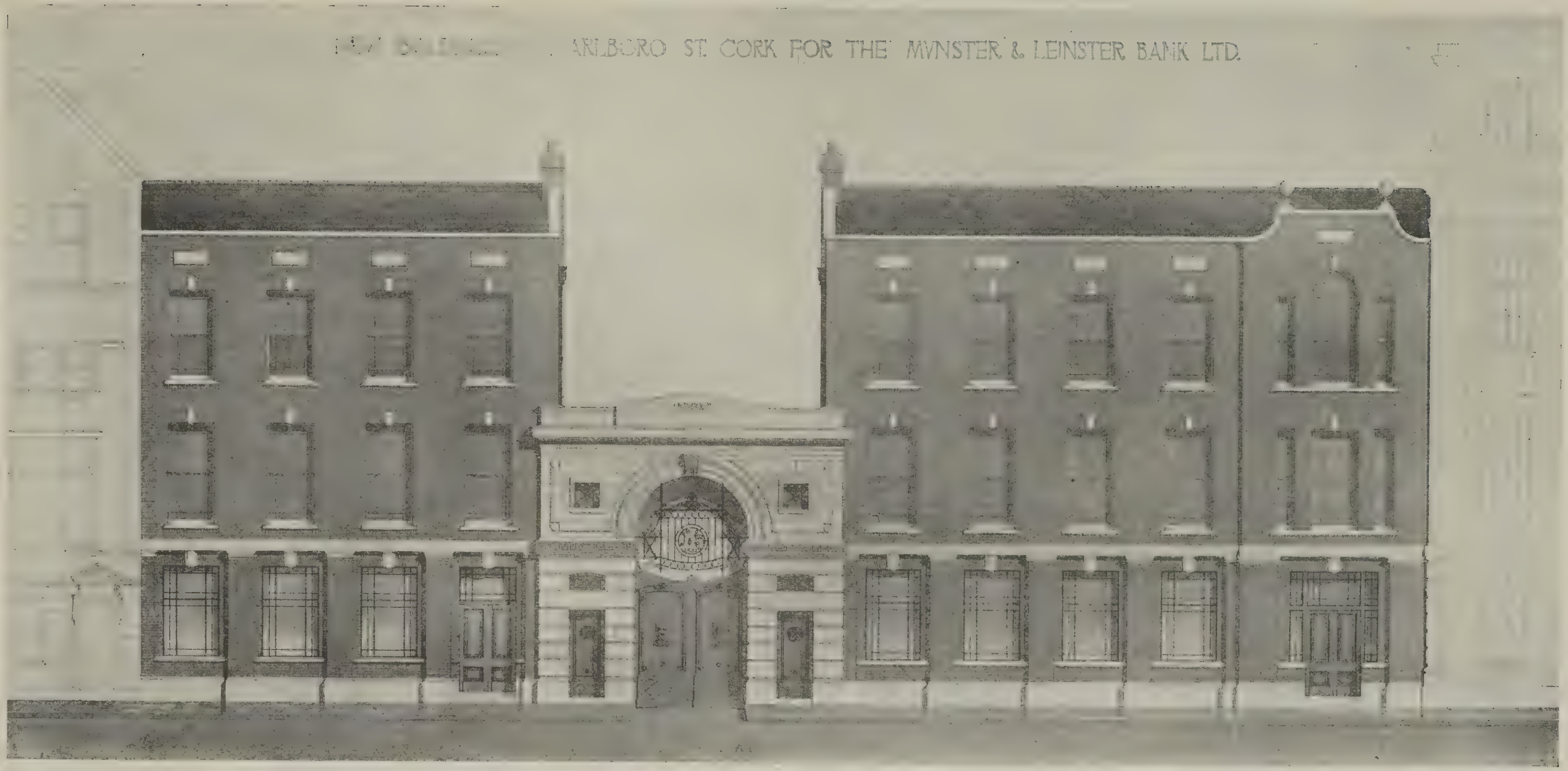
A. and HENRY H. HILL, Architects

THESE extensions to the head office of the Munster and Leinster Bank were designed primarily in order to meet the need for a small courtyard and garage. The buildings to the front are secondary, and, except for the gateway, are to be very quietly treated in plain stock brickwork. There is much old work of this character in the neighbourhood.

This new front is at present unconnected with the main elevation of the bank on the South Mall. But care has been taken in the design to secure that, should a further extension bring the blocks together, the main horizontal lines will run through level, and also that the character of the archway shall be strongly reminiscent of the main front, from which it is separated by about 60 yds. It is on this account that the impost and the rusticated courses of masonry under it have been copied from the other; and thus was set the scale of the whole design.

The general contractors are John Sisk and Son, of Cork.

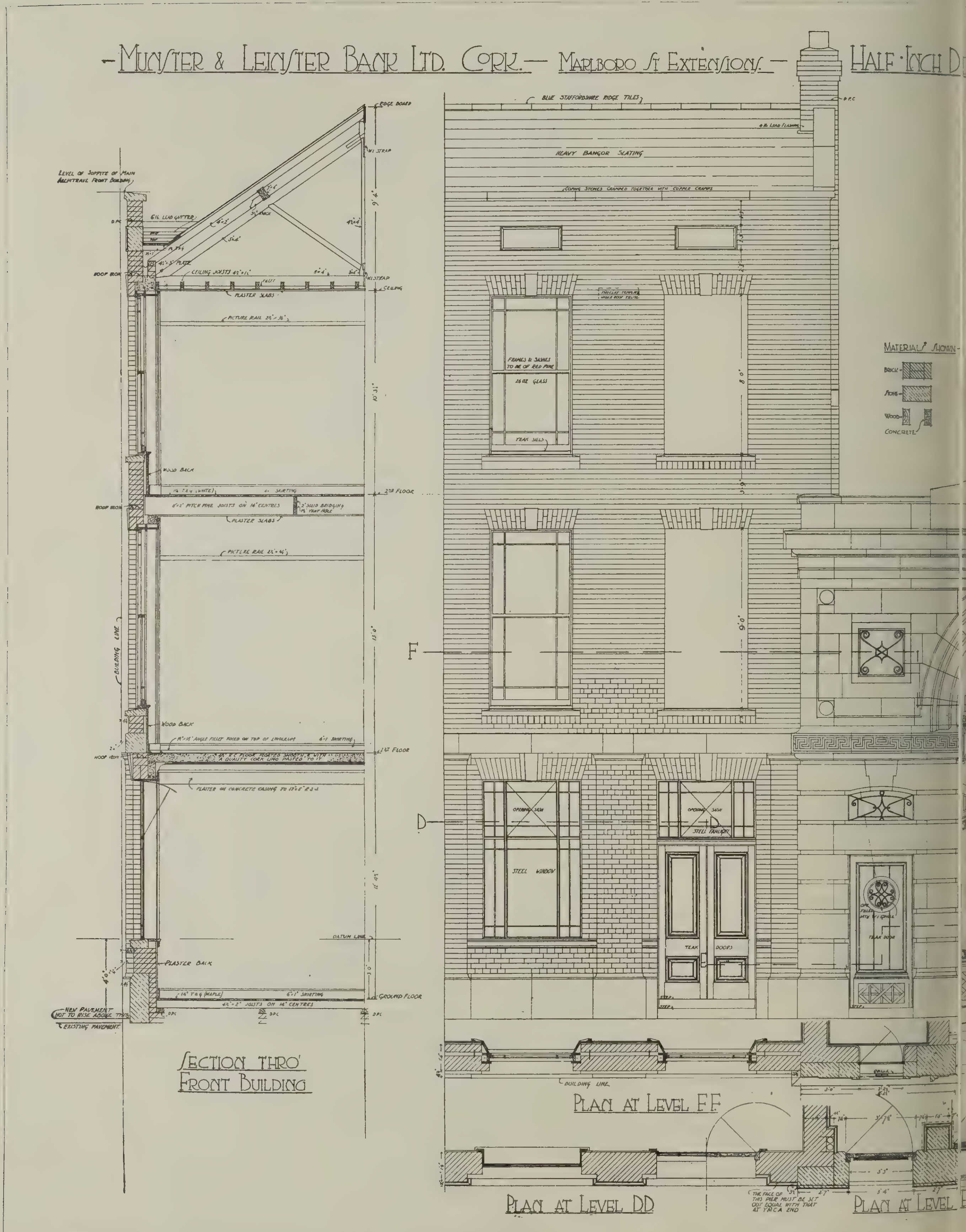




NEW BUILDINGS IN MARLBORO STREET, CORK, FOR THE MUNSTER AND LEINSTER BANK, LTD
A. AND HENRY H. HILL, ARCHITECTS.

Architects' Working Drawings. 71.—New Buildings in

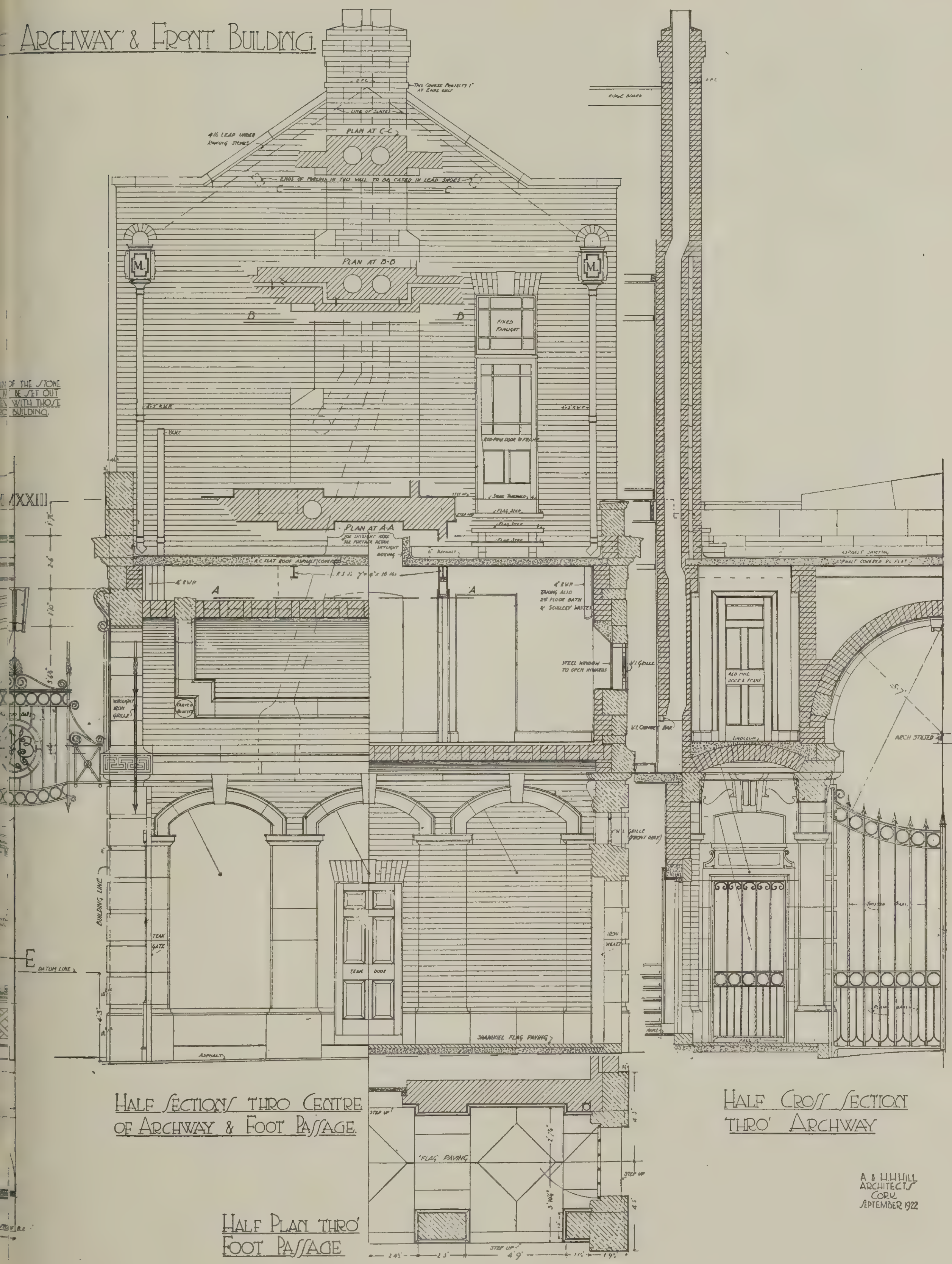
A. and Hen



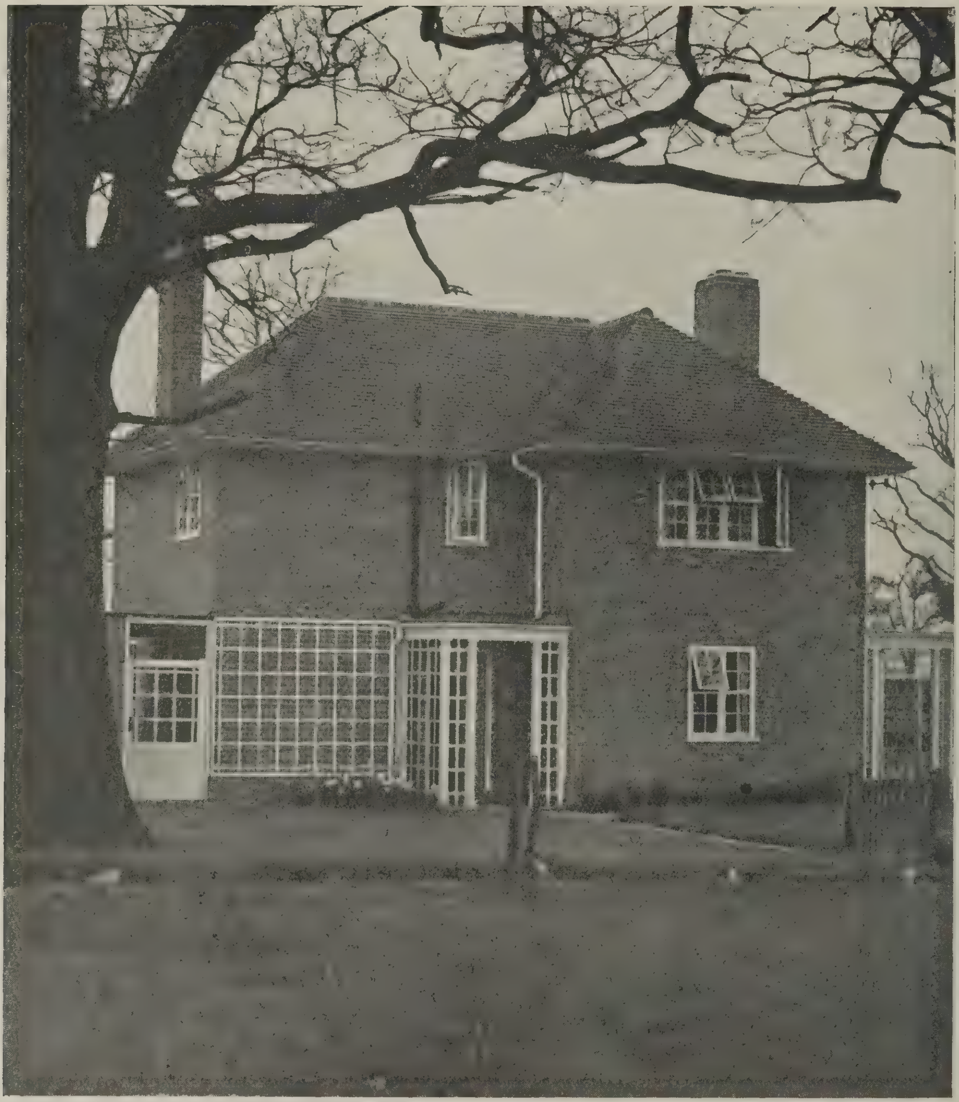
This new front is at present unconnected with the main front of the Bank on the South Mall, but care has been ta
The existing main front,

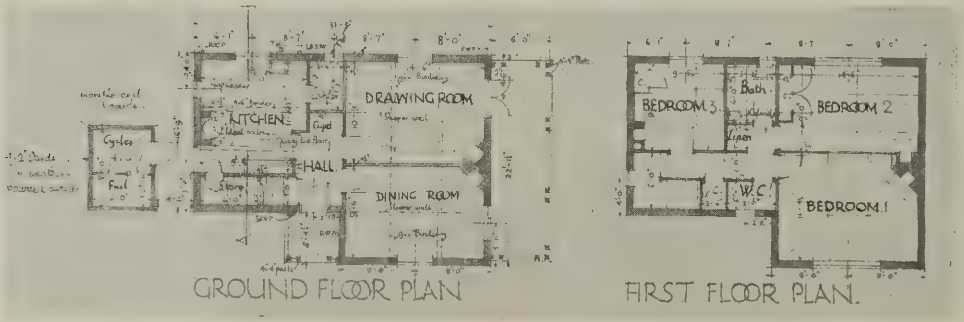
o Street, Cork, for the Munster and Leinster Bank, Ltd.

ll, Architects


ARCHWAY & FRONT BUILDING.
D.P.C.
THIS COURSE PROJECTS 1" AT ENDS ONLY
RIDGE BOARD
LINE OF SLATES
PLAN AT C-C
4lb LEAD UNDER RAKING STONES
ENDS OF PURLINS IN THIS WALL TO BE CASED IN LEAD SHOES
C
C
PLAN AT B-B
B
B
FIXED FANLIGHT
RED PINE DOOR & FRAME
VENT
4½" R.W.P.
OF THE STONE BE SET OUT WITH THOSE BUILDING.
MXXIII
STONE THRESHOLD
STEP UP
FLAG STEP
PLAN AT A-A
FOR SKYLIGHT HERE SEE FURTHER DETAIL
SKYLIGHT BOXING
6" ASPHALT
R.C. FLAT ROOF ASPHALT COVERED
R.S.J. 7" x 4" x 16 lbs
4" R.W.P.
A
A
4" R.W.P. TAKING ALSO 2nd FLOOR BATH & SCULLERY WASTES
STEEL WINDOW TO OPEN INWARDS
W.I. GRILLE
W.I. CHIMNEY BAR
WROUGHT IRON GRILLE
CARVED ROSETTE
W.I. GRILLE (FRONT ONLY)
BUILDING LINE
TEAK GATE
E
DATUM LINE
TEAK DOOR
IRON WHEEL
SHANAKIEL FLAG PAVING
ASPHALT
ASPHALT SKIRTING
ASPHALT COVERED R.C. FLAT
RED PINE DOOR & FRAME
LINOLEUM
ARCH STILTED
TWISTED BARS
PLAIN BARS
FALL
HALF SECTIONS THRO CENTRE OF ARCHWAY & FOOT PASSAGE.
HALF CROSS SECTION THRO' ARCHWAY
STEP UP
FLAG PAVING
STEP UP
HALF PLAN THRO' FOOT PASSAGE
A. & H. H. HILL ARCHITECTS CORK SEPTEMBER 1922

sign to ensure that, should a further extension bring the blocks together, the main horizontal lines will run through.
he scale of the whole design.





A HOUSE AT WELWYN GARDEN CITY, HERTS.
LOUIS DE SOISSONS, A.R.I.B.A., S.A.D.G., ARCHITECT

he Swansea Masonic Buildings Competition

A Criticism of the Designs

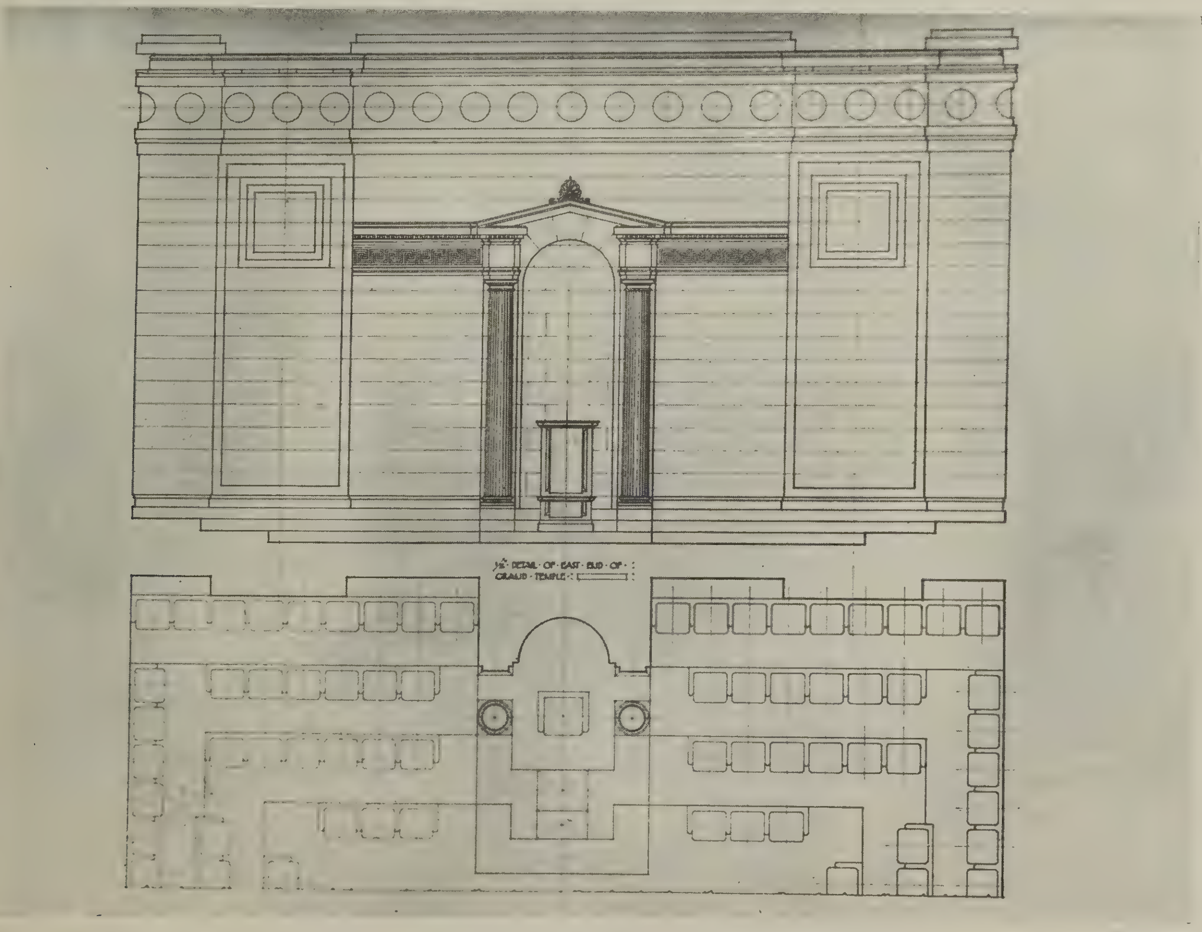
THE Swansea Masonic Hall Company, Ltd., having purchased an excellent site in St. Helen's Road, invited architects who were Freemasons practising in the Eastern, Western, and Mon- iouthshire divisions of South Wales to submit designs for ew premises. Fourteen sets of drawings were received of ery unequal merit. Mr. Arthur Keen was nominated as ssessor by the President of the R.I.B.A., and it is not ifficult to imagine that he could have immediately set on ne side eight or nine sets as being below the required andard of quality.

The designs placed first are by Messrs. Wilmott and mith, of Cardiff; the second by Mr. A. F. Webb, of Black- ood, Mon.; and those of Messrs. Ivor Jones and Percy homas, of Cardiff, are highly commended. The com- etitive drawings will be on exhibition at the Masonic Hall, t. Helen's Road, from January 1 to 3.

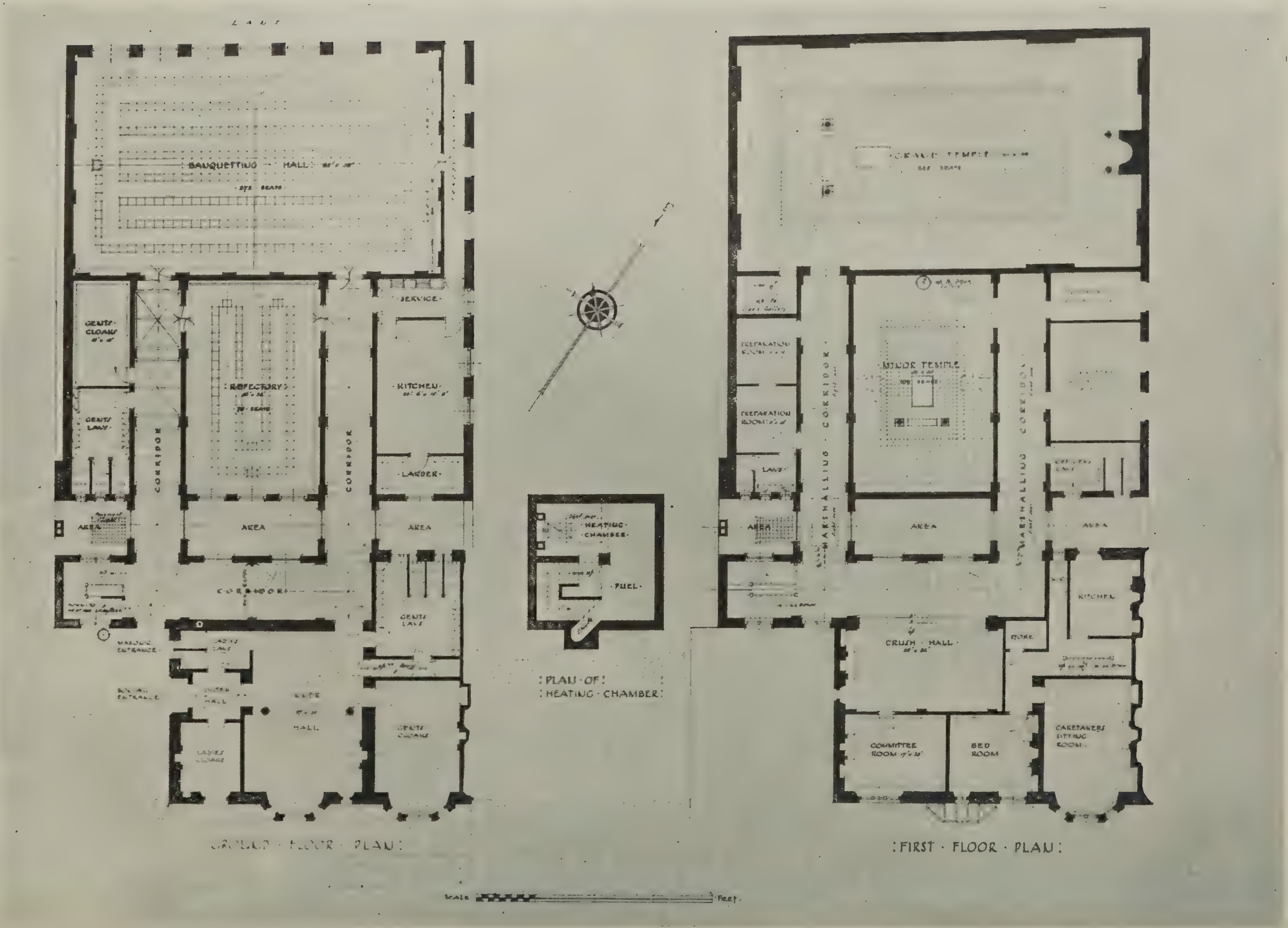
The site of the new buildings is a rectangular plot on e north-west side of St. Helen's Road. It has a frontage f 70 ft., and a depth available for the new buildings of 5 ft. It is bounded at the rear by a back road. On part the site is a well-built house. It was a condition of the mpetition that this building should be incorporated in e scheme with as little alteration as possible. The ac- mmodation required was, on the first floor, a large grand mple to seat 220 to 250 on the "floor" with 50 to 75 in e organ gallery; a minor temple to seat 100; both to ave a marshalling corridor, ante-rooms, and lavatory. n the ground floor provision was to be made for a large anqueting hall to seat 250, a small refectory, together ith cloakrooms and lavatories for both sexes, committee rooms, adequate kitchen and service accommodation, and caretakers' quarters. Orientation of the temples was not insisted on as a condition of the competition. It was to be borne in mind that either of the dining-rooms might be in use for ordinary social purposes, while the other was being used for masonic gatherings. The cost of the scheme was not to exceed £13,500, exclusive of furnishing.

Messrs. Wilmott and Smith (No. 12) submit a simple and straightforward plan, which appears to be an admirable solution of the problem. The temples are on the first floor, and a separate approach to each is managed by means of an arrangement of double corridors. The retiring rooms, preparation rooms, committee rooms, and lavatories are ample and well arranged. The difficulty of providing a scheme to allow of the premises being used at the same time for masonic and social purposes has been surmounted very cleverly. The kitchen would be better if made larger. A separate tradesman's entrance from the back road is shown. The architectural treatment is simple and dignified. The temples are designed in a Neo-Grec manner, the decoration to be carried out in "stuc." The temples and dining-rooms are well lighted, but some of the ground-floor lavatories would be dark. The existing buildings are not disturbed to any great extent. The estimated cost is based on a unit of 1s. 1d. per foot cube, which we consider is rather low for the locality.

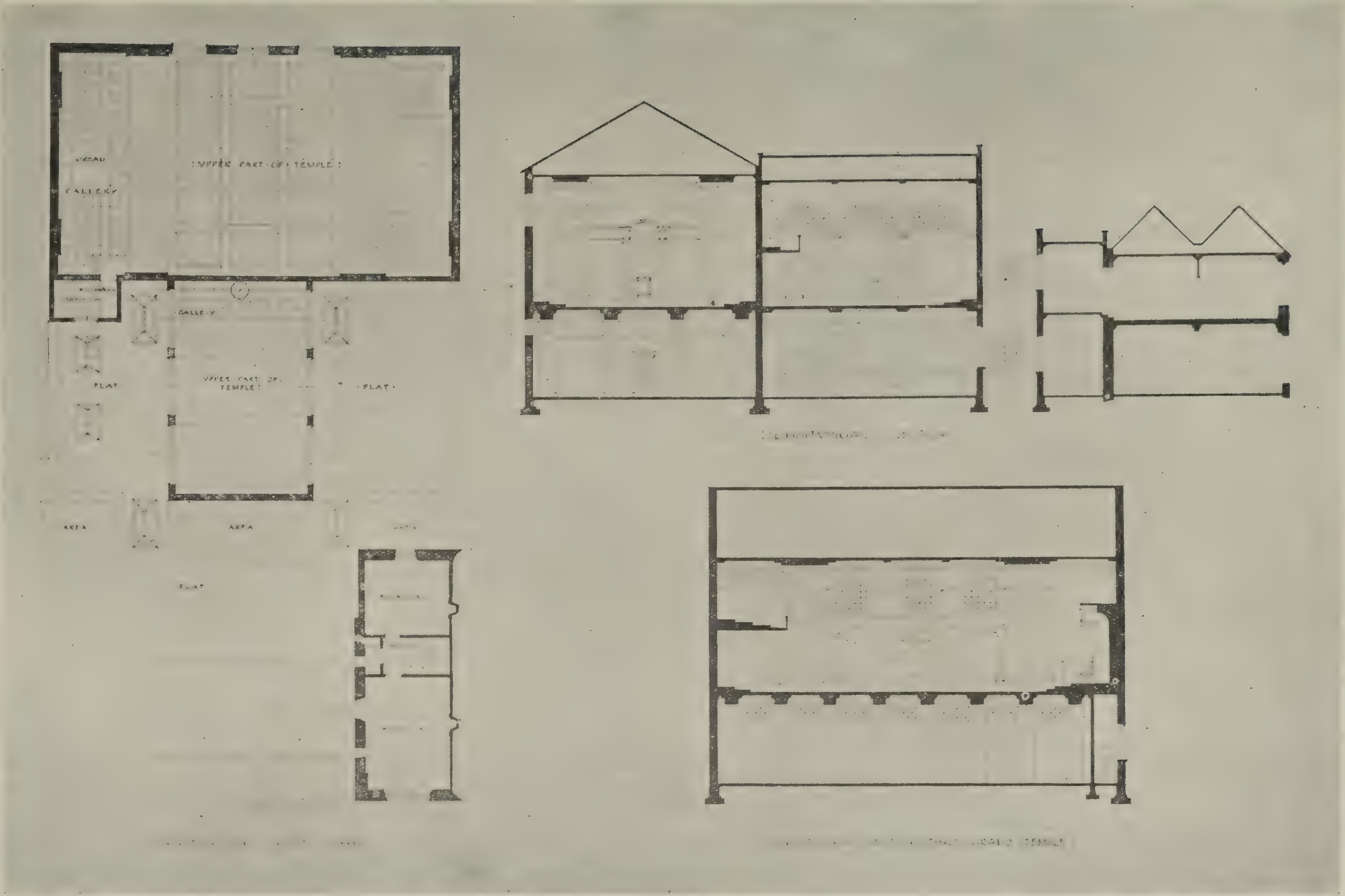
Mr. Webb's plan (No. 14) is not so straightforward as that placed first. The hall and staircase of the existing buildings serve also for the new premises. The access to the marshalling corridors is not good, and the utilization of the premises for masonic and social purposes simultaneously



A DETAIL OF THE EAST END OF THE GRAND TEMPLE



SWANSEA MASONIC PREMISES COMPETITION: FIRST PREMIATED DESIGN WILMOTT AND SMITH, ARCHITECTS



SWANSEA MASONIC PREMISES COMPETITION: FIRST PREMIATED DESIGN WILMOTT AND SMITH, ARCHITECTS.

would be very difficult. New kitchen quarters are provided, but the "service" is cramped. Good cloakrooms and lavatories are shown. The design of the temples is in a free Renaissance manner, and is not equal to the plans placed first. The main temple has a range of flat pilasters to the flank walls supporting an entablature of a "composite" character. A dado of hardwood panelling runs between the pilasters, the ceiling is flat over the greater part, but there is a small saucer-dome in the middle with "sun-burst" and masonic emblems.

The highly commended design by Messrs. Ivor Jones and Percy Thomas (No. 3), shows slight alterations to the existing house by removing the stairs to make a central entrance hall for masonic use only. The stairs lead to an upper hall and marshalling corridor on the first floor from which the temples are entered. The main temple is situated across the extreme end of the site in a similar manner to Nos. 12 and 14; the minor temple adjoins it, and their axes are parallel. The banqueting halls are situated on the ground floor, immediately under the temples. They are connected by means of folding or sliding doors. The service arrangements are somewhat cramped. No separate tradesman's entrance is provided, and all goods taken into the kitchens must pass through the main entrance hall. The banqueting rooms are not so well arranged for social purposes as in the design placed first. Although the larger room could be used for social purposes while the smaller was used for masonic functions, the reverse would be impossible without serious interference. The small portion of the front elevation which is visible follows in character the old buildings. The architectural quality imparted to the scheme by these authors is very high. The grand temple, a well proportioned room of dignified design, has attached fluted Doric columns, an entablature with triglyphs, and a flat coffered ceiling. The lighting is by a range of windows placed below the architrave. Over elaboration is avoided. The minor temple and banqueting halls are simple, good proportioned rooms. The scheme lends itself very effectively to masonic ceremonial. The drawings are presented in a very delightful manner by means of watered ink and are by far the most attractive of all those submitted.

The scheme marked No. 6 shows the grand temple carried out in an Egyptian style, and is very forcefully shown by coloured drawings. Primary colours are used in the decoration of the columns and entablature. The character of the room is dignified and suitable for its purpose.

Scheme No. 10 is disqualified on account of non-compliance with the conditions. It shows an entirely new building covering practically the whole of the site.

The author of scheme No. 2 has planned the temples diagonally to obtain exact orientation, thus making his minor rooms awkward in shape and creating difficulties in construction.

The prices on which all the estimates are based appear to be much too low and we think that few of the schemes could be carried out for the stipulated figure in the conditions of the competition. J. HERBERT JONES.

The number of proposals for masonic buildings which have recently been put before architects for the submission of competitive designs is noteworthy. There was the Manchester Masonic Temple (a competition in which Messrs. Thomas Worthington and Sons were the winners), the Birmingham Masonic Temple competition (won by Mr. Rupert Savage, F.R.I.B.A.), and there is shortly to be promoted the competition for the Masonic Headquarters which it is proposed to erect in Old Queen Street, Westminster. We congratulate the Masons upon their public spirit and good sense in choosing the competition as a means of obtaining the best design.

An Interesting Duplex Apartment House in Chicago

REBORI, WENTWORTH, and DEWEY, Architects

THE co-operative apartment building at 40-50 Schiller Street, Chicago, designed by A. N. Rebori, architect, of Rebori, Wentworth and Dewey, Inc., is a noteworthy contribution to the list of successful apartment homes, and deserves a close view of its features, both financial and architectural.

The distinctive feature of the building lies in the combination of duplex and studio apartments, for of the twenty apartments all but six have living rooms which extend through two stories, forming an arrangement similar to artists' studios, with dining-room, kitchen, and maid's room on the main floor and two or more bedrooms above, reached by circular stairs and balconies. This affords opportunities for interesting design of which the architect has taken full advantage.

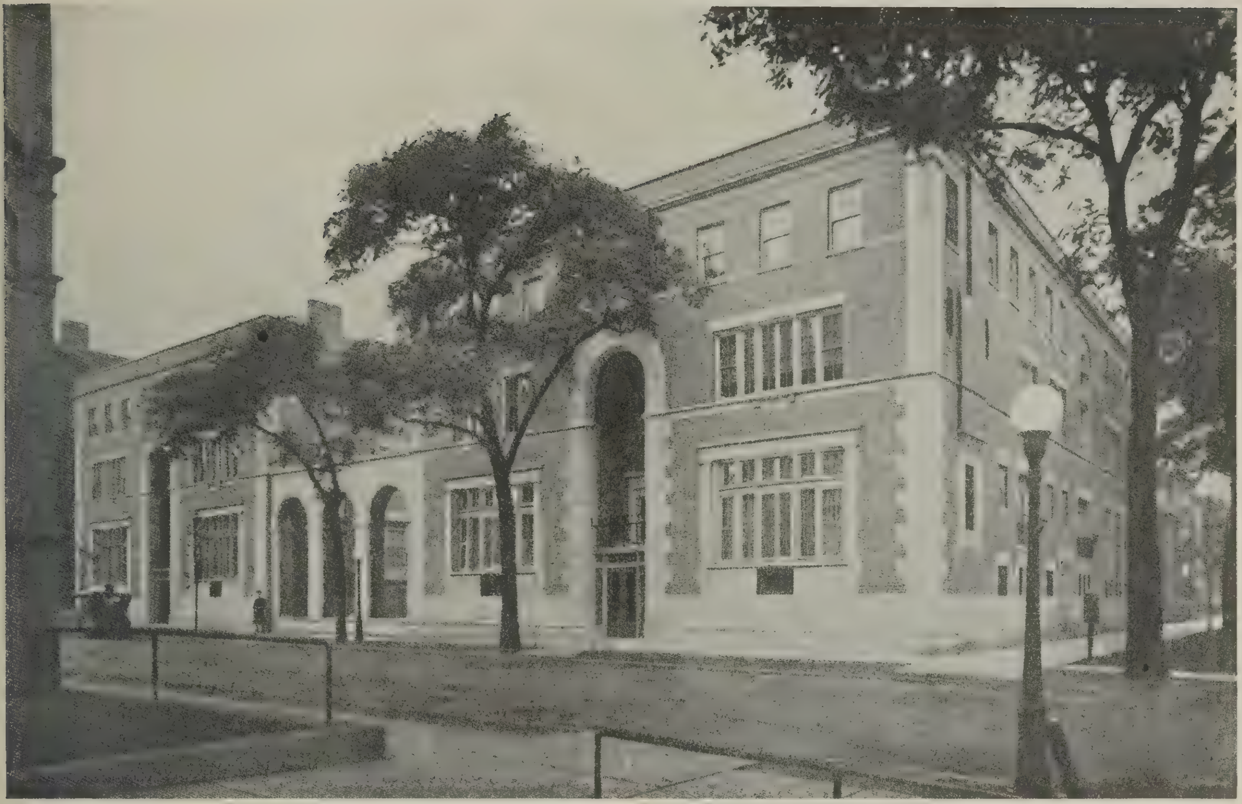
As there are two ranges of duplex apartments, a lower and an upper, the building may be regarded as either a two-story or a four-story building according to whether the section is taken through the studio-like living rooms or through the dining-rooms, kitchens, and bedrooms. As a matter of fact, in the eyes of the building department of the City of Chicago, it was declared to be a four-story building, so that the usual construction permitted in three-story apartment buildings was not passed by that department. In consequence, metal lath and gypsum block partitions were used throughout. The public stairs are fireproof.

The aim of the projectors was to form in a corner lot of slightly less than one-third of an acre, a collection of city homes of the greatest possible homelike qualities. In this they have succeeded to a marked degree; in fact, no two apartments are alike, the interior in each case having been designed to meet the particular need or taste of the prospective owner or tenant.

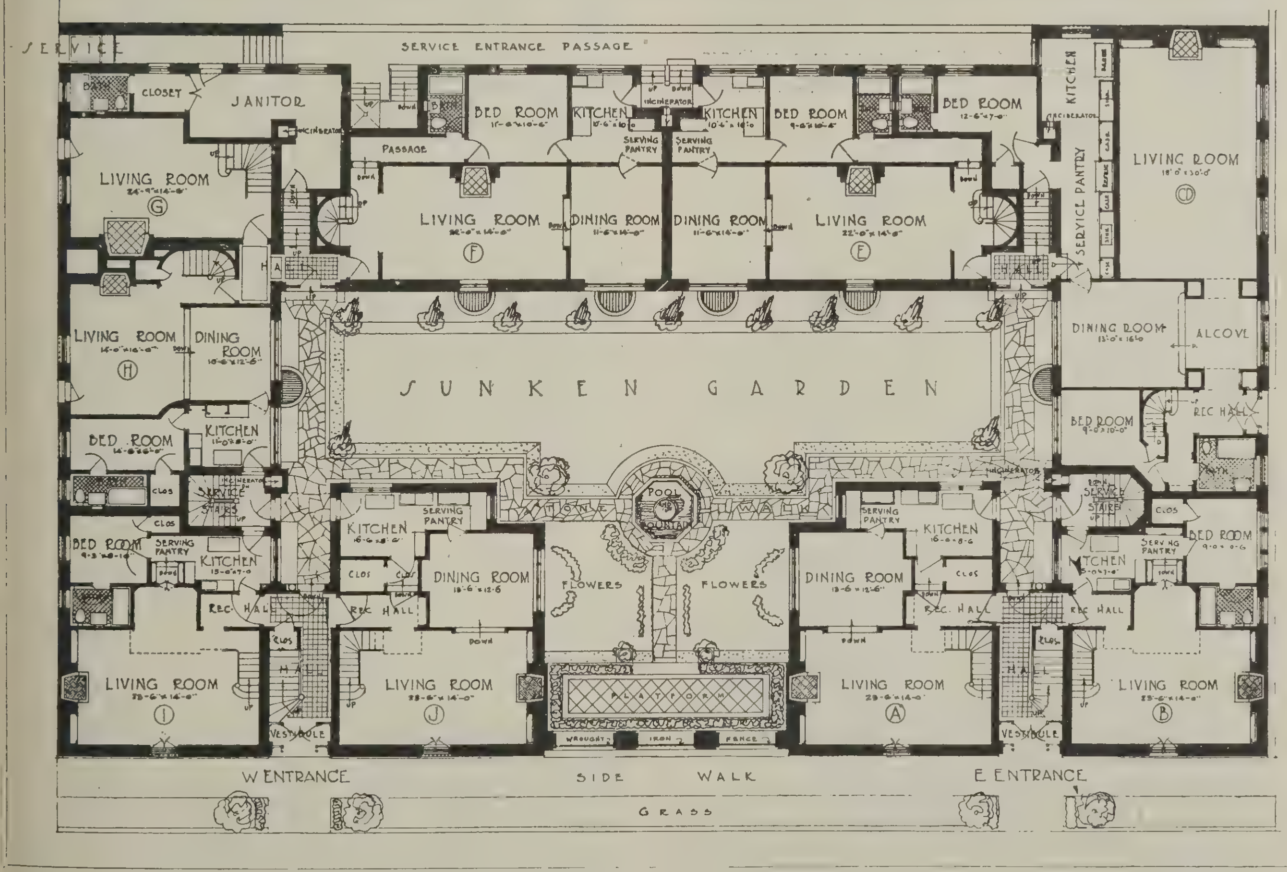
In the exterior design the architect seems to have sought to make evident the separation of the home units, taking advantage of the stairways for this purpose and marking them off with narrow and deep archways. The separation of the home units is also evident from the belt courses and from the fenestration which is in itself interesting. There is in these elements a certain appeal of the picturesque and at the same time a sense of orderly arrangement. There is a judicious balance of limestone and brickwork, and it is to be observed that the mortar joints are wide and of light colour so that the stone and brick seem to belong to the same wall plane instead of producing an excessive contrast.

It pleases me to see a bit of architecture which is a thoughtful expression of structural conditions rather than a conscious effort to reproduce a given phase of historical style. Yet in the brickwork, the stone quoins, lintels, and flat pilasters, there is a pleasing echo of eighteenth-century domestic architecture.

[The above extracts and the illustrations reproduced on the opposite page are from an article by William E. Parsons in "The Architectural Record."]



A GENERAL VIEW.

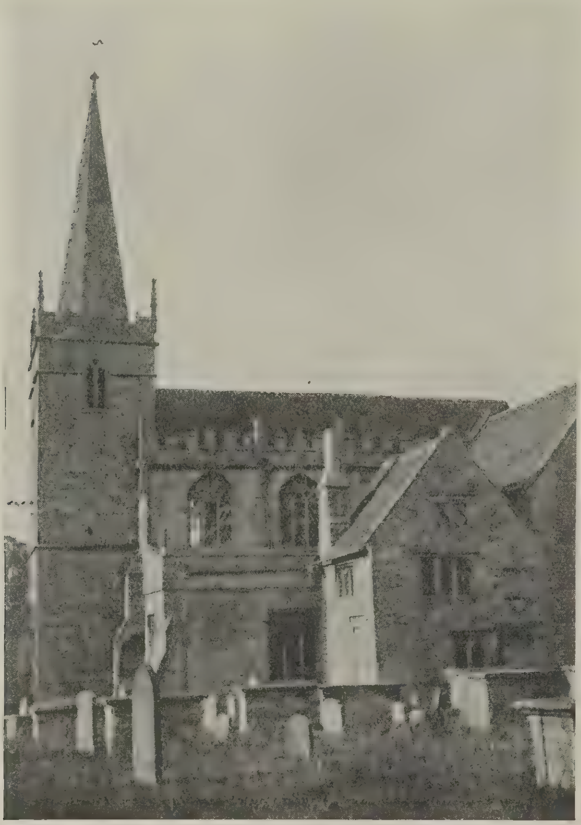


DUPLEX APARTMENT BUILDING, CHICAGO, ILLINOIS.
REBORI, WENTWORTH, AND DEWEY, INC., ARCHITECTS.

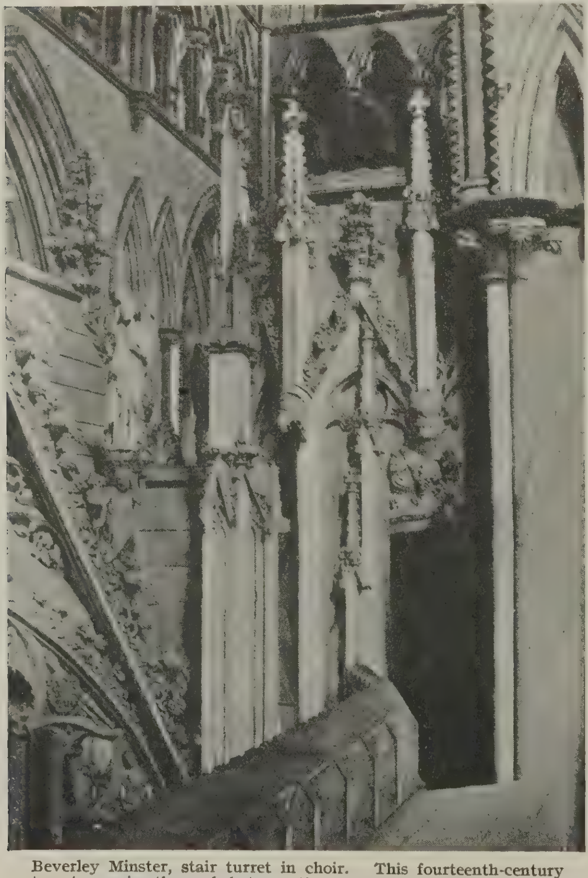
A Pictorial Review

Illustrations of Topical, Practical, or Curious Interest

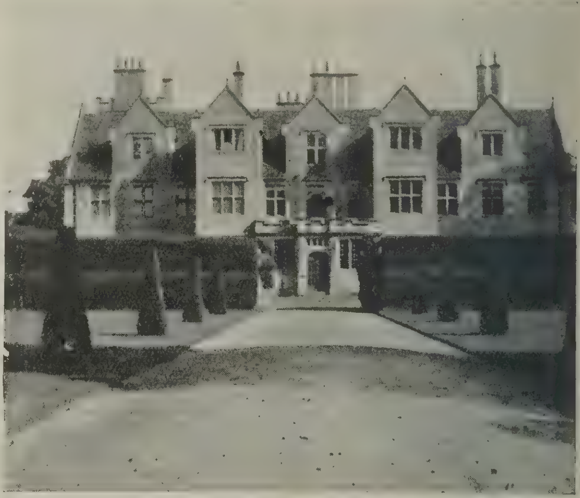
Readers are invited to send in sketches and photographs for publication in these pages. A fee of 2s. 6d. will be paid for each illustration accepted. Contributions should be accompanied by short explanatory notes.



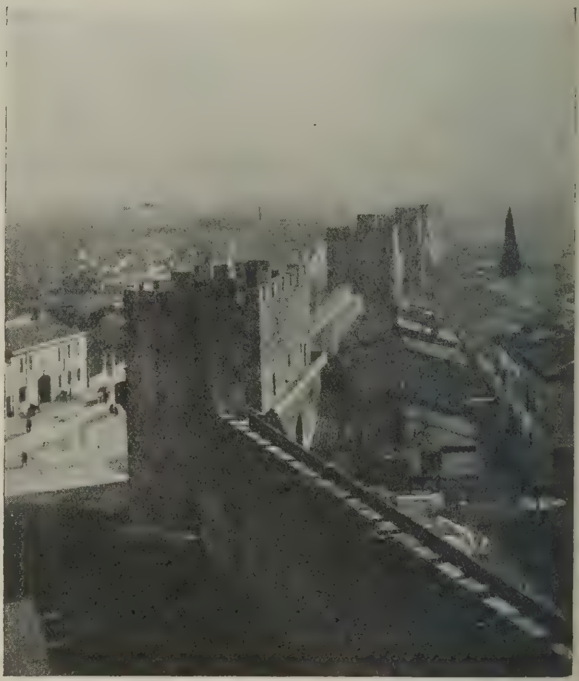
Lacock Church, Wilts, dedicated to St. Cyriac, possesses a south porch resembling a three-story cottage. The fifteenth-century chancel chapel is fan vaulted and retains its original rich colouring.—G. E. H.



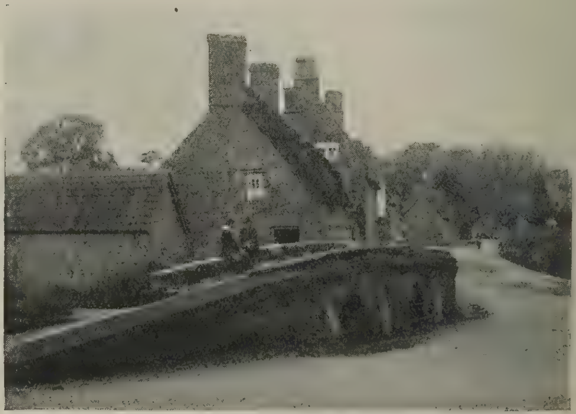
Beverley Minster, stair turret in choir. This fourteenth-century turret occupies the angle between the Percy shrine, the altar screen, and the E. respond of the N.E. transept arch.—H. L. H.



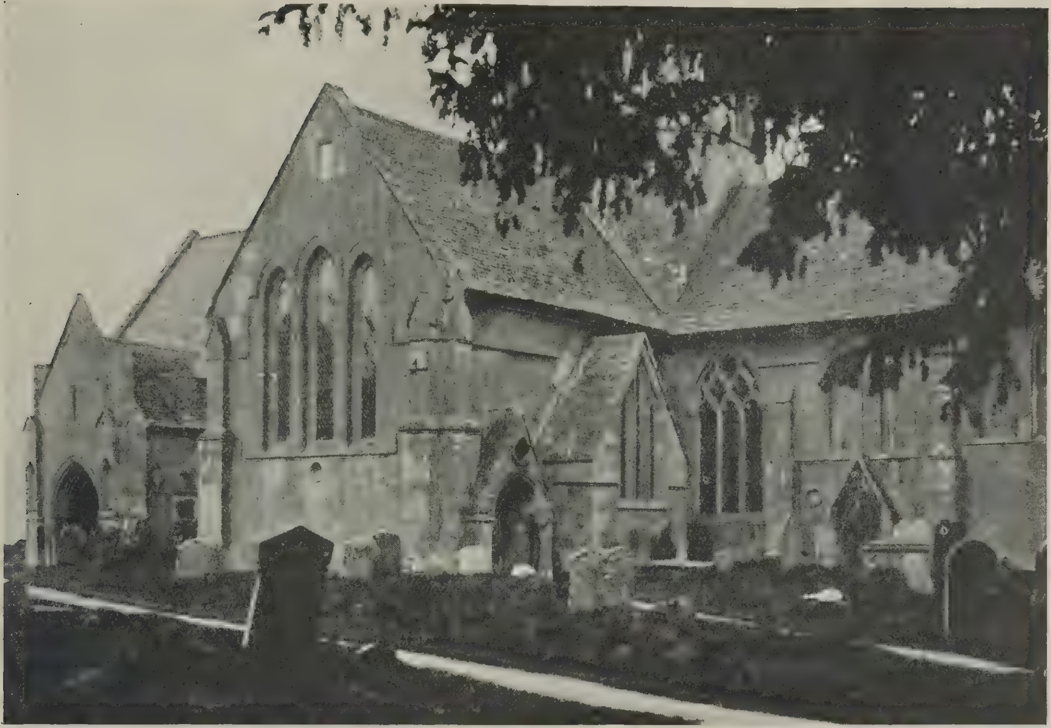
Shipton Court, Oxon. A fine old manor-house very much restored.—E. A. P.



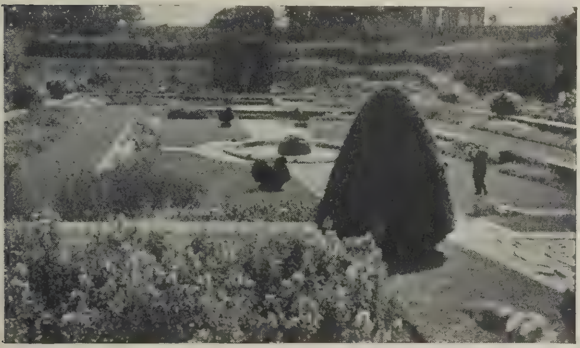
Augues Mortes is situated on the edge of Salt Lagoons, and is about 25 miles from Nimes. The enciente forms a rectangle, 600 yds. by 300 yds., completely surrounded by walls, with fifteen towers and ten gates.—A. B. H.



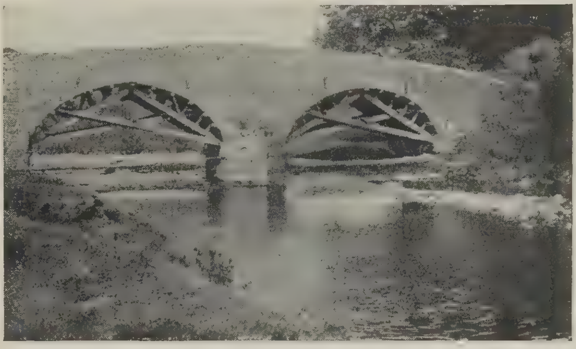
Charwelton Packhorse Bridge is on the road from Daventry to Banbury. It is a thirteenth-century relic of the pre-wheel period when in isolated districts goods and passengers were conveyed on horseback.—J. B. T.



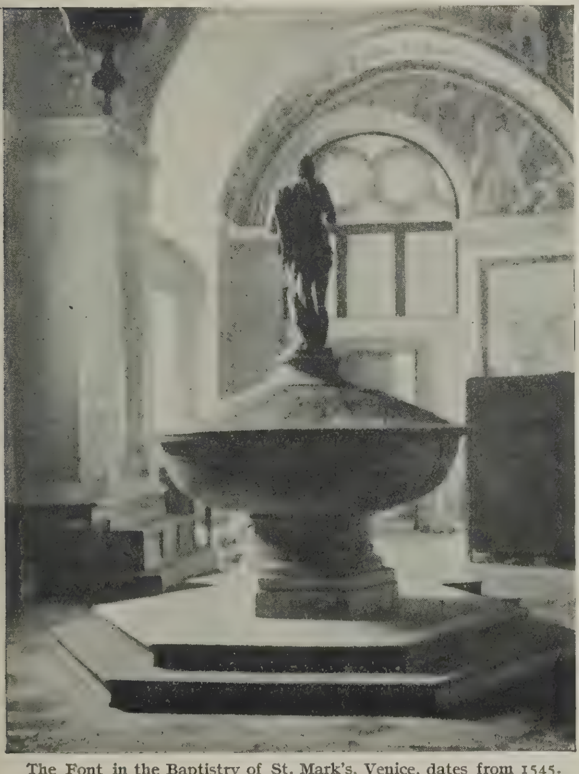
Uffington Church, Berks. Special features of this thirteenth-century church are the altar recesses on the east walls of the transept, two on the north, and one on the south, together with a small porch. The room over the vaulted south porch contains the original fireplace and chimney.—E. M. H.



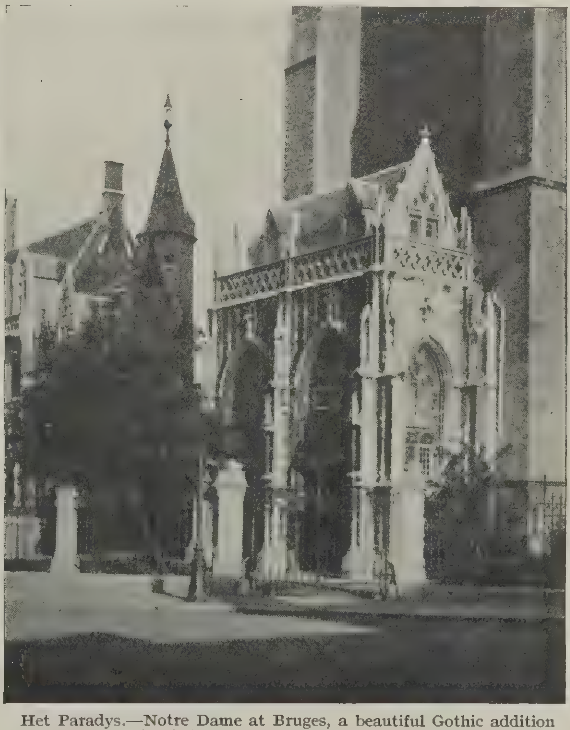
The Dutch Garden at Hampton was laid out in the time of Sir Christopher Wren.



Bridge over the West Dart at Two Bridges, Dartmoor. The centering has either been left in position or replaced later for strength.—G. E. V.



The Font in the Baptistry of St. Mark's, Venice, dates from 1545. It bears a fine statue of John the Baptist by Francesco Sigala (1565).—R. E. E.



Het Paradys.—Notre Dame at Bruges, a beautiful Gothic addition to the north side of the church and was originally a portal. It was built about 1470 and is now used as a chapel.—A. B. H.

"Academic Dress" at the Northern Architectural Association

There was an absence of formality but an abundance of merriment at the Northern Architectural Association Club annual dinner, held at the Association premises at Newcastle-upon-Tyne. Immediately the guests had become seated there arrived an unexpected "deputation" of six architects in "academic garb," all grotesquely gowned and strangely visaged individuals. They submitted an amusing skit—all in the best of taste—upon the recent proposal that architects should adopt academic dress.

There were included a President, a Fellow, an Associate, a Licentiate, a Student, and a Probationer, and they announced their arrival to the strains of "D'ye ken John Peel" by singing :

"We have summoned this meeting here to-day
To show you architects, grave and gay,
Who have left their drawing-boards far, far away,
And we don't care a ——— till the morning."

Then each in turn gave his own particular version of the class he represented, as follows :—

The President :—
In me you see the President,
I am not broken, merely bent,
I've got a chain, but it's only lent,
And it goes back to "Uncle's" in the morning.

The Fellow :—
Behold in me the fellow sage,
Who ofttimes gets in heck of a rage
With my pupils four, and my clients a score,
I'll make plenty of rhino in the morning.

The Associate :—
Have a look at me, the Associate,
At exams. I'm it, never shirked a bit,
I've mastered the lot and I don't care a jot,
I only want a job in the morning.

The Licentiate :—
Now you see the Licentiate,
A relic of the past, I'm one of the last,
A vote I don't possess, but I've got my fancy dress ;
Now I have that Kruschen feeling every morning.

The Student :—
I am the student—oh so sad ;
When I think of exams. they just drive me mad,
History gets me down, and I say with a frown,
I'll try, try again in the morning.

The Probationer :—
And last, but not least, the "Probationaire,"
With forms and exemptions I'm losing my hair ;
Having just left school I've got one foot there
And the other foot is coming in the morning.

Upon taking their seats the "President" was called upon to give his inaugural address. He rose with dignity and said :—

"Ladies and Gentlemen,—It falls to my unhappy lot as your deputy acting assistant president, elect and select, but without portfolio, to commence my term of office for the next three hundred and sixty-five minutes, by delivering you my inaugural address.

"In doing so let me first of all congratulate everybody upon having survived the last three hundred and sixty-five minutes, which, I regret to say, have been a lean and hungry (not to say thirsty) time for architects, but we look forward with the utmost confidence to good times in the near future."

He referred to the harmonious way in which he was working with the central body of our profession and said :—"It was only yesterday that I received a letter from their

"ACADEMICALLY DRESSED."

secretary; he wrote to thank us for the way in which we attended their last Council meeting and dinner (our representatives were all ladies!), and he also added that if we will be good enough to send similar representatives to all these meetings and dinners they will be warmly welcomed.

"And now let me speak for a moment on the subject of charity, which always has been one of our first considerations. May I say that during my brief term of office, that every effort will be made on my part to further our charitable obligations, and especially to assist our blind brethren and those partially or totally incapacitated.

"In conclusion, may I thank all our students for the wonderful support that the club has received from them of late, and add that in the event of more than four of them at a time being present at any of our meetings we shall have to consider the question of enlarging our premises very seriously.

"Ladies and Gentlemen—I thank you.

"And now before we get down to it, we will conclude with our closing hymn of praise (sung to the tune of 'The Church's One Foundation'). Final chorus :—

"We are the builders' bugbear,
For Architects are we,
Nobody ever knew us
Without our lingerie;
But since we've put our gowns on
All people now do say:
'Hoch, hoch, mein Gott!
What a jolly posh lot
Are the Architects to-day.'"

Law Reports

Alleged Nuisance—Change of Neighbourhood

Flatau and another v. *Sheldon and another.*

November 13. Chancery Division. Before Mr. Justice P. O. Lawrence.

This was an action by Mrs. K. Flatau and Mr. P. H. G. Powell-Cotton, seeking an injunction against Mr. N. M. Sheldon and Mrs. P. de Meza, to restrain them from using or permitting to be used the house and premises known as Whitefriars, Chislett Road, West Hampstead, as a nursing home, or for any other purpose than that of a private residence, in breach of a restrictive covenant.

Mr. Jenkins, K.C., and Mr. W. A. Jolly appeared for the plaintiffs; Mr. Owen Thompson, K.C., and Mr. J. F. Carr appeared for the defendant, Mr. N. M. Sheldon; Mr. H. W. Dollar appeared for Mrs. Priscilla de Meza.

From the statement of counsel it appeared that Chislett Road forms part of the Powell-Cotton Hampstead estate, and has only nine houses in it, all of which were erected as private residences.

Mrs. Kate Flatau is the owner of freehold hereditaments on the south side of Chislett Road called Holmleigh, and had been in occupation of it since 1897. Her co-plaintiff is tenant for life in possession of the parts of the Powell-Cotton Hampstead estate which remain unsold, including two houses with frontages to Chislett Road.

The defendant, Mr. N. M. Sheldon, is the owner of freehold hereditaments known as Whitefriars, on the south side of Chislett Road adjoining Holmleigh, and the defendant Mrs. P. de Meza is the tenant and occupier of Whitefriars.

The Powell-Cotton Hampstead estate was the subject of a deed of settlement dated December 18, 1865, and the trustees of the settlement by a deed of conveyance dated January 29, 1885, conveyed Whitefriars to Mr. J. Mansbridge, and by a deed of conveyance dated March 19, 1885, conveyed to him also Holmleigh, and in each of those conveyances Mr. J. Mansbridge covenanted for himself, his heirs, and assigns with the settlement trustees "not to use, occupy, or permit to be used or occupied the said messuage or dwelling-house for the purpose of any trade or manufacture or for any other purpose than a private residence."

Mr. P. H. G. Powell-Cotton is now the tenant for life in possession of the Powell-Cotton Hampstead estate.

In July, 1923, the defendant Mrs. Priscilla de Meza, with the privity and permission of the defendant Mr. N. M. Sheldon, opened a nursing home for chronic invalids at Whitefriars. The plaintiffs alleged that the carrying on of the nursing home was a breach of the covenant contained in the conveyance dated January 29, 1885, and was a serious annoyance to Mrs. Kate Flatau and to the occupiers of the other houses in Chislett Road, and that if it was continued the value of Holmleigh and of the parts of the Powell-Cotton Hampstead estate remaining unsold would be greatly depreciated.

Defendants, by their defence, admitted that the houses in Chislett Road were very large. The defendant Mrs. P. de Meza, in her defence, alleged that she carried on at Whitefriars a general nursing home for the reception of surgical cases and of persons who were suffering from non-infectious illness, and she denied that it was a serious or any annoyance to Mrs. Kate Flatau or to the occupiers of the other houses in Chislett Road.

The defendants contended by their defences that if it was a breach of the covenant in the indenture of January 29, 1885, which was not admitted, there had been such a change in the general character of the neighbourhood, or, alternatively, in the use to which most of the houses in Chislett Road had been put, the object for which the covenant was entered into had completely disappeared.

Plaintiff and her husband gave evidence, and said the nursing home was a great nuisance to them. They could see from their bedroom window the patients being washed and dressed and walking in the garden. One old lady who used to walk in the garden was always shaking all over. The effect of having the nursing home next door was very depressing.

The defendant stated that she advertised a month before going into possession of Whitefriars that a nursing home would be set up there. She did not take infectious cases, but she would take all medical and surgical cases, including mental cases. She ascertained before she took possession that in the road and neighbourhood there was a convent school and boarding houses. Her home was licensed by the London County Council, and there was no notice-board or anything outside the home to show that it was carried on as a nursing home.

Mr. Sheldon, a surveyor, stated that there was at present no demand for large houses. This neighbourhood or locality had entirely changed, many of the large houses being converted into maisonettes.

His lordship, after hearing long legal arguments, gave judgment. He said there was no dispute that the plaintiff Mr. Powell-Cotton was entitled to the benefit of the covenant and that the defendants acquired their respective estates in Whitefriars with full notice of that covenant. Further, it was clear that the carrying on of the nursing home, even, as it was admitted, in a perfectly proper manner, was nevertheless a breach of the covenant, and the only question was whether there had happened anything which would make it inequitable to enforce the covenant against the defendants. The question was whether there was a general or common scheme for the laying out of this part of the settled estates, and, if so, there was the further question whether there had been such a change in the circumstances as to render the enforcement of the covenant inequitable. He thought Chislett Road was still a road for private residence only, and he could not therefore hold that the covenant had been waived so far as it concerned other houses. He must therefore grant the injunction, the defendants to pay the costs of the action. He would stay the injunction for three months to allow the defendants to decide whether they would appeal. They might also apply for a further stay to secure other premises.

R.I.B.A. Final Examinations

Alternative Problems in Design

Instructions to Candidates.

1. The drawings, which should preferably be on uniform sheets of paper of not less than imperial size, must be sent to the Secretary of the Board of Architectural Education, Royal Institute of British Architects, 9 Conduit Street, W., on or before the dates specified below.

2. Each set of drawings must be signed by the author, and his full name and address, and the name of the school, if any, in which the drawings have been prepared, must be attached thereto.

3. All designs, whether done in a school or not, must be accompanied by a declaration from the student that the design is his own work, and that the drawings have been wholly executed by him. In the preparation of the design the student may profit by advice.

4. Drawings for subjects (*a*) are to have the shadows projected at an angle of 45 deg. in line, monochrome, or colour. Drawings in subjects (*b*) are to be finished as working drawings. Lettering on all drawings must be of a clear, scholarly, and unaffected character.

Subject LXXIII.

(*a*) A design for an entrance hall, staircase, and members' room of a club in a large city. The members' room is to be 2,500 ft. super., and to be situated on the first floor. The entrance hall is centrally beneath this with rooms on each side which should not form part of the design.

The long side of the members' room is on the street, and the staircase is at the back, approached through the entrance hall.

Drawings required: Two ⅛-in. scale plans. Two ⅛-in. scale sections. One of the sections to be longitudinally through the members' room and the entrance hall looking towards the staircase. The other section to be a cross-section showing the members' room, entrance hall, and staircase. The scheme of decoration is to be shown.

(*b*) Working drawings for design subject No. LXXI (*a*) (a cemetery chapel).

The design for the cemetery chapel may, after it has been approved, be re-submitted with the addition of ⅛-in. scale ground and foundation plan, ½-in. scale longitudinal section, ½-in. scale transverse section, ½-in. detail of part of front.

Subject LXXIV.

(*a*) A design for a school of architecture in a large provincial town. The school is to be erected on a corner site of 40 ft. by 70 ft. with buildings adjoining on both streets. It is intended to accommodate about fifty to sixty students.

The accommodation to consist of studios including one for freehand and life drawing, a small library, lecture room, a room for building construction demonstrations, principal's and staff rooms, office. Lavatory and cloakroom accommodation for both sexes should be provided. Also an exhibition hall which may or may not be combined with the entrance hall.

Drawings required: ⅛-in. scale plans, sections, elevations.

(*b*) Working drawings for design No. LXXII (*a*) (tea house in a public park), provided the design has been approved. The drawings submitted under (*a*) to be submitted together with ⅛-in. scale ground and foundation plan. One ½-in. scale elevation. One ½-in. scale section.

Subject LXXV.

(*a*) The tomb of a great man in the nave arcade of a Renaissance cathedral. The piers are 25 ft. centre to centre.

Drawings to ½-in. scale sufficient to explain the design are required.

(*b*) Working drawings for design No. LXXIII (*a*) (entrance hall, staircase, and members' room of a club), if the design has been approved.

The drawings submitted under (*a*) to be submitted together with one ½-in. scale plan of ground floor, two ½-in. scale sections, including both floors.

Subject LXXVI.

(*a*) A design for an office building for a porcelain manufacturing company. The office building should be situated adjoining the main factory, and furnish accommodation for clerical staff and a store room for finished products.

The accommodation should comprise an entrance hall, waiting room and enquiry office, two large offices for clerks, head clerk's office, offices for managing director, secretary, chief accountant and his clerks. In addition, a small drawing office and room for head draughtsman, board room and ante-room should be provided. Lavatory accommodation, cloakrooms, etc., for both sexes. In addition, there must be a well-lit exhibition hall suitable for showcases and a display of porcelain. This hall should be about 4,000 ft. super. It is suggested that the building be on two floors.

Drawings required: ⅛-in. scale plans, two elevations and section through office and exhibition hall.

(*b*) Working drawings for design No. LXXIV (*a*) (a school of architecture).

The design for the school of architecture may, after it has been approved, be re-submitted with the addition of one elevation and one section to ½-in. scale.

Subject LXXVII.

(*a*) A boys' club in a poor neighbourhood.

Site.—A rectangular corner site, 55 ft. by 35 ft., with adjoining buildings on both streets which extend back 24 ft. from the building line.

The whole of the ground floor may be built over and a basement formed, but there are no rights of light over adjoining properties.

Requirements.—Junior club room and quiet room. Senior club room and quiet room. Gymnasium, bathroom (shower baths), drying room for towels, kitchen, store room for camp and games equipment, heating chamber and fuel store, two lavatory basins and two w.c.'s for each club room. A hand lift should serve all floors, and the kitchen—about 280 ft. super.—should serve the club rooms either directly by a bar counter or by the lift. The quiet rooms should each be about 220 ft. super. The cornice or eaves should not be more than 30 ft. above pavement level.

Drawings required: Plan of each floor, two sections, two elevations, to ⅛-in. scale.

(*b*) Working drawings for design No. LXXV (*a*) (tomb for a great man), provided the design has been approved.

The drawings submitted under (*a*) to be submitted together with full-size sections of mouldings showing jointing, etc.

Subject LXXVIII.

(*a*) A design for a small shop.

A shop building suitable for a draper's business is to be erected on a site measuring 90 ft. by 50 ft. One side of the site, measuring 90 ft., adjoins other buildings—the remaining sides abut on to streets. The floors consist of basement, ground, first, second, and third floors.

Drawings required: Three plans, two elevations, one section, to ⅛-in. scale.

Detail of front elevation showing shop fronts and principal entrance to ½-in. scale. Construction of the shop fronts must be clearly shown.

(*b*) Working drawings for design No. LXXVII (*a*) (an office building for a porcelain manufacturing company), provided the design has been approved. The drawings submitted under (*a*) to be submitted together with one elevation and one section, to ½-in. scale.

Dates for Submission of Designs in 1924.

Subj. LXXIII, February 29.
Subj. LXXIV, April 30.
,, LXXV, June 30.
,, LXXVI, August 30.
,, LXXVII, October 31.
,, LXXVIII, Dec. 31.

The Gold Medal for Sculpture

At the general meeting of the Royal Society of British Sculptors, Sir Hamo Thornycroft, F.R.S.B.S., R.A., was unanimously elected to receive the gold medal "for distinguished services to sculpture," which has recently been instituted. The presentation is to be made at the annual dinner of the Society towards the end of January.

R.I.B.A. Notes and News

Intermediate Examinations.

The time allotted for the optional subject C.3 (Design) will be increased, at all future examinations, from 4 hours to 6½ hours, i.e., from 10 a.m. to 1.30 p.m., and 2.30 p.m. to 5.30 p.m., instead of from 10 a.m. to 2 p.m., as previously.

Prizes and Studentships, 1924.

The award of the R.I.B.A. Prizes and Studentships for 1924 will be announced at the general meeting to be held on Monday, January 21, in the meeting-room of the Royal Society, Burlington House, Piccadilly, W.1. The exhibition of the works submitted will open on Tuesday, January 22, in Gallery No. VI at the Royal Academy of Arts, Piccadilly, W.1, and close on Monday, February 4. The Exhibition will be open daily, free to the public, between the hours of 10 a.m. and 6 p.m. (Sundays excluded).

Cost of Building Materials

The Ministry of Health issued last week the third interim report of the Inter-Departmental Committee appointed to survey the prices of building materials.

It states that since April last fluctuations in prices of bricks had been comparatively small. In seven instances common bricks were quoted at a higher figure in the returns for October than they were in April, the increase in six cases varying between 2s. 6d. and 3s. 6d. per 1,000. In two instances decreases were shown. The Committee say they have not had brought to their notice any organized effort to raise prices by means of the operation of trade combinations, trusts, or agreements. Owing to the difficulty of obtaining immediate delivery of British-made bricks, in some quarters supplies had been obtained from abroad. The Fletton Association had only reduced their minimum prices since the appointment of the Committee by an amount approximating to the reduction in railway rates, and the Committee express the opinion that the Association might well take into consideration the question of a general reduction in their price.

With regard to light castings, the report mentions that there had been a considerable expansion in house building generally, carrying with it as a necessary consequence an increased demand for light castings, such as rain-water goods. There is, the Committee say, no longer justification for the maintenance of the existing prices by the National Light Castings Association.

Sir Halford Mackinder, the Chairman of the Committee, in his monthly report, which is appended, states that a further advance in lead has been notified, while timber also, on the average, has increased in price. Common bricks have risen 3s. 6d. per 1,000 at Edinburgh, and, on the other hand, facing bricks in that district had fallen 7s. per 1,000. From Manchester a fall from 65s. to 60s. per ton was reported in British Portland cement. In the remaining materials no very appreciable change had occurred.

Competition News

A Competition of Industrial Designs.

In order to encourage the study of designs for industrial purposes, the Royal Society of Arts have decided to hold annual competitions. The first competition will take place in June, 1924. It will be open to two classes—(*a*) Students in British Schools of Art, and (*b*) all British subjects. The subjects of competition will be the same for both classes of candidates, but in considering the work the judges will bear in mind to which class the competitors belong. The competition will be divided under the following heads: (1) architectural decoration; (2) textiles; (3) furniture; (4) book production; (5) pottery and glass; (6) miscellaneous. The judges will be appointed by the Council of the Royal Society on the recommendation of the various sectional committees. Over £1,000 will be offered in travelling scholarships and money prizes. The competition will be of an extremely practical nature, and the successful candidates will be expected to show that, in addition to possessing marked artistic ability, they are also familiar with the processes of the trades for which their designs are intended. The fund to provide scholarships and prizes has been contributed almost entirely by manufacturers who are taking a warm interest in the movement. The Society will also confer a diploma on those candidates whose work reaches a very high standard of distinction; and it is hoped that this diploma will soon come to be known as conferring on its possessor a definite and generally recognized status as a designer of the first rank. After the awards have been made, a number of selected designs will be exhibited, by the kind permission of the director, at the Victoria and Albert Museum, South Kensington, and subsequently at suitable centres in the provinces, where they will be brought to the notice of manufacturers likely to be specially interested in them. Intending competitors must communicate between May 1 and 15 with the secretary of the Royal Society of Arts, who will supply them with the necessary forms, labels, and instructions for the dispatch of their designs to the Victoria and Albert Museum. No designs must be sent to the Royal Society of Arts.

List of Competitions Open

Date of Delivery.	COMPETITION.
Jan. 1	The Imperial War Graves Commission invite architects who served during the war as members of the Military, Naval, or Air Forces raised in any part of the British Empire to send in their names for admission to a competition for the designing of memorials to the missing to be erected by the Imperial War Graves Commission at Bethune, Armentières, Cambrai, and Soissons. Applications for particulars of premiums and other regulations from those desiring to compete are to be addressed to the Secretary (Works Branch), Imperial War Graves Commission, 82 Baker Street, London, W.1, and must be received there not later than January 1, 1924, and must be accompanied by a statement giving particulars of the war service and professional career of the applicant and clearly stating which of the memorials it is desired to compete for. Deposit, two guineas for each set of plans. The Assessor is Sir Aston Webb, K.C.V.O., P.R.A.
Jan. 5	Memorial Building and Tower, Dudley. The Council of the County Borough of Dudley invite Competitive Desigus from duly qualified Architects for the "Brooke Robinson Memorial" Building and War Memorial Tower comprising a public hall, coroner's court, small museum, and a new sessions court. Premiums £300, £200, and £100. Mr. W. Curtis Green, A.R.A., F.R.I.B.A., Assessor. Conditions of competition, together with a copy of the site plan, can be obtained on application to Mr. E. W. Tame, Town Clerk, Town Clerk's Office, Dudley, with deposit of £2 2s.
Feb. 1	Proposed Concert Hall and Public Baths for Newcastle-upon-Tyne. Premiums £750, £250, and £100 respectively are offered, the first premium to merge into the commission or other payment to be made to the author of the successful design. Assessor, Mr. Alfred W. S. Cross, M.A. Apply, with deposit of £2 2s., to Mr. A. M. Oliver, Town Clerk, Town Hall, Newcastle-upon-Tyne.
Feb. 14	Proposed New Cottage Hospital for Durham. The Holmside and South Moor Collieries Welfare Scheme Committee invite designs for a new cottage hospital, and premiums of £75, £50, and £25 respectively are offered. Mr. T. R. Milburn, F.R.I.B.A., is the assessor. Apply not later than December 26. Joint Secretaries, Welfare Scheme Committee, South Moor Colliery Co., Ltd., South Moor, Stanley, S.O., Co. Durham.
Feb. 29	Architects practising in the West Riding of Yorkshire are invited to submit designs for the City of Leeds Branch Public Libraries, Cardigan Road, Burley, and Hough Lane, Bramley. Premiums, £35, £20, and £15. Assessor, Mr. Percy S. Worthington, M.A., Litt.D., F.R.I.B.A. Apply Mr. Robert E. Fox, Town Clerk, 26 Great George Street, Leeds, with deposit of one guinea.
April 3	A competition has been promoted by the Canadian Government for designs for a full-length statue of the late Sir Wilfrid Laurier to be erected in the grounds of the Parliament Buildings, Ottawa. The winner will be commissioned to carry out the work. Second premium, $1,000. Apply the Secretary, Public Works Department, Room 784, Hunter Buildings, Ottawa.
April 26	At the instance of the British Drama League the proprietors of "Country Life" have promoted a competition for desigus for a national theatre. The proprietors of that journal will bear the cost of building a complete large-scale model of the first prize design, to be shown at the British Empire Exhibition. Jury of Award: Mr. J. Alfred Gotch, President R.I.B.A.; Sir Edwin Lutyens, R.A., F.R.I.B.A.; Sir Lawrence Weaver, K.B.E., F.S.A.; Professor C. H. Reilly, F.R.I.B.A.; Professor Hubert Worthington, A.R.I.B.A.; Mr. Harley Granville-Barker; Mr. Albert Rutherston. Mr. Geoffrey Whitworth, Hon. Secretary. First prize, £250; second prize, £100; for the best model sent in with a design, £25; for the best perspective view of the interior of the larger auditorium, £25. Desigus are invited from architects, or architects associated with decorative designers, of either sex, who must be British born or of British parentage. The work of such architects resident in the British Dominions will be especially welcomed. Apply Editor, "Country Life," 20 Tavistock Street, Covent Garden, London, W.C.2.

The Treatment of Wall Surfaces

Architects and the public have begun to realize the value of the plain wall surface, and tradesmen have necessarily begun to cater for the modern taste. Nevertheless, even after taking into consideration the fact that one is expected to judge from a panel of 6 sq. ft. the effect of a particular medium over an area of 50 sq. ft., or even of 100 sq. ft., the exhibits at the A.A. illustrating methods of dealing with the decoration of walls are, in many cases, as disappointing as they are varied.

Messrs. Roberson show a very nice panel and cornice in red lacquer, with black and gold ornament very delicately painted. This, although imitation, is quite as good in effect as the real thing, and can therefore be used quite safely without giving the impression of a cheap striving after the unobtainable. As a whole the exhibits of this firm are very good indeed. Messrs. Roberson have used small panels with the angle of a bolection moulding, and in some cases they have shown a string course as well; their colours are well chosen, and they have illustrated the value of "scrumbling" with considerable success.

Messrs. Gaze and Son show a piece of stencil work, of metallic paint on a dark-blue velvet, which could be used with great effect as a cheaper substitute for tapestry in a restaurant or theatre. The "colour-glazing" series by Messrs. Gaze is also very pleasant, the three best examples being by the use of "stippling," "clouding," and by their "cloudy effect." The colouring is very attractive, and the ground colour has apparently been sprayed with a slightly darker tone, so that there is a slight unevenness and variety, while retaining the one colour. This should be a very popular method for flat decoration, either on large or small surfaces.

Messrs. Mander Bros. exhibit a panel of "Vernasca," and one of their "Rubber-paint," but they have for some reason chosen rather uninteresting colours, so that the excellent finishes of these two mediums are not seen at their best value.

Messrs. Morris & Co. have some material of the "Lincrusta" type, which has been used in the National Gallery, and Gaze's "metallic effects" are quite pleasing.

The main criticism of the exhibition is that very few of the people concerned seem to have realized that there are wall surfaces in small rooms as well as in palaces; if more attention were devoted to this point, then the general public might be educated to an appreciation of really good colour effects.

M. L. A.

Good and Bad Manners in London Architecture

Mr. A. Trystan Edwards, M.A., A.R.I.B.A., in delivering a lecture on "Good and Bad Manners in London Architecture" at the Royal Society of Arts, gave an analysis of the nature of urbanity in architecture. This urbanity, he said, was nothing more or less than good manners, and the lack of it was bad manners. The argument was advanced by means of lantern slides giving examples of the various ways in which buildings could either obey or disobey the canon of manners.

First a city of the old-fashioned type in which public buildings dominate over shops, offices and private dwellings was contrasted with a city in which this social hierarchy no longer obtained. Objection was taken to skyscrapers overtowering cathedrals and town halls, and to shops with domes and steeples, on the ground that such buildings showed a spirit of self-assertion which made impossible the dignified aspect of the city as a whole.

Urbanity in architecture consisted not only in the deference which one class of structure may owe to another class, but in the deference it should pay to the street of which it formed a part. Good and bad examples of town and country houses were shown, and the use and abuse of uniformity in design were discussed with reference to both architecture and dress.

Other kinds of bad manners in buildings, such as the disregard for the public which was shown in carelessly designed backs of houses, the lack of harmony between the various parts of a single design, and the over-emphasis of constructional features, received attention. Reference was also made to the discourtesy of many modern commercial buildings, which ignored the scale of the human figure and belittled the passer-by as if with direct intent to make him feel insignificant. Types of modern shops were contrasted unfavourably with the buildings of old Regent Street. In conclusion the view was expressed that the cause of good manners in architecture was best served by a critical public opinion which, through agencies such as the London Society, could powerfully assert itself and ensure that the civic ideal would receive recognition.

Concrete Roads

At the second joint meeting of the session of the Metropolitan District of the Architects' and Surveyors' Assistants' Professional Union and the Associates' Section of the Institution of Municipal and County Engineers, held in London, a paper was read by Mr. H. Stapleton Graves on "Notes on Concrete Roads." Mr. Graves stated that certain engineers considered that a concrete road was a discovery of the last few years, despite the fact that a concrete-surfaced road was laid in Blackwood Crescent, Edinburgh, in 1873. Concrete had been used as a foundation for wood blocks and granite setts for very many years. For footway and floors its first use was unknown. Concrete-surfaced roadways were being used for the heaviest traffic. Considerable lengths had been laid at the London Docks, where extremely heavy loads must be allowed for, while in other parts of the country regular traffic from 1,500 to 2,000 tons per day was being satisfactorily carried.

He suggested that where slow traffic was to be anticipated, even though it might be of heavy axle weight, a concrete surface would be satisfactory. Such a surface might be quite suitable where the traffic was mounted on pneumatic tyres, even though it was fairly heavy and fast, but when a shattering traffic was to be anticipated a proper wearing and cushioning surface was imperative. Two stretches of reinforced concrete carriageway—one composed of granite and the other of slag—were recently examined after a period of two years, and it was found that whereas the steel in the granite was sound and bright, the steel embedded in the slag was badly corroded.

Turning to specific consideration of a concrete foundation with a concrete wearing surface, several important considerations arise, and doubtless, whatever bed was available, the concrete would be laid as two-coat work. The bottom would be composed of any reasonable local materials broken to pass a 2-in. ring of a depth to suit the traffic expected, while the top coat would be 2 in. thick. This coat should be composed of granite chippings aggregate, so as to provide the hardest-wearing surface possible. Some authorities recommended that the whole of the aggregate for this top course should be of granite chippings from ¾ in. gauge, down to $\frac{1}{16}$ in. gauge dust, so proportioned as to give a close mix, while others recommended ¾ in. to ½ in. gauge granite chippings or ¾ in. to ¼ in. gauge granite chippings. A mix of about 3 to 1 was regarded as satisfactory. Where the whole depth was brought up in one coat it needed very careful proportioning, so as to get a dense body with a hard surface, and the proportion of aggregate to cement should be about 4½ to 1.

It had been the experience of those having charge of concrete floors in factories where there was heavy traffic that wear took place, and dusting up of the surface naturally followed. It would seem, therefore, that some form of cement hardener should be applied to the actual surface to assist the cement to resist the wear and tear of iron-shod wheels.

The Royal Scottish Academy

At the Assembly of the Royal Scottish Academy in dinburgh, a letter was read from Sir James Lawton ingate, the president, intimating his resignation owing to l-health, and asking to be placed on the retired order of embership.

The Manchester Society of Arts

The annual dinner of the Manchester Society of Archi-ects was held under the chairmanship of the president, r. Francis Jones, F.R.I.B.A.

Mr. Paul Ogden said he was weary of hearing people ecry the architectural features of the city. Manchester ad been told to remove the Albert Memorial. He would firm that there was not a better memorial in the country, nd it was the work of a Manchester man. A better theatre ould not be found than the old Theatre Royal, nor a better t gallery than Barry's building in Mosley Street. And ere were many other fine things if people only had the yes to see and the intelligence to appreciate them. Criticizing the changeable mind of the Ministry of Health on e subject of housing, he said he was ready to admit that e Ministry had given us open spaces and the valuable udor Walters report. But it had interfered with Manhester schemes in a manner which indicated that it did ot know its mind, and he felt bound to say that Manchester ould manage these things for itself much better than Lonon could.

The Lord Mayor (Alderman W. T. Jackson) said, on the eneral subject of architecture, that good architecture as a vic amenity had been somewhat neglected. Most big ties now had an architect's department, and the question ose: What was the legitimate sphere of activity of such department? Personally, he thought it should be rather n administrative and advisory department than one to hich people should look for creative genius.

Mr. J. A. Gotch, P.R.I.B.A., ventured to suggest that Manhester should follow the example of Birmingham and form civic advisory committee, to consider questions relating to e architectural amenities of the city and similar matters.

he Origin and Use of the Corinthian Capital

Sir Banister Fletcher's lecture at the Central School Arts and Crafts referred to the study of the origin and use the Corinthian Order, which was Greek by birth and oman by adoption. The Greek love of the beautiful and eir gift for developing art forms, he said, tempted them, r a time, away from the sturdy Doric and the simple and ighter Ionic to that more varied and ornate combination nature-forms which became known as Corinthian. oric and Ionic were both tribal names, but Corinthian bore o such meaning. Some of these early capitals were in ronze, a metal worked in Corinth by a certain Callimachus, nd thus known as Corinthian bronze—much as we call a ertain product "Sheffield plate." So the material may have ven the name to the style. Sir Banister Fletcher condered that, as to origin, it was hardly likely that the new rder was suggested by the anthemion necking of the Ionic apitals of the Erechtheion, because that did not account r the altered shape and increased height. It was more robable that Greek artist-craftsmen, who ever sought some ew thing, seized upon the Egyptian lotus and papyrus rototypes at Karnak and Philæ, and from them reproduced e bell-shaped capital, sheathed in tiers of carved acanthus aves and curling calices. Greek imagination was strong nough to create the Order, but Greek love of simplicity as stronger, and the Order was little used by that nation, xcept in small buildings, like the Choragic Monument to ysicrates, and the Athenian merchant's "Tower of the inds." It made, however, later on, a stronger appeal to e Romans, who were then making use of beautiful forms building to emphasize their imperial power.

Contemporary Art

The Lefèvre Galleries.

W. Lee-Hankey's pictures have gained a wide recognition and so have his etchings, but in this exhibition a new phase of his artistic activities is made known. Half the show consists of water-colour sketches of French subjects which the artist finds to his hand near his studio at Etaples. They are simple and homely, and observed in a direct manner which imparts an intimate charm to them. The exhibition is a representative one including some forty numbered prints as they appear in Mr. Martin Hardie's catalogue and to these are added twenty others, including his latest work, which collectors will be glad to see here. There is such a decorative quality in most of the artists etched work; a richness approximating to the quality of colour, that not only collectors for the portfolios, but others, who desire framed works for the adornment of their rooms, will be equally eager to secure them.

The Fine Art Society.

A charming collective exhibition of water-colours by "thirty artists of repute," is a timely show, which is added to very satisfyingly and brilliantly by the sketches in oil and water-colour by Bertram Priestman, and oil paintings of "Field and Farmyard," by Fred Hall, added to which there is a remarkable collection of hand-wrought silver by the Swedish sculptor and craftsman, George Jensen, a member of the Société Nationale des Beaux-Arts; a wonderful show with a very wide range of articles, all admirably fabricated by a real master in metal work.

Swedish Arts and Crafts.

At the Gieves Gallery there is a further exposition of Swedish craft-work, very largely made by women-artists, and including not only metal, but glass, pottery, textiles and miniatures. A very handsome silver-gilt cup by Ferdinand Boherg and a cup and a silver dish by Helge Lindaren, indicate the fine character of the metal-work; the glass is lent by Heals, of Tottenham Court Road, the hard-fired pottery vases by B. Wissleu are good ware, and the tapestry-woven carpets by Ameli Fjæstad, forming wall-hangings after cartoons by G. A. Fjæstad, are of exceptional interest, as showing the revived use of woven wall coverings common in mediæval times. There are some excellent cloths from ordinary weaving looms shown here for this purpose, and the display of lace is most pleasing.

The Arlington Gallery.

Craft-work in the form of bookbinding and casemaking is to be seen in the adjoining gallery, where Rosamond Philpott exhibits her craft in actual working, and a large number of very choicely bound books in octavo, quarto, and folio. Her designs are simple and admirable and well within the essential traditions of her beautiful artistic industry. On the walls are wood-cuts by C. C. Webb, of animal and other subjects, which are sound craft-work, while the craftsman becomes the complete artist in the fifty water-colour drawings of Devon, Cornwall, and the Midlands; work of a capable character offered at the reasonable prices that I should like to see more common in our exhibition galleries.

The Walker Galleries.

Master of Foxhounds and celebrated author, E. E. Somerville is artist too, as many will remember who saw her one-man show in 1920. Her present exhibition contains no less than 130 items; an extraordinary revelation in itself, but considered in relation to the artist's other activities, nothing short of phenomenal. For these sketches and drawings in oil and water-colour are often remarkably good in themselves; capably painted, sometimes indeed, brilliantly so, as in the two studies of rocks and sea "Dinny Donovans," and "Reene Point from Poulghurrum." They are mostly of Irish subjects, and are evidently labours of love, so affectionately are they observed, an observation only to be expected from the accomplished partner in literary work of "Martin Ross."

KINETON PARKES.

The Week's News

£16,300 Scheme for Harrogate.

Harrogate Corporation are applying for sanction to borrow £16,300 for purchasing 66 acres of land on Harlow Moor.

A London Hospital Extension.

An isolation block is to be added to the Royal Waterloo Hospital at an estimated cost of £4,000.

The Royal Society of Portrait Painters.

The Royal Society of Portrait Painters have elected to membership Messrs. Archibald Barnes, W. G. de Glehn (A.R.A.), Francis Dodd, and J. D. Revel.

Change of Address.

Mr. Williams-Ellis, of 22 South Eaton Place, is moving his main office to the old "Viscount Milton School," 22b Ebury Street, S.W.1, on January 15.

Monifieth Gas Works Extension.

The Monifieth Town Council have agreed to increase the number of retorts at the Gas Works by five and extend the premises, at an estimated cost of £1,000.

Burnley Nurses' Home Scheme.

The Union Bank of Manchester, Ltd., Burnley, have offered to the Burnley Guardians a loan of £12,000 to defray the cost of extensions to the nurses' home.

A New Chadderton School.

The plans submitted by Messrs. Taylor and Simister, F.R.I.B.A., of Queen Street, Oldham, for the building of the North Chadderton senior elementary school, have been accepted by the Education Committee and passed by the Council.

The Athenæum, Liverpool.

The Athenæum Club and Library, in Church Street, Liverpool, founded 125 years ago, is to be demolished for street widening. It is understood that the club will be rehoused on the St. Peter's site, at the corner nearest the old Blue Coat School.

New Technical College for Wolverhampton.

The proposals for the erection of the engineering block of the new Technical College at Wolverhampton have been confirmed by the Town Council. The part of the college it is proposed to proceed with will, it is estimated, cost nearly £40,000.

Mumbles Sea Front Improvements.

The Swansea Parks Committee are recommending the Council to adopt the scheme of the borough architect (Mr. Ernest Morgan) for the erection of a public shelter, promenade, with shop-fronts, etc., at Langland Bay, Mumbles, at a cost of £7,058.

Fellowship of the British Empire Exhibition.

A Fellowship has been instituted in connection with next year's British Empire Exhibition, with the Prince of Wales as president and first member. It is hoped that the Prince of Wales's lead will be followed by all interested in the development of the Empire.

City Streets to be Widened.

The City Corporation have resolved to widen St. Martin's-le-Grand to 80 ft. from Newgate Street and Gresham Street; Gresham Street from St. Martin's-le-Grand to Foster Lane to 50 ft.; and Cheapside, in front of Sweeting's Corner to the junction with St. Martin's-le-Grand, to about 95 ft.

Trent Bridge to be Rebuilt.

Nottingham Corporation has decided to rebuild the Trent Bridge at a cost of £130,000, the Treasury contributing 60 per cent. and the County Council £10,000, leaving the city to find the remainder. The new bridge will be 80 ft. wide, and open a new main artery north and south.

Radley College Extensions.

Dr. T. H. Archer Houblon, chairman of the governing body, laid the foundation-stone of a new house at Radley College, Berks. This is the first house built since 1903. The design allows for twenty studies, large class and recreation rooms, separate cubicles, and the master's private house. The two architects are old Radleians.

Yeovil Housing.

The Yeovil Town Council have received the sanction of the Ministry of Health for loans in connection with the Westland housing scheme. These included £1,870 for the purchase of land and £25,360 for the erection of fifty-eight houses. The seal of the Council was affixed to a contract with a Weymouth firm of builders for the erection of the dwellings, which are of the non-parlour type.

The Health of Sir William Joynson-Hicks.

Sir William Joynson-Hicks, the Minister of Health, as the result of overwork for many months past, has been ordered by his medical advisers to take a complete rest before Parliament meets, and has accordingly, with the assent of the Prime Minister, left with Lady Joynson-Hicks for Bordighera. Only urgent letters and matters of ministerial importance will be forwarded to him.

Bridlington Sea Wall.

At Bridlington a Ministry of Health inquiry was held into the application of the Corporation to borrow £54,000 for the south side of the new sea wall under the unemployment scheme and for £6,500 for the purchase of property in Quay Road for municipal offices. The only opposition was by two south side owners, who objected to the builders carting away shingle from the beach.

Atmospheric Corrosion.

The first experimental report to the Atmospheric Corrosion Committee of the British Non-Ferrous Metals Research Association was presented and discussed at a meeting of the Faraday Society held on December 17 in the rooms of the Chemical Society, Burlington House, W.1. The report described the very comprehensive series of field tests and laboratory experiments carried out by Mr. W. H. J. Vernon, B.Sc., on behalf of the committee.

Building Trade Fears.

The annual report of the Association of Building Trade Employers at Birmingham points out that although the arbitration of Sir Hugh Fraser had avoided a cessation of work, it had not brought about a settlement that was likely to be maintained. The outlook could only be regarded with misgiving. The year had concluded with an application from the operatives for increased wages, and it had to be recognized that the number of skilled men available was totally inadequate.

Mr. Alfred C. Bossom, F.R.I.B.A.

Mr. Alfred C. Bossom, of New York, has been elected an F.R.I.B.A. by the vote of the Council. Mr. Bossom, who has practised in New York for some twenty years, has retained his British citizenship and is keenly interested in the welfare of British architecture. He has recently founded, under the control of the R.I.B.A., a travelling studentship to enable young British architects to travel in the United States and study the methods of American commercial architecture.

New Farm Institute for Carmarthenshire.

Plans are under preparation by the County Architect of Carmarthenshire, Mr. Vincent Morgan, for a farm institute at Pibwrlwyd, the County Council's demonstration farm near Carmarthen. The cost is estimated at £10,000. The laboratory (with equipment) and lecture room are estimated to cost £3,000; the dairy (exclusive of apparatus), £2,000; and the hostel £5,000. It is understood that 75 per cent. of the cost is being borne by the Ministry of Agriculture.

The Victoria and Albert Museum and the Bethnal Green Museum.

The Victoria and Albert Museum and the Bethnal Green Museum will be closed on Christmas Day. At the former, during the Christmas holidays (December 21 to January 7, inclusive) lecture tours of the galleries for young people will be made, as in previous years, by Miss E. M. Spiller, and other members of the Art Teachers' Guild, every weekday at 12 and 3 p.m., in addition to the tours conducted by the official guide. The parties will be limited to twenty visitors each as usual. The hours of opening for both museums now are: Monday to Saturday, 10 a.m. to 5 p.m.; Sundays, 2.30 p.m. to 6 p.m. Admission is free every day.

(*Continued on page* xvii.)

The Week's News—*continued.*

Central and Local Taxation: the Burden of Industry.

The preliminary report of the Federation of British Industries' Committee, appointed in February, 1923, to consider the whole question of central and local taxation and administration, was adopted at the last meeting of the Executive Committee of the Federation. In their report the committee refer to the burden of taxation upon industry; the increases in rates since 1913; the increased cost of local government since 1913; local expenditure and central control; and the need for reconsideration of the duties of local authorities; and for a committee or commission on incidence of taxation.

The Building Surveyors' Inspectors' Association.

At a general meeting of the Association, held at Stoke-on-Trent, it was resolved that the necessary steps be proceeded with for the formation of a London area branch of the Association. The chairman, Mr. W. J. Stone, M.R.S.I., of Bootle, then introduced Mr. James Wilding, F.S.I., surveyor and engineer to the Runcorn Urban District Council, who read a paper on "The Building Surveyor in Relation to Town Planning." The lecturer, in the course of his lecture, enumerated in detail the various provisions of the Town Planning Act, pointing out how the various sections affected the work of the building surveyor.

The Ancient Architecture of Western Asia.

Early in the new year Messrs. Bell will publish an illustrated volume on the ancient architecture of Western Asia. It is a continuation of Mr. Edward Bell's series of studies on the origins of architecture, in which volumes on Egyptian and Hellenic art have already appeared. This new volume will deal with Chaldæan, Hittite, Assyrian, and Persian architecture, and will embody the results of recent exploration in Anatolia and Mesopotamia. It will attempt to trace the interdependent relations of these several phases of art, and to indicate their effect on the general architectural tradition.

The Reconstruction of Lambeth Bridge.

The Improvements Committee have informed the London County Council that they are advised it will be necessary to submit to the Select Committees of Parliament, who will consider the Bill for the reconstruction of Lambeth Bridge, drawings showing the proposed architectural and artistic treatment of the new structure. In the circumstances, the Committee approached Sir Reginald Blomfield, R.A., who is prepared to collaborate with the chief engineer and architect in the preparation of the design. The Committee were of opinion that it was very desirable that the offer should be adopted, and suggested that a fee of £1,500 should be paid to Sir Reginald for his services. The recommendation was adopted.

Argentina Exhibition of Educational Materials.

The Department of Overseas Trade is informed by the British Legation at Buenos Aires that the American Academy of History (president: N. Sarmiento), is organizing an International Congress of History and Geography of America and an Exhibition of Educational materials to be held in Buenos Aires in 1924. The academy invites all scientific and geographical institutions to participate, as well as manufacturers of, and dealers in, materials concerned in the supply of educational institutions, libraries, science laboratories, etc. If the project is of interest to United Kingdom institutions or firms, further particulars of the scheme may be obtained from the secretary of the academy, Dr. A. E. de la Guardia, Academia Americana de la Historia, Buenos Aires.

L.C.C. Tramway Matters.

At the last meeting of the London County Council, Mr. Herbert Morrison, M.P., asked what was the latest attitude of the City Corporation to the proposed extension of tramways over Southwark Bridge. Mr. Matthews said that in a communication, dated December 15, the Corporation asked that in order to avoid the necessity of taking steps on standing orders the undertaking might be given that the tramways would not be proceeded with unless the consent of the Corporation was given. While the L.C.C. had agreed not to proceed with schemes adopted by it in the absence of the necessary consents, it had been assumed that the intention was that no scheme should be withdrawn, at any rate up to the second reading stage, unless the necessary consents had been definitely refused. He had, therefore, given instructions for the City Corporation to be informed that the Council would proceed with this scheme until an intimation was received from the City that it gave its consent to the scheme or that such consent was withheld.

Trade and Craft

"The Pelican."

The current issue of "The Pelican," the house journal of Messrs. G. and T. Earle, Ltd., of Hull, cement manufacturers, is full of interesting information concerning the social and other activities of the company. On the social side the company boasts a glee party, a library, a ladies' swimming club, garden section, and first aid sections and dance classes, Rugby football, and angling clubs.

Messrs. Alfred Olby's Exhibition.

Messrs. Alfred Olby, Ltd., wholesale builders' merchants, etc., announce the success of their recent exhibition of household fittings, decorative schemes, etc., held at their showrooms at King Street, Ramsgate. Over 6,000 invitations were issued, and the response far exceeded expectations; so much so, that the attendance record showed 9,650 visitors for the first seven days of the exhibition.

The Care of the Piano.

No. 117 of "A Thousand and One Uses for Gas," contains illustrations of various makes of pianos in drawing-rooms, schools of music, lesson-rooms, pianoforte showrooms, and professional artistes' studios, which show the methods adopted for keeping the pianos in good condition. Other articles and illustrations deal with the care of valuable paintings and leather-bound books. Every owner of a piano should obtain a copy of this publication by applying for it either to the local gas undertaking or to the Secretary, The British Commercial Gas Association, 30 Grosvenor Gardens, S.W.1.

A London Cinema Exhibition.

The enormous advance made in the building, furnishing, equipment, and illumination of cinematograph theatres through the past few years was typified by an interesting exhibition opened in London on December 17. This exposition—due to the enterprise of Messrs. J. Springer, Ltd., cinema equipment specialists—was held at 152, 154, 156, and 158 Wardour Street, W.1. A salon beneath the Novello concert hall was adapted at a cost estimated at something approximating £4,000 for the exposition, and the decorative scheme was unique. The exhibition included the latest and best in every branch of cinema construction and equipment.

Ozonair Pure Air Ventilation.

Messrs. Ozonair, Ltd., of 96 Victoria Street, London, S.W.1, are installing their system of pure air ventilation in the following buildings: the new premises of Messrs. Liberty & Co., Ltd., Tudor House, Argyll Place; the premises of Messrs. Style and Mantle, Ltd., and Messrs. C. and A. Modes, Ltd., in Oxford Street; underground conveniences of the City of London Corporation and the Chelsea Borough Council; the public fruit saleroom erected from the designs of Messrs. T. Wainwright and Sons, architects, Liverpool; the bank premises for the Société Générale de Belgique, Brussels; and the new premises for the Bon Marché, Brussels.

The "Kingsway" Watertight Wiring System.

We have received from the General Electric Company, Limited, of Magnet House, Kingsway, W.C.2, a copy of the recently issued second edition of their catalogue, section W.2, dealing with the "Kingsway" wiring system. The catalogue is greatly enlarged, and contains a section dealing with an entirely new feature, namely, the "Kingsway" watertight wiring system. This has been designed to meet the demands for a reliable watertight surface installation. In addition to the special details required for use in conjunction with the "Kingsway" wiring system, the list contains a useful selection of such details as fixing screws, Rawl plugs, and also accessories such as main switches and fuses, lampholders, plugs, and switches, and should therefore be of the utmost value to the contractor, as it contains in a compact form practically all the material used for carrying out this class of work.

Master Heating and Domestic Engineers.

The December issue of the "Journal of the National Association of Master Heating and Domestic Engineers" contains, among other features, special articles on "Technical Education in Heating and Domestic Engineering," by Ernest S. Beal; "Notes on a Short Visit to America," by Stanley J. Benham; Shipping, Engineering Machinery Exhibition—Lecture on the "Modern Principles of Heating," by Mr. Kenneth Gray; and

(*Continued on page* xviii.)

Trade and Craft—*continued.*

"Water Fittings and Regulations"—The National Association of Water Users, by Alfred Gray. Mr. P. M. B. Grenville, a Vice-President of the Association, has been elected to the Presidentship of the Institution of Heating and Ventilating Engineers for 1924. Mr. Grenville's services to the industry are many, as he is Chairman of the Labour and Wages Committee of the Association, and Vice-Chairman of the Heating and Domestic Engineering National Joint Industrial Council.

The Ruston Thermax Boiler.

Messrs. Ruston and Hornsby, Ltd., of Lincoln, have issued a leaflet describing their patent Thermax boiler; the outstanding features of which are claimed to be high efficiency, large firebox heating surface, rapid water circulation, accessibility, low maintenance costs, and a large steam space. Before placing the boiler on the market the firm had one under observation in their own works for nine months working continuously (with the exception of week-ends), on an overload of 30 per cent. At the end of this period, it is stated, the boiler was found to be in as good a condition as when first installed. The boilers are designed to comply with Board of Trade requirements, and are equipped with a full set of high-class steam, water, and furnace fittings. They are constructed in standard sizes ranging from 2 ft. 9 in. diameter by 6 ft. 9 in. high to 5 ft. 6 in. diameter by 14 ft. high. The boiler is claimed to be specially suitable for all cases where space is a consideration and where reliability, accessibility, and economy are essentials, and it is particularly well adapted for workshops, laundries, factories, and other buildings.

"Relay" Automatic Exchanges at Wembley.

All parts of the Empire will be connected by telephone at the British Empire Exhibition at Wembley next year. A system of internal communication is being installed by the Relay Automatic Telephone Company, Limited, to connect all the Dominions and Colonies with each other and with the exhibition headquarters. They are arranging for over 200 lines. The switchboard which will be accommodated on Stand S.778 in the building section, will be open to the inspection of visitors and should, in view of the general adoption of automatic telephones, prove of considerable interest, as comparatively few people have seen an automatic exchange in operation. The Relay Automatic Company is at present working on the switchboard for the British Empire Exhibition. Work in installing the lines was begun on December 1, and the whole system will be ready for use on January 1. In addition to the exchange in the building section, the Relay Company is occupying a site 500 sq. ft. in the engineering section, where latest models in public exchange, private automatic exchange, and private automatic branch exchange will be shown in operation. A private automatic branch exchange is also being exhibited in the British Government pavilion. The system is already in operation at Marconi House, the London Hospital, Australia House, the Bank of England, Paddington Station, and many other of the big buildings in London and elsewhere. In Fleetwood in Lancashire so perfect is the system that the nearest operator is nine miles away at Blackpool. The "Relay" system is now being widely used in India, South Africa, Brazil, and in many of the countries of Europe.

New Inventions

Latest Patent Applications.

30381.—Ayliffe, A. E.—Glazing of building, etc., materials. December 3.

30382.—Boam, E.—House, etc., fittings. December 3.

30656.—Cochrane, J. P.—Reinforced-concrete walls, etc. December 6.

30769.—Hanvey, A. G.—Walls, etc. December 7.

30750.—Lander, A. P.—Forming concrete floors, etc. December 6.

30690.—Orlovsky, W.—Process for building walls, etc. December 6.

30719.—Pfeifer Freres et Cie and Pfeifer.—Concrete bricks. December 6.

Specification Published.

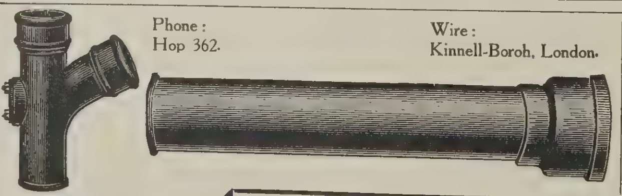
187582.—Kleinlogel, A.—Wearproof and dustless concrete compound.

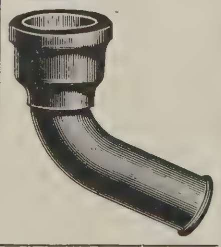
Abstract Published.

205688.—Casting floors *in situ.*—Steinberg, H. E., 72 Victoria Street, Westminster.—Centering for floors and ceilings.—A mould for use in casting floors *in situ* is formed of two L-shaped members joined together by bolts and slots so as to be relatively adjustable in width. The vertical webs of the members are perforated with holes to receive cross bolts for supporting shuttering when the full depth of beam is not required or to receive an adjustable portion to increase the depth of beam. In a modification the sides may be slightly inclined and may be provided with inturned flanges to stiffen the mould.

The above particulars are specially prepared by Messrs. Rayner & Co., registered patent agents, of 5 Chancery Lane, London, W.C. 2, from whom readers of the JOURNAL may obtain all information free on matters relating to patents, trade marks, and designs. Messrs. Rayner & Co. will obtain printed copies of the published specifications and abstract only, and forward on post free for the price of 1/6 each.

Fiberlic
"THE WALLBOARD WITH A REPUTATION."
MACANDREWS & FORBES LIMITED, 65 SOUTH MOLTON STREET, LONDON, W. 1.





Phone: Hop 362.
Wire: Kinnell-Boroh, London.

C. P. KINNELL & Co., LTD.
MAKERS OF
CAST IRON PIPES AND FITTINGS FOR COLD WATER, DRAIN, SOIL AND GAS. MANHOLE COVERS AND GULLIES. Castings made to pattern or design.
Enquiries invited.
65, 65A SOUTHWARK ST.,
LONDON, S.E. 1

The Week's News

Iammersmith Nursery Extension.

is proposed to extend Hammer- Day Nursery at a cost of £1,330.

New Shelter for Bournemouth.

ns are being prepared for a shelter. cost is not to exceed £3,000

Parish Hall for Worksop.

Worksop a new parish hall is to be ed at a cost of about £2,500.

New Flats for Chelsea.

elsea Borough Council have applied loan for £45,000 for their new flats.

New Parish Hall for Hornsey.

new parish hall is proposed for eter's, Hornsey.

St. George's Chapel, Windsor.

0,000 has been raised in connection the repairs of St. George's Chapel, lsor.

Change of Address.

. J. Norman Harber has moved to ersity Chambers, 5 Edmund Street, ningham.

New School for York.

ne York Educational Committee have led to purchase a site for a school on Tang Hall Estate.

The Mansion House.

ne City Council have voted £1,140 redecorating the Egyptian Hall at the lon Mansion House.

New R.A. Elected.

a general assembly of Academicians Associates of the Royal Academy of , Mr. Bertram Priestman, A.R.A., elected a Royal Academician.

New Cardiff Church.

is proposed to build a new Albany d Baptist Church. The estimated is £10,000, of which £4,000 has ady been secured.

Change of Address.

he Winter Thomas Co., Ltd., agents advertisers, have moved to Aldwych se, Aldwych, London, W.C.2. Telene: City 4653-4.

annel Ash College War Memorial.

library building is to be constructed Pannel Ash College, Harrogate, to etuate the memory of master and boys who fell in the war. The cost be about £1,600.

The Birmingham Civic Society Gold Medal.

he gold medal for 1923 of the Birgham Civic Society was presented on e 29 to Mr. W. H. Bidlake, M.A., .I.B.A.

New Fire Station for Blyth.

n inquiry was held at Blyth into the plication of the Town Council for er to borrow £7,200 for a new fire ion. It was stated that the proposed station was to occupy a more central , and provision could also be made for re expansion.

The Admiralty Screen.

The Office of Works are restoring the screen in front of the old Admiralty building to its original form. When designed by Robert Adam the screen had a central gateway, on each side of which were five columns. The restoration consists of "blocking up" the two subsidiary entrances by replacing the centre column in each half of the screen.

Housing in Belgium.

Out of the 100,000 private houses in Belgium which were destroyed or damaged in the war, 74,585 have been restored at a cost of £8,500,000.

Garden Village for Burton.

There is a possibility that a garden village will be commenced during the present year midway between Branston (Burton-on-Trent) and Barton Turn.

Proposed New Subway for London.

The desirability of constructing a subway for pedestrians from the corner of Westminster Bridge to the corner of Parliament Street is being considered by the L.C.C.

A Bath School Memorial.

A wing to cost £21,000 will be added to the Royal School for the Daughters of Officers of the British Army at Bath as a war memorial to the pupils' fathers and brothers.

Colonial Architecture.

A collection of drawings of old Colonial architecture in New South Wales and Tasmania, made by Mr. Hardy Wilson, is now on view at the Victoria and Albert Museum.

Baths for Small Houses.

The Housing Committee of Dundee Town Council have decided to install baths and hot water in 102 houses to be erected on a site at Dudhope under the slum clearance scheme.

New Zealand Battle Memorial.

Viscount Milner has consented to unveil the New Zealand Battle Memorial at Le Quesnoy on July 15. On the following day a tablet erected by the New Zealand Government in the Cathedral at Amiens will also be unveiled.

Ouse Navigation.

The West Riding County Council Highway Committee has adopted a recommendation by the Bridges Committee to contribute an additional £5,000 to the cost of constructing a new bridge over the Ouse at Boothferry (Goole).

New Spiritualist Church at Westcliff-on-Sea.

The new church which has been built at Westcliff-on-Sea, to meet the requirements of the Southend Spiritualist Society, was dedicated on July 4. It is the largest of its kind in the combined districts of Southend, Westcliff, and Leigh.

Repair of Scarborough Castle.

The Office of Works, which has been repairing the damage caused to the Norman castle and walls on Scarborough Castle Hill by bombardment in 1914, propose to excavate the soil from the base of the walls. The Department states that a very fine plinth course exists 6 ft. below the ground level. Not only would the plinth course then be visible, but an additional dignity would be given to the curtain walls, which now appear somewhat low and unimportant through the accumulated earth.

An Architect's Estate.

Sir Alpheus Cleophas Morton, of Gauden Road, Clapham, S.W., architect and surveyor, liberal M.P. for Peterborough, 1889–1895, and for Sutherlandshire, 1906-1918, a member of the Thames Conservancy, and formerly deputy Alderman of the Ward of Farringdon Without, who died on April 26, aged 83, left estate of the gross value of £25,890, with net personalty £11,944.

South Wales Institute Scheme.

A grant of £5,000 has been made by the Miners' Welfare Fund to the Cwmaman (Aberdare) Institute Welfare Committee in connection with the institute's welfare work. The institute's projected scheme embraces a pit boys' welfare club and gymnasium, and the erection of a ladies' club and reading-room.

Worthing Town-planning Scheme.

Worthing Town Council have decided to prepare a town-planning scheme for the borough. In May the Corporation passed plans for thirty-nine houses, representing a cost of £44,675. On July 3 plans for another forty-two houses, twenty-nine shops, and an arcade were approved, representing a value of over £100,000.

Cartmel Gatehouse to be Opened.

The Gatehouse of Cartmel Priory, near Ulverston, in North Lancashire, is shortly to be opened to the public. The Priory Church was founded in 1188. Over the groined archway of the principal entrance to the Priory is the Gatehouse, built at the same period. This building was for five hundred years the Manor Court, with civil and criminal jurisdiction exercisable over about 75 square miles of country.

Town Planning Conference at Leeds.

A conference of representatives of the local authorities of the East and West Ridings was held at Leeds, under the auspices of the National Housing and Town Planning Council. Mr. H. R. Aldridge, the secretary of the Council, said that the Ministry of Health definitely intended to insist on a substantial contribution from rates as a condition of the granting of the £6 housing subsidy. The Town Clerk of Bridlington and the chairman of the Middlesbrough Housing Committee suggested that the Bill did not make such a contribution imperative. Mr. Aldridge, however, stuck to his point, and added that it seemed to him that the Treasury were taking the proper view that local authorities should, in dispensing the money of the State, be prepared to make adequate provision themselves. The speaker said that local authorities might have to contend with a big increase in building costs during the coming year.

New Headquarters.

The British Medical Association has purchased the premises in Tavistock Square, Bloomsbury, known as the Theosophical College. It is designed by Sir Edwin Lutyens, R.A., whose plans were never fully completed, as the building was taken over by the Government at one time. The building was illustrated in our last issue. It is understood to be the intention of the British Medical Association to enlarge and adapt the building as their headquarters.

Hertford College Extension.

Work is to begin immediately on the extension of Hertford College, Oxford, under the direction of Sir T. G. Jackson. The extension, which has long been contemplated, will bring the new buildings in New College Lane flush with the Indian Institute, and is part of a larger scheme which will give the college a north front on Holywell Street. The old property on both sides has long since been acquired, and progress will be made with the building as finance permits. Parts of the Octagon Book Shop, which Sir T. G. Jackson regards as a building of great historic interest, will be incorporated in the porter's lodge, which will take its place.

New Inventions

Latest Patent Applications.

16005.—Dehongnie, E.—Arched roofs. June 20.

15972.—Harvey, T. — Wall blocks. June 20.

Specifications Published.

198758.—Bendall, R.—Construction of roads and other similar work and concrete slabs therefor.

198783.—Alwyn, L. — Manufacture of moulds for making concrete or like beams, blocks, columns, and the like.

198924.—Edman, G. A.—Fireplace frames and the manufacture thereof.

Abstract Published.

197050.—Wall and ceiling coverings.—Rowley, A. J., of 140 Church Street, Kensington, London.—Bevel-edged sheets are secured at adjacent corners by nails or like fastenings, each of which secures at least three sheets. The sheets may be angular or curved, and may interlock by a groove and tongue and be hollowed on the underside.

The above particulars are specially prepared by Messrs. Rayner & Co., registered patent agents, of 5 Chancery Lane, London, W.C. 2, from whom readers of the JOURNAL may obtain all information free relating to patents, trade marks, and designs. Messrs. Rayner & Co. will obtain printed copies of the published specifications and abstract only, and forward on post free at the price of 1/6 each.

Competition News

The Manchester Art Gallery.

Another step has been taken towards building an art gallery on the Piccadilly site in Manchester. The sub-committee which is now charged with preparation of plans has requested that an allocation of £2,500 be made in the estimates for 1924–25 for the provision of assessors. The assessors are to work with the sub-committee in formulating conditions under which competitive plans for the gallery will be entered. The cost of the gallery is estimated by the city treasurer to fall between £250,000 and £300,000. The assets, including the present gallery and the property in George Street and Nicholas Street, are valued at £101,324.

R.I.B.A. Nominate Assessors.

The President of the R.I.B.A. has nominated the following gentlemen as assessors in the undermentioned competitions :—

Proposed Library, Armstrong College, Newcastle-upon-Tyne : Mr. Henry M. Fletcher, F.R.I.B.A.

Proposed Hospital for the Barton-upon-Irwell Union, Manchester : Mr. William A. Pite, F.R.I.B.A.

Proposed Public Hall, Truro : Sir A. Brumwell Thomas, F.R.I.B.A.

List of Competitions Ope

Date of Delivery.	COMPETITION.
Aug. 25	Public Swimming Baths and Washhouse East Greenwich. Assessor, Mr. Henry Ashley, F.R.I.B.A. Premiums: £300, £20 £100. Apply Mr. Frederick J. Simpso Town Clerk, Town Hall, Greenwich.
Sept. 12	Masonic Temple in Broad Street, Birmingham. Premiums: £500, £300, and £20 Sir Banister Fletcher, F.R.I.B.A., is th assessor. The competition is restricted architects who are masons subscribing Lodges in the Province of Warwickshir Apply Mr. J. P. P. Dutfield, 65 Temple Row Birmingham.
Sept. 30	Designs for a series of plaquettes in bronz illustrative of London as the capital city the Empire, or of one or more of her mai architectural features. Designs should b submitted in the form of models in plaste The following prizes are offered:—On prize of 100 guineas, two prizes of 50 guinea three prizes of 25 guineas. Apply Deput Master of the Royal Mint, London, E.C.1.
Sept. 30	The best colouring of a design for the vest bule connecting 315–317 Oxford Street wit 17–19–21 Dering Street, Messrs. Thoma Parsons and Sons' new offices and show rooms. Prizes: 100 guineas, 50 guinea 25 guineas, and five consolation prizes 10 guineas each. Assessors—Sir Edwi Lutyens, R.A., F.R.I.B.A., Sir Davi Murray, R.A., P.R.I., H.R.S.A., Sir Joh Lavery, R.A., Mr. Frank Brangwyn, R.A and Mr. E. Guy Dawber, F.R.I.B.A., wi adjudicate. Apply Competition Depar ment, Thomas Parsons and Sons, 315-31 Oxford Street, London, W.1. There is n entrance fee.
Nov. 5	Art Gallery for Hull. Assessor, Mr. John W Simpson, PP.R.I.B.A. Apply (with chequ for £2 2s.) to Mr. H. A. Learoyd, Tow Clerk, Guildhall, Hull.
No date	The Student Welfare Committee, Universit of Glasgow, invite Competitive Design (limited to Architects having an office i and practising within the Municipal Bour daries of the City of Glasgow) for Pavilion to be erected on the Universit Athletic Ground at Westerlands, Annie land, at a cost of £10,000. Assessor M Alexander N. Paterson, A.R.S.A. App Honorary Secretary, Student Welfa Committee, The University, Glasgow.
No date	Erection of a Cenotaph on a site in Parago Square, Hull, belonging to the Corporatio Conditions of the Competition togeth with a plan of the site will be supplied b the Town Clerk on receipt of a cheque fo one guinea, which deposit will be returne to competitors on receipt of a bona-fid design. The estimated cost of the wor amounts to £4,000, and premiums of £15 £75, and £50 are offered for the desig placed first, second, and third respectivel The assessor is Mr. Stanley Ham F.R.I.B.A.

SUSPENDED SCAFFOLDING | TUBULAR SCAFFOLDING AND CRANE STAGINGS. | "SCAFFIXER" SCAFFOLD TIES

(For Sale) BUILDERS' PLANT (For Hire)

SCAFFOLDING (GREAT BRITAIN) LTD.

Incorporating—

The Tubular Scaffolding Co., Ltd., and The Patent Rapid Scaffold Tie Co., Ltd.

Telegrams : "Scaffixer, Claproad, London." 43 LANSDOWNE ROAD, STOCKWELL, LONDON, S.W.8. *Telephones :* LONDON—BRIXTON 380. BIRMINGHAM—VICTORIA 187.

EASTWOODS
LIMITED
STOCK FLETTON AND RED BRICK
MANUFACTURERS
CEMENT, LIME & BUILDERS' MERCHANTS
HEAD OFFICE. 47. BELVEDERE RD. LONDON, S.E.1.
PHONE. HOP 3448.

Is Integral Waterproofing Desirable?

An Architect's Tests

INVESTIGATIONS, unique in several respects, have been carried out by Mr. Samuel R. T. Very, an architect, h regard to the use of integral terproofing compounds. The tests re made on a large number of cimens of Portland and natural nents, some treated and others un- ated with various waterproofing com- unds. The tests were not made with greater care than would obtain "on job"; they were not conducted for entific results, but to obtain as nearly possible "job" conditions and com- risons. In the course of a lightly- tten article on the tests in 'Archi- ture" Mr. Very says: No concrete was ted, because stuccos were far simpler to nipulate, and they were quite as isfactory for the purposes intended: find out whether cement mixtures are de more nearly waterproof through use of integral waterproofing com- unds.

The apparatus for mixing the specimens s purposely chosen for its unlaboratory racter, for its similarity in crudeness job or field conditions. Scales akin those likely to be found under prac- al working conditions were chosen, ere the variation of a hundredth part a gramme wouldn't scare the operator undredth of a particle. An ordinary bler measured out the sand and ce- nt and some of the compounds tested. re was taken, however, to mix the at batters well, as well as they could reasonably expected to be mixed on job—as well as a good workman with elligence and experience, or as well as bad workman under the guidance of a od boss. Moreover, the directions of the manufacturers of the water- ofing compounds used were read with y such intelligence as the writer pened to possess, but were followed as idly as he could expect of a cement son who had never used the material fore.

Much larger masses of dry sand and nent were mixed in a heap, and some ecimens untreated and others treated h the different compounds tested were de from the same dry batter. Minute ords of every operation were kept, en to the number of trowel strokes in xing the dry mass; the quantities of ter and other ingredients used were orded; but note, all this was incidental, explained above.

Two kinds of sand were used: white tawa laboratory-testing sand and inary commercial Cow Bay sand. ght here is the place to emphasize fact that on the job it is not common use white Ottawa laboratory-testing d, whose use is usual, however, for refined tests which have proved such azing waterproofing laboratory perfec- n for some unwaterproofed Portland- nent concrete specimens. But if it re usual to use such sand, no workman uld have taken more care in the mixing l, incidentally, no laboratory chemist s.

The cements tested were both grey and white typical commercial brands of Portland cements widely used, equal to the standard specifications of the American Society for Testing Materials, and also natural American hydraulic cement, generally called Rosendale.

The integral waterproofing ingredients tested, in the opinion of the writer, were typical of the various widely used, so-called repellent, non-repellent, metallic powders, pastes, emulsions, soaps, and liquids, which one writer at that time called unsaturated, extended, and concentrated colloids. No mere surface coatings such as membranes or dampproofing paints were tested. The specimens were formed and set in rings cut in 1 in. sections from a wrought-iron gas-pipe 4 in. in internal diameter, and were uniform in superficial shape and form, being thus approximately of the same mass when set, and the thickness of many stuccos. The tempering water was ordinary "Croton" water as drawn from the faucet of the New York testing laboratory, just such water as a mason would use on any ordinary New York building operation.

No particular overcare was used to measure with scientific accuracy ideal quantities for ideal results, but the manufacturer's requirements were nevertheless followed as rigidly as by the ordinary practical workman. Quantities used in each case were recorded merely as a matter of interest, not for scientific deduction, but the measure, gauges, scales, and other instruments used were scrupulously cleaned after each operation, and drawings, photographs, and careful descriptions of each were kept.

No other person than the writer was present during the mixing, thus assuring the same "personal equation" for all the specimens. Each ring was numbered with a removal tag, which, months later, just before testing, were each removed in presence of all of the witnesses of the tests; and at that time, new, entirely different designating letters were marked directly upon the specimens themselves, the changes being accurately recorded and witnessed by all, without anybody present, not even the writer himself, having the slightest idea of the identity of a single specimen. Therefore, unlike the usual laboratory test, no results were being anticipated.

Great batches of dry cement and sand, many times the needed quantities, were thoroughly mixed uniformly in the quantities of one to three, and the amounts necessary for specimens identical in their matrix were chosen from the same homogeneous batch (except in certain instances to be mentioned). The large superfluous balance was immediately discarded.

Seven specimens using white Portland cement and white sand from the same batch were tempered and set May 3, 1914. Seven specimens using grey Portland cement and white sand from the same mixed batch were tempered and set July 27. The specimens remaining, using, respectively, Rosendale cement, grey Portland cement, and white Portland cement, were mixed with different sands, and were tempered and set July 27 and July 28.

Thick, soaked blotting-papers, themselves protected so as to evaporate slowly, were used to cover the rings without touching them, and they were allowed to dry very slowly by ordinary evaporation. The specimens were otherwise unmolested until the middle of August, the same year, when they were carefully wrapped in paper, and kept so until March, the following year, when they were unwrapped, and all placed together in a large bucket filled with water in which they remained submerged one day.

The next day, in the presence of representatives of all of the manufacturers concerned, who accepted the invitation, these specimens were re-marked, as above stated, in such a manner that their cement and their waterproofing ingredients were both blind to all present, and they were tested carefully in a special hydraulic testing-machine. Its construction is such that water may be forced through the whole area of a specimen without leakage about the ring circumference. Its pressure gauge is calibrated to 150 lb. per square inch of surface tested, but the pressure chosen for these tests was only two-thirds that capacity.

There was not a single specimen tested which did not show porosity to some extent; but it should be noted that the pressure used was far greater than most field or job requirements. Some specimens showed porosity markedly more than others; some showed structural weakness, developed, no doubt, from the tremendous pressure used, which approximated a head of water 200 ft. in height.

Two specimens blew up, probably from inherent weakness not due in any way to the waterproofing compounds.

There was not a single "unwaterproofed" specimen of the six tested that proved the equal of the best of the waterproofed specimens; but one of the six which contained grey Portland cement and ordinary Cow Bay sand only, tied for third place out of the whole lot with a waterproofed specimen mixed in identical proportions, one to three, with white Portland cement and white sand. The best of all showed absorption of only 1¼ cubic centimetres. This was waterproofed with a compound mixed with white Portland cement and white Ottawa laboratory-testing sand.

The second best specimen was mixed with another compound. The poorest of all, with the exception of the two which burst, and some others, referred to later, was, strangely enough, of identically the same consistency as the best untreated specimen already mentioned. It absorbed 21½ cubic centimetres of water.

To all superficial appearances this less-waterproofed specimen is even more perfect than its mate which absorbed but 4½ cubic centimetres of water; it was mixed the same day, with the same ingredients taken from the same packages, but not mixed dry in the same batch. It was tempered with slightly more water, but was tamped the same number of times. This observation illustrates well the writer's opinion that unwaterproofed Portland-cement mortar is largely dependent for its waterproof properties upon the variable personal equation of the men mixing or placing the batch.

While permeability was the sole experimental quest in these tests, the specimens show other interesting characteristics. Four of the waterproofed specimens showed, when wet, cracks invisible when dry. Their waterproofing compounds were, respectively, a paste, a liquid, and two powders, which divide the glory impartially amongst all classes tested. The two specimens which burst probably succumbed to too great pressure for their structural efficiency rather than to any deleterious effect from their waterproofing ingredient, which was in both cases the same as the compound which proved to be the most effective one recorded.

Waterproofing compounds are not intended to increase the structural pressure resistance of cement mixtures. They are not even intended to increase the theoretical waterproofing efficiency of unwaterproofed stuccos over the practical least efficiency of treated stuccos; or to state it in a different way, they are not commercially intended to raise the laboratory - waterproofing efficiency of cement or concrete briquets.

They are not theoretically intended to increase the density of the stone aggregate in concrete nor to lessen its natural absorption, except on or near its surface. They are not intended to bodily automatically replace the honeycomb voids of ill-mixed, ill-placed, badly proportioned concrete. They are not intended to act as a panacea for all waterproofing ills.

They cannot convert ignorance into knowledge, and they will not change inefficiency into skill. Neither will they ruin the commercial profit of Portland cement manufacturers, who, if they only knew it, would have much better friends amongst some architects and some clients if their product could be used with the greater safety which their co-operation with, instead of antagonism to, manufacturers of good integral waterproofing compounds would warrant; there is nothing chemically deleterious to Portland cement from many of these compounds, nor are they in any sense competitors of Portland cement.

They do, however, partly lessen the importance of the personal equation of cement-workers, who must, when using them, pay more attention to proper grading, mixing, tempering, and placing of concrete and stucco batches. They undoubtedly do bodily replace some of the imperceptible pores in even the best field specimens (there is a loss of approximately 7 per cent. by weight of water evaporation from a theoretically perfect density of mix). They increase the colloidal efficiency of cement.

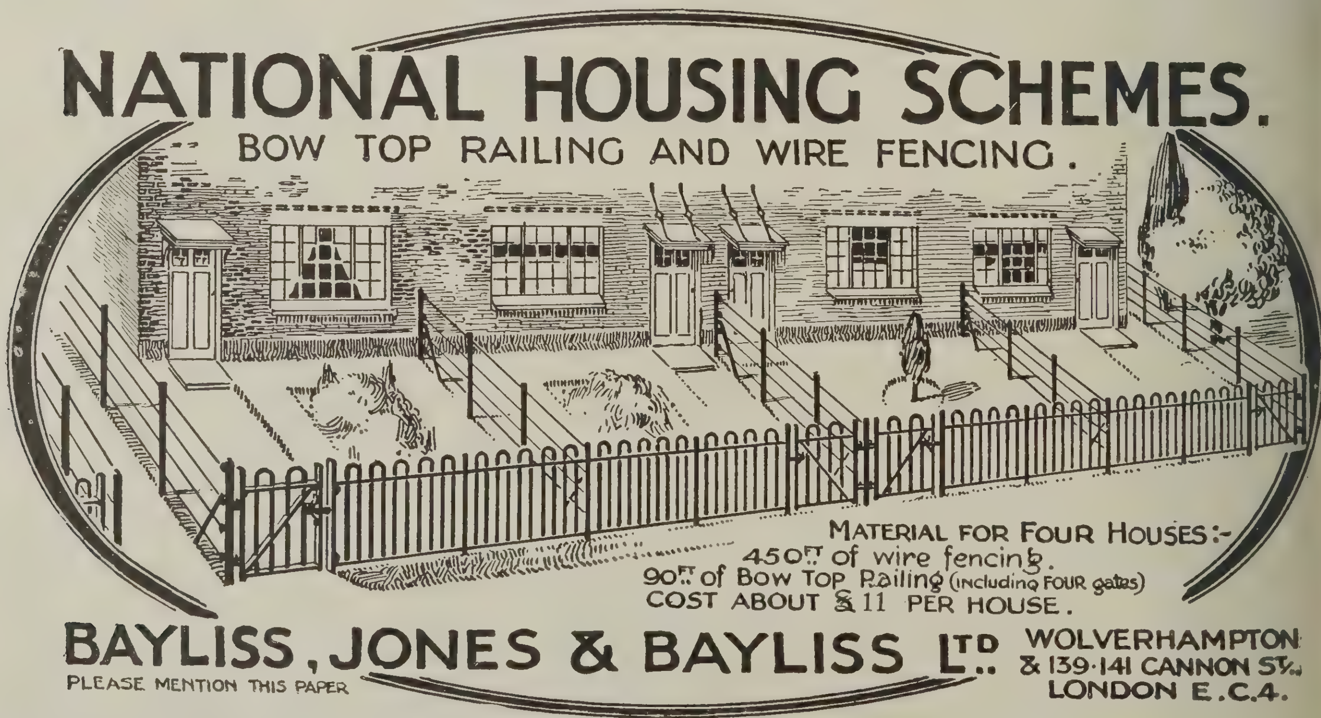
They act somewhat as catalyzers, and cause a decrease in the normal number and natural size of the honeycomb voids; they help the mixture to densify itself. Some of them decrease, and some abolish the capillarity of concrete and cement stuccos.

And unless the writer is mistaken, they will be eventually the cause of a t mendous increase in the architectu specification of cement stucco. T United States Department of Agricult got on record as long ago as 1915 say "no amount of care in the preparat of concrete prevents the absorption water into the mass. The addition some water-repelling compound appe absolutely necessary to insure this resul

This article is purposed to rouse perso interested in the discussion of integ cement waterproofing compounds to realization of a few of the fallacies spo sored by champions of all the curre opposing claims. It has accomplish a mighty service if it has cleared aw the cataract from a single biased eye.

There is no doubt in the mind of t writer that some of the practical d advantages from lack of integral wat proofing such as stucco-staining, d coloration, disintegration from frost a weather, and development of hair-crac and also many ills from dampness due sub-surface drainage, and seepage throu unwaterproofed foundations, such mildew of food-products and other stor bacterial disease culture environme and metallic disintegration, can materially lessened, and even abolish by the proper selection and intellige use of a suitable waterproofing co pound.

This claim is broad. It sounds a litt visionary, possibly as theoretical as t claim of a cement manufacturer's adve tisement: "Concrete when properly ma is watertight"—of course it is wh . . . ! But the writer's simple tes have made one convert to faith in wate proofing compounds.


NATIONAL HOUSING SCHEMES.
BOW TOP RAILING AND WIRE FENCING.
MATERIAL FOR FOUR HOUSES:-
450FT of wire fencing.
90FT of Bow Top Railing (including FOUR gates)
COST ABOUT £11 PER HOUSE.
BAYLISS, JONES & BAYLISS LTD.
WOLVERHAMPTON & 139-141 CANNON ST.
LONDON E.C.4.
PLEASE MENTION THIS PAPER

G. JACKSON & SONS, Ltd.,
49 RATHBONE PLACE, LONDON, W. 1.
FIBROUS PLASTER,
FRENCH "STUC," CARTON-PIERRE, WOODWORK, &c.

A Better Fabric and why

MAXWELD Guaranteed Fabric *is* better for three simple reasons :—

1. It is made of British steel by British steelmakers with a world reputation and half a century's experience. Hill's drawn steel is used for the highest quality wire ropes : Hill's were the first, and to-day are the largest producers of gun wire.
2. Each cross wire is electrically welded at every intersection by our own method, at our own works on our own patented machines, with an accuracy and completeness that never varies. So efficient are these machines that the welds are actually stronger than the adjacent wires.
3. Every ounce of metal is actual reinforcement and carries the same uniform inherent strength. **The Steel is drawn in our own mills and has an average ultimate tensile strength of 90,000 lbs. per square inch. The quality and strength of wire and welds are guaranteed.**

Let us quote you : you will find it worth while.

Maxwell *Double Layer* Fabric for roads over "made" ground, for foundation rafts, etc., is remarkable alike for its simplicity and efficiency.

Write for "Double Layer" leaflet.

45-24

Maxweld Guaranteed FABRIC

Richard Hill & Co., Ltd.

Telephone— M'bro. 706 & 707. **Middlesbrough.** Telegrams— Hills M'bro.

AGENTS :

LONDON : J. Parr Emett, 5 Victoria Street, S.W. 1
Telephone—Victoria 2685.
BIRMINGHAM : A. E Thomas, 65 & 66 Exchange Buildings
Telephone—Midland 537.
MANCHESTER : J. Drummond Paton, 25 Market Street
Telephone—City 3132.
GLASGOW : Morris Warden & Co., Ltd., 21 West Nile Street
Telephone—Central 2809/10/11.

Electrical Notes

The Barton Super Power Station

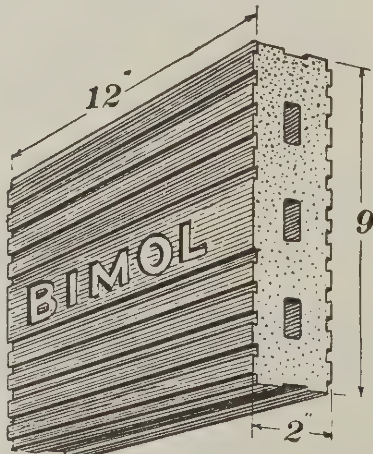
THE Barton Power Station which the Manchester Corporation's Electricity Department is now completing, began its work recently. It is not working more than a quarter its capacity, but will be exercised into full strength gradually. The Barton Power Station is larger in design than in actual capacity. When it is completed according to present plans, it will house three units each capable of 30,000 kilowatts, thus falling short by 11,000 kilowatts of the capacity of Stuart Street, which is the largest single station in the country. Barton is designed, however, for extension. The whole of one long side is roughed in with corrugated asbestos sheets, which can be easily removed when another building becomes necessary.

According to "The Manchester Guardian" it is in its way an impressive sight. Four stumpy chimneys of steel have inspired the humorous to call it the Aquitania. The walls are of red brick between steel framework. A couple of conveyors make a long arm to the railway, and under them runs a finger of the canal. Fuel thus comes by two ways, by barge or by rail. If a truck brings the load it is halted opposite the end of the conveyor; a steel arm rising from under the track grips an axle and tilts the truck to about 45 degrees, emptying it into the conveyor feed. Coal may be fed from rail or water by machinery, dumped in store, fed to the conveyor again, or lifted into the feed which conducts directly to the Babcock and Wilcox boilers.

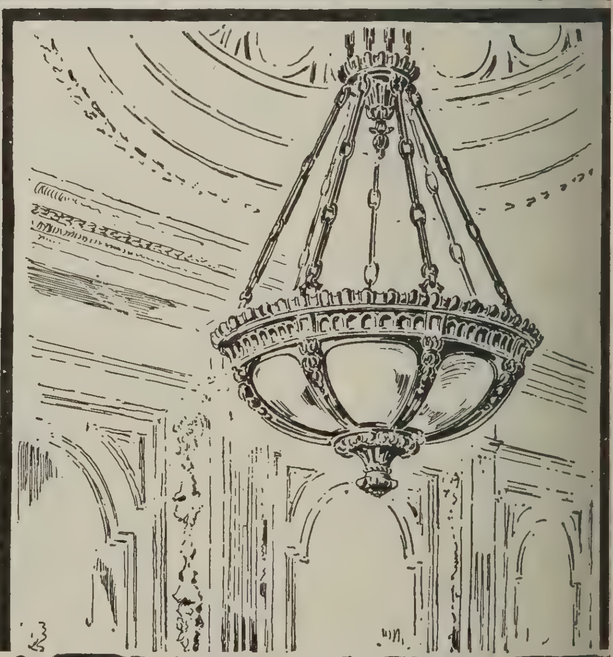
The station, which is to cost about £2,000,000, is one of the later words of electrical engineering, and is additionally pleasing to Manchester because it is largely home-made. Mr. S. L. Pearce, the City Electrical Engineer, and his staff designed it for the Electricity Committee, which had gone to the trouble of seeking new ideas abroad, and sought so keenly that it narrowly escaped getting into Germany on August 2, 1914. From France it brought one suggestion which has been carried out. Standing on the floor of the engine room looking over the humpbacks of the generators the visitor sees high up on the wall a dignified bay window. It is the window of the control bridge which overlooks the whole of the engine-room just as the bridge of a liner commands its course. It has a ship's engine telegraph for each generating unit, and a threefold screen of black polished slate full of well-registered meters and indicators. The efficiency of electricity, one might say, imposes a regime of monastic discomfort. It runs to cold corridors lined with huge steel boxes, to impeccable cables tightly bound to white walls. The windows are so glazed th
one cannot idle time away looking at t
sky. There is an instrument in t
engine-room that tells one without hesi
tion, or any more trouble than the pres
ing of a button, the temperature of a
one of twenty or thirty things, from t
oil cooler circulating water to the turbi
thrush bearings. Eighty men and
number of complicated machines run t
Barton Station. In a few years perha
the number will have dwindled to half
dozen, and without looking "as f
ahead as the mind can reach," one c
see the lineal successor of the half doz
disposed by a cold and calculating vo
meter.

The Barton Station itself is part of
machine of larger sort. On May 28 t
Government established the South-ea
Lancashire Electricity Advisory Boar
and on July 19 the Board held
first statutory meeting. The Manchest
Committee have elected as the
representatives to the Board, Alderm
Dagnall, Alderman Walker, Councill
Hill, Councillor Massey, and Councill
White, and the advisory scheme is th
formally in action. The Barton Stati
is an important link in the system and
planned to take in time a bigger part
serving the Board and thus serving t
area.

BIMOL BLOCKS
Made from MOLER earth



FOR
BETTER BUILDINGS
LIGHT - STRONG - FIREPROOF
SOUNDPROOF - NON-CONDUCTING
EASY AND RAPID TO ERECT
SEND FOR PARTICULARS TO "A" DEPT.
The BUILDING & INSULATING MATERIAL CO., Ltd.
DENE HOUSE, ELLISON PLACE, NEWCASTLE 'Phone: Cent. 1044
128 HOPE STREET, GLASGOW 'Phone: Cent. 1053
198 WEST STREET, SHEFFIELD 'Phone: Cent. 4038
WESTERN MAIL CHAMBERS, CARDIFF 'Phone: Cardiff 2892
and
20 ESSEX STREET, STRAND, LONDON, W.C. 2
Telephone: CENTRAL 8716-7. Telegrams: CHALKINESS, ESTRAND



JACKSON & BOYCE
19 BERNERS STREET. LONDON. W.1.
MUSEUM 7500 & 7501.
A VARIED DISPLAY OF ELECTRIC LIGHT FITTINGS
MAY BE SEEN IN OUR NEWLY EXTENDED SHOWROOMS.
CONTRACTORS FOR WIRING AND COMPLETE
GENERATING PLANTS
R.A.A

The Week's News

Two Hundred Houses for Barnsley.

Barnsley Town Council propose to ct 200 houses.

Lincoln Cathedral.

Lincoln Cathedral repair fund now tals close on £20,000.

hortage of Bricklayers at Birmingham.

At Birmingham many building schemes e being held up owing to the shortage bricklayers.

Port of London Development Scheme.

Developments in the port proposed to carried out by the Port of London uthority will cost many millions.

Union Club to Go.

Sir Robert Smirke's "Union Club" in rafalgar Square, London, has been leased the Canadian Government. Alterations e to be carried out from the designs of r. Septimus Warwick, F.R.I.B.A.

New Chiswick-Barnes Bridge.

Thames Valley authorities are urging e erection of a new bridge across the hames between Chiswick and Barnes.

Kitchener Memorial Tablet.

A tablet is to be placed on 2 Carlton ardens, London, to commemorate the esidence there of Lord Kitchener.

New Lambeth Bridge.

The rebuilding of Lambeth Bridge is be considered by the London County ouncil at the end of the year.

More Houses for Knowle.

Fifty houses—twenty-six with parlours nd twenty-four without—are to be rected at Knowle, near Bristol, by the reat Western Railway.

New Labour Exchange for London.

A new labour exchange, consisting of uts, will be erected in Marylebone Road t a cost of £7,000.

Bury War Memorial.

The Earl of Derby laid the foundation-tone of the new annexe to the Bury firmary. It will form the local war emorial, and is to cost £43,000.

Turkish Baths for Bermondsey.

Bermondsey Borough Council are making arrangements for Turkish baths and ussian vapour baths to be installed in heir new baths at Grange Road.

London Housing Deficiency.

At the last meeting of the London ounty Council it was stated that the eficiency last year on State-aided housing chemes carried out by the Council was 687,000.

Middlesbrough Hospital Extension.

The foundation-stone has been laid f a new extension to the North Ormesby ospital, Middlesbrough. The extension onsists of two wards to accommodate ighteen adults and twenty-four children.

Housing at Hinckley.

There has been a notable response in onnection with the housing scheme of the inckley Urban District Council, and it s possible that within a short time the rection of houses will proceed on a large cale. An outside builder has submitted lans for the erection of 120 houses, and rovisional sanction to the erection of the irst batch of twelve has been given.

New London Store.

It is understood that a big American store is negotiating for the property at the corner of Marylebone Road and Upper Baker Street, London, as a site for new premises.

Cairo's "Kitchener" Memorial.

A memorial to the late Lord Kitchener will be opened in Cairo in December. It takes the form of a training school for Egyptian women doctors and a hospital for poor women.

New Partnership.

Mr. A. Coles, A.M.I.M.C.E., of Radstock, has taken into partnership Mr. F. J. Barton, A.R.I.B.A. The firm will practise as Coles and Barton, architects, civil engineers, and surveyors.

International Congress on Architectural Education.

The Board of Architectural Education, R.I.B.A., announce that the International Congress on Architectural Education will be held in London from Monday, July 30, to Friday, August 1.

Proposed Dental Clinic for Dover.

Major Astor, M.P., has offered to build and maintain for two years, at his own expense, an adult dental clinic at Dover. The offer is made subject to the Corporation providing the site and maintaining the clinic after two years.

The Donaldson Silver Medallist in Architecture.

On this page we reproduce a portrait of Mr. Oliver Martin Welsh, who, as announced last week, has been awarded the Donaldson Silver Medal in Architecture of the R.I.B.A. He is twenty-four years of age, and was educated at the University College School (senior and junior) from 1907 until 1917. He matriculated in 1916, in the same year joined the school contingent Officers' Training Corps, and in the following year he won the Case Exhibition at the school, which is tenable at University College, London. During the last year of the war he served in France with a commission in the Royal Engineers, and on demobilization proceeded to University College, Bartlett School of Architecture, to pursue the college five years' diploma course. He passed his fourth year diploma examination this year.

MR. OLIVER MARTIN WELSH.
Donaldson Silver Medallist in Architecture.

Westminster Hall.

After nine years' work, the restoration of the roof of Westminster Hall is complete, and the building has been reopened by the King and Queen. A description of the restoration work appeared in a recent issue of the JOURNAL.

Change of Address.

Mr. Orlando Middleton, F.R.I.B.A., formerly of Port Elizabeth, has moved from Flamstead to his new residence, "Orlands," Watford Road, St. Albans. This residence has been completed to his own design. His business premises are at Town Hall Chambers, St. Albans.

London Housing Scheme.

The London County Council has voted £2,417,000 for housing purposes during the current year. Of this total £1,207,550 is for the Council's estates at Roehampton, Bellingham, and Becontree, and £108,000 for the acquisition and clearance of slum areas.

Louvain University Library.

One wing of the new library of the University of Louvain has been completed. Cardinal Mercier dedicated the building, and Prince Leopold placed on the library shelves the first book, which is dedicated to the memory of the 196 students of the University who fell in the war.

A.A. School of Architecture.

The annual prize distribution will take place at the Architectural Association on Friday, July 27, at 3 p.m., to which all members are invited. There will be an exhibition of students' work which will remain open daily (10 a.m. to 6 p.m.) until August 17.

Mr. Martin Briggs, F.R.I.B.A.

Mr. Martin Briggs, F.R.I.B.A., having been appointed one of His Majesty's Inspectors of Technical Schools under the Board of Education, has resigned his lectureship at University College, London, and is retiring from private practice. From July 20 his address for all purposes is 9 Winterstoke Gardens, Mill Hill, N.W.7.

Northamptonshire Association of Architects.

The summer meeting of the Northamptonshire Association of Architects will be held at Northampton on July 26. Visits have been arranged to Lloyds Bank, and the Exchange Cinema. Lloyds Bank (in course of erection) occupies a commanding site opposite All Saints Church. Mr. F. W. Dorman, A.R.I.B.A., the architect, will meet members and conduct them over the building, drawings of which will be on view. The Exchange Cinema was originally the Corn Exchange, and the old building has been remodelled and extensive additions made. The old hall has been converted into a cinema, and a convenient café, roof tea-room, and model bakery, etc., added. Mr. J. W. Fisher, F.R.I.B.A., the architect, will meet members and conduct them over the building, drawings of which will be on view.

Cardiff School of Art Club Excursion.

The summer excursion of the Cardiff School of Art Club was held in the valley of the Wye. The party included the vice-president, Mr. R. H. Winder, M.A., A.R.I.B.A., and Mrs. Winder. The Abbey of Tintern (now being restored by the Office of Works) and the castles of Raglan and Chepstow afforded good opportunities for studying mediæval architecture; and in the picturesque towns of Monmouth and Chepstow many interesting Georgian features were noted. Lunch was arranged at Tintern, and tea at Monmouth. The party left Cardiff at 9.30 a.m., and arrived back at 10 p.m. after a thoroughly interesting and enjoyable day.

The Royal Sanitary Institute Congress.

The thirty-fourth congress and health exhibition of the Royal Sanitary Institute will be held at Hull from July 30 to August 4, under the presidency of the Right Hon. T. R. Ferens, P.C., J.P., High Steward of Hull. Up to the present nearly 500 delegates have been appointed, and many representatives of public health bodies are expected. The following Government departments have appointed delegates: the Admiralty; Board of Control, England; H.M. Office of Works; War Office; Scottish Board of Health; and the Ministry of Health. The following foreign and Dominion Governments and municipalities are also sending representatives: Bombay, South Australia, New South Wales, Victoria, Brisbane, Perth, New Zealand, Christchurch, New Zealand, Capetown, Kimberley, South Africa, Czecho-Slovakia, Greece, Mexico, United States of America. In addition, many of the members of the Institute (which total over 5,000) will be attending.

Gothenburg Exhibition

The Cities and Town Planning Exhibition, which will be held in connection with the three-hundredth anniversary of the foundation of the City of Gothenburg, promises to be one of the largest and most important exhibitions of its kind held for many years. The whole of the 9,000 square metres of floor space originally appropriated for the purpose will be utilized, and additional buildings have also been acquired. Specimens of work from all parts of the world will be exhibited, and architects, town planners, and municipal and State representatives from practically all countries will attend the International Conference organized by the International Garden Cities and Town Planning Federation.

A party will leave London on July 31 by the s.s. "Patricia," arriving at Gothenburg on August 2. Further details regarding this party can be obtained from the organizing secretary, International Garden Cities and Town Planning Federation, 3 Gray's Inn Place, W.C.1. Appended is the programme:—

The conference meetings will take place in the Grand Hall of Gothenburg University (Goteborgs Hogskola).

Friday, August 3.—10 a.m.–4 p.m.: Conference bureau open to delegates. 2 p.m.: Reception of delegates; presidential address; reports on housing and town planning progress in the different countries since 1918. The evening will be left free.

Saturday, August 4.—10 a.m.–4 p.m.: Conference bureau open for delegates. 10 a.m. Conference; "Housing and Town Planning in Gothenburg." A paper presented by Mr. A. Lilienberg, City Planning Engineer of Gothenburg; "The Garden City and Town-Planning Movement in relation to present economic conditions." A paper presented by Dr. Erik Sjostrand; 1 p.m.: Luncheon interval; 2.15 p.m.: "The Development of New Towns and Industrial Centres, with special reference to Regional Planning." Papers presented by Mr. Harald Andersen (Finlan
Mr. John Nolen (United States),
Gustav Langen (Germany), Mr. Raymo
Unwin (Great Britain); "Internatio
Notation for Civic Surveys and To
Plans." Paper presented by Mr. G.
Pepler (Great Britain). In the even
the delegates will be entertained at
banquet by the City of Gothenburg.

Sunday, August 5.—Visit to the seasi
Trams will be provided for the delega
by the courtesy of the City of Gothenbu
11 a.m.: Trams start from the Drottnir
torget; 11.45 a.m.: Arrival at the Lan
drag; walks, warm or cold sea-bathi
etc. Delegates who wish to will be a
to go by steamer from Langedrag
Gothenburg Aerodrome (twenty minut
voyage) to see the international fly
contests; 1 p.m.: Luncheon; 2.30 p.m
Departure from Langedrag; 5.15 p.m
Arrival at the Gotaplatsen; conduct
visits to the Jubilee Exhibition (munici
section) and the Cities and Town Planni
Exhibition.

Monday, August 6.—10 a.m.: Annu
meeting of the International Gard
Cities and Town Planning Federatio
1 p.m.: Luncheon interval; 2 p.m.: Vis
to the following garden suburbs: Baga
garden, Landala, Anngarden, and Kung
ladugard. Auto-cars will be provided f
the delegates by the courtesy of the Ci
of Gothenburg. The evening will be l
free.

Tuesday, August 7.—Departure f
Stockholm. 8.50 a.m.: Train leaves fro
the Berglagsbanan; 9.23 p.m.: Arriv
at Stockholm.

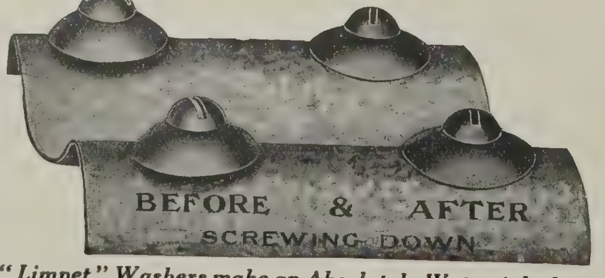
Wednesday, August 8.—Visits to hou
ing schemes in Stockholm district.

Thursday, August 9.—Study tour
Stockholm. Cars on these two days w
be provided for the use of delegates
the courtesy of the City of Stockhol
The city will also entertain the delegat
to luncheon on one of these days.
detailed programme of the Stockhol
visit will be prepared later.

Thursday Evening and Friday Mornin
—Departures from Stockholm.

SUSPENDED SCAFFOLDING
TUBULAR SCAFFOLDING AND CRANE STAGINGS.
"SCAFFIXER" SCAFFOLD TIES
(For Sale) BUILDERS' PLANT (For Hire)
SCAFFOLDING (GREAT BRITAIN) LTD.
Incorporating—
The Tubular Scaffolding Co., Ltd., and The Patent Rapid Scaffold Tie Co., Ltd.
Telegrams: "Scaffixer, Claproad, London."
43 LANSDOWNE ROAD, STOCKWELL, LONDON, S.W.8.
Telephones: LONDON—BRIXTON 330. BIRMINGHAM—VICTORIA 187.

"LIMPET" PATENT BOLTS & WASHERS



"Limpet" Washers make an Absolutely Watertight Joint. They prevent Leakage and Corrosion round the Bolt Holes.
ADOPTED BY THE INDIAN GOVERNMENT, CROWN AGENTS FOR THE COLONIES, AND THE LEADING RAILWAY CO.'S

For CORRUGATED IRON SHEETS and Asbestos Cement Corrugated Sheets

PRICE'S PATENT

The most approved Fixing for Joining Corrugated Iron Sheeting together.

REGISTERED TRADE MARK
LIMPET

Full Particulars and Samples from
WILLIAM JACKS & CO. Winchester House, Old Broad Street, LONDON, E.C.2.
Agent for Scotland: FRANK G. PRICE & Co., 115 Bothwell St., Glasgow.

The Week's News

Houses at Becontree.

Further development of the Becontree housing colony, at a cost of half a million, is proposed.

Hammersmith and the Unemployed.

The Hammersmith Borough Council is to spend £72,000 on winter work for the unemployed.

Tilbury Dock Scheme.

The P.L.A. contemplate a big scheme estimated to cost £5,000,000 to improve the docks at Tilbury.

New Concert Hall for Ilfracombe.

The Urban District Council propose to erect a new concert hall at a cost of £8,000.

Lincoln Cathedral.

More than half the £50,000 required to restore Lincoln Cathedral is now assured.

New Kingston-Sutton Road.

The Surrey County Council have decided to proceed with a new arterial road from Kingston to Sutton. The estimated cost is £567,500.

The Development of Worthing.

Plans for forty-two houses and sixteen other buildings, representing a total estimated constructional cost of £72,840, were approved by the Town Council during June.

Change of Address.

Mr. W. Scotter Owen, M.A., A.R.I.B.A., P.A.S.I., architect and surveyor, has moved to new offices at 9 King's Bench Walk, Temple, E.C.4. Telephone: City 3434.

More Houses for Woolwich.

The London County Council have sanctioned an application of the Woolwich Borough Council for the borrowing of £18,699 for the erection of fifty houses on the Eltham estate.

Brighton Aquarium.

Brighton Corporation have resolved to lay out the Aquarium site on the Brighton front as ornamental gardens, with a shelter hall, swimming bath, and other attractions.

Old London Almshouses To Go.

St. Peter's Hospital, Wandsworth, is being pulled down to make room for a housing estate. It is a block of almshouses belonging to the Fishmongers' Company.

The R.I.B.A. Examinations.

The questions set at the intermediate and final (or special) examinations held in June, 1923, have been published, and are on sale at the Royal Institute, price 1s. 6d. (exclusive of postage).

Bradford Chamber of Commerce Offices.

The Council of the Bradford Chamber of Commerce has invited Bradford architects to submit designs for the Chamber's new offices. The new building will probably cost between £30,000 and £40,000, apart from the cost of the site.

The Dover Dental Clinic.

The Dover Town Council have decided to accept the offer of Major Astor, M.P., to build, and to maintain at his own expense for two years, an adult dental clinic. The site, to be provided by the town, is near to the existing infant welfare clinic.

New Power Scheme for Johannesburg.

The Johannesburg Town Council have voted in favour of the propcsed new power station. The total cost will be about £500,000; it will be equipped with two 10,000 k.w. generators together with two generators from the old station, so as to give a capacity of 39,000 k.w.

Manchester Housing Schemes.

Negotiations have been entered into by the Manchester Corporation Housing Committee for the purchase of land lying between Burnage Lane, Burnage, and Cringle Fields for building purposes in connection with the city housing schemes.

Wallsend Water System.

The Wallsend Town Council is making application for a further loan of £12,000 in connection with the work of introducing the water carriage system throughout the town. The last loan was for £40,000, and conversions have been made in respect of 1,650 ashpits.

University College, London.

An entrance examination of the value of £40, tenable in the Bartlett School of Architecture for five years, subject to satisfactory progress, will be awarded in September. Full particulars may be obtained on application to the Secretary of University College, Gower Street, London, W.C.1.

Cenotaph for Byfleet.

An appeal has been issued for subscriptions towards a war memorial in Byfleet. The design adopted by the committee is by Mr. Gerald Warren, M.S.A., one of the first men in the parish to volunteer for service when war broke out. The design is in the nature of a cenotaph, in specially selected brickwork, with some stone, and the names of the fallen will be inscribed on a massive bronze tablet.

Architects' Assistants Visit Ashby-de-la-Zouch.

Members of the Architects' and Surveyors' Assistants' Professional Union recently visited the works of Messrs. John Knowles & Co., at Mount Pleasant, Ashby-de-la-Zouch. The party, who were entertained by the managing directors of the firm, made an instructive journey through the works, where they saw the manufacture of fireclay goods from the raw material to the finished product.

B.E.S.A. Annual Meeting.

The British Engineering Standards Association held its fifth annual general meeting in London. The chairman, Sir Archibald Denny, Bart., in reviewing the year's work, laid stress on the fact that the Association was faced with a deficit of some £1,700, and he hoped that both His Majesty's Government, who represented the purchasing public, as well as industry as a whole, would assist in putting the finances of the Association on a more stable basis.

The late Mr. William Holabird.

Mr. William Holabird, senior member of the firm of Holabird and Roche, has died at his home at Evanston, Illinois, after a long period of illness. The death of Mr. Holabird marks the passing of another one of the great pioneer builders of Chicago's history. He ranked foremost among the architects of the country, and was the originator of the skeleton type of building which revolutionized the building industry, not only in Chicago, but throughout the world. It is interesting to note that the Tacoma Building was the first building of this type constructed in America, and that the Chicago Temple Building is the last of this type designed under Mr. Holabird's direction, both buildings being in Chicago.

Big West End Scheme.

It is proposed to develop the land bounded by the Haymarket, Jermyn Street, and Market Street, formerly covered with shops and the courts and passages of St. James's Market. The scheme, the private undertaking of Sir Walter Gibbons, consists of four portions, the first a block of shops and offices already completed and let. At the side a new street 30 ft. wide is to be constructed between the Haymarket and Market Street leaving an island site upon which an imposing building is being erected. One portion of this will be a restaurant and ball-room with entrances in the new street. Besides the main restaurant there will be dining-rooms, grill-room, palm court, and bedroom accommodation. The second portion will be devoted to shop property on the Haymarket and Jermyn Street frontages. The third portion of the building is destined for a new theatre. The cost of the whole scheme is expected to exceed £750,000.

Cardiff School of Architecture and Civic Design.

The following awards have been made as a result of the sessional examinations at the School of Architecture at the Technical College, Cardiff. Mr. Paul Waterhouse, F.R.I.B.A., was the external examiner:—

Third examination for the certificate awarded at the end of three years full-time day course, exempting from R.I.B.A. intermediate examination:—

Certificate (with distinction), B. W. Thomas. First place in design.
Certificate (with distinction), L. Monroe. Second place in design.
Certificate (with distinction), V. L. Nash. Third place in design.
Certificate, Miss E. Atkins.
Certificate, W. O. Oakley. Third place in design.

Second Examination:—

Wride, J. B. First place in design.
Banks, A. V. Second place in design.
Byrd, E. B.
Harper, F. W.
Bull, H. A. H.

First Examination:—

Light, A. C.

A Correction

In a note in our last issue on the appointment of Mr. J. Hubert Worthington to the Professorship of Architecture at the Royal College of Art, South Kensington, we stated that he was M.A. Oxon. This is incorrect. He is a graduate of the University of Manchester.

Trade and Craft

The Church of the Annunciation, Bryanston Street, W.

Messrs. C. P. Kinnell & Co., Ltd., of Southwark Street, London, S.E., installed the central heating system in the Church of the Annunciation, Bryanston Street, London, W., which was illustrated in our last issue. Mr. Walter Tapper, F.R.I.B.A., was the architect.

Polden & Co.'s Annual Outing.

The annual outing of the staff of Messrs. Francis Polden & Co., Ltd., of London, electrical and mechanical engineers, took place recently, when an enjoyable day was spent at Eastbourne. The party left London by rail at 9 a.m. and arrived back at 10.15 p.m. During lunch speeches were made by Mr. Polden, Mr. Shaw, and Mr. Bovey.

The Ruston Vertical Oil Engine.

Messrs. Ruston and Hornsby, Ltd., of Lincoln, engineers, have just issued a new catalogue in connection with the Ruston vertical type of cold starting engine. It is a prime mover which it is claimed can be relied upon to give efficient and economical service in the hands of a man of average intelligence. It is designed to run on the lowest grade of fuel oils, and as small consumption is guaranteed low running costs are assured. With average working conditions and fuel, the guaranteed consumption does not exceed .44 lb. in the smallest and .42 lb. per B.H.P. per hour in the larger powered engines. The engine starts from cold without the use of a blow lamp or the application of any external heat. Ruston oil engines are produced under conditions recognized as essential to reliable service. High grade materials are used throughout and skilled craftsmen are employed in the manufacture. Jigs and special tools are used to ensure the interchangeability of parts, and each detail is subjected to close inspection. The materials are tested in the firms' laboratory, and special attention is paid to the steels used in crankshafts, connecting rods, connecting rod bolts, and other important details. Of vital importance is the lubrication system, and this has been carefully studied. All bearings and working parts have been most carefully designed with the result that no part of the engine is called upon to stand strains or stresses greater than those for which ample provision is made.

G.E.C. Floodlights for Hoarding Lighting.

A large, painted advertisement (40 ft. long by 28 ft. high) of the Osram lamp at Chiswick is particularly noteworthy for its illumination. This is carried out by three units only, each containing one 500-watt Osram gasfilled lamp. These units have been specially designed for hoarding lighting by the General Electric Co., and are known as the "Wembley" reflector fitting. In the case under review the three reflectors are mounted on brackets projecting only 3 ft. 6 in. from the hoarding. The great difficulty of illuminating a depth of 28 ft. has been overcome by the special design of the reflector, which in addition to giving a great depth of illumination provides a wide lateral spread so that the spacing of the reflectors can be as great as 15 ft. An even illumination distributed over the whole surface is obtained, and the character of the light is well diffused.

Coloured Cements.

A new department in building materials has been made by Messrs. C. A. Peters, Limited, of Stores Road, Derby, who have just placed on the market a series of permanent waterproof coloured cements, which should fulfil any decorative scheme. The colours are ground in, and are integral with the cement, so that permanence and uniformity of colour can always be obtained, thus doing away with any possibility of varied, patchy or streaky colours. The cements, which have been evolved after exhaustive experiments, can be applied as easily as Portland grey cements. Samples of cements sent us by the company show a pleasing array of colours—blue, green, brown, yellow, brick red, black and white. There is a great field for these coloured cements in decorative building. They are claimed to be permanently coloured and waterproof, and therefore require no after painting. The London offices of the company are: 323 High Holborn, W.C.1.

"Ozonair" on the Central London Railway.

"The Story of a Wonderful Achievement," a small publication just issued by Messrs. Ozonair, Ltd., of 96 Victoria Street, Westminster, S.W.1, tells of the success achieved by the use of the "Ozonair" system of pure-air ventilation on the Central London Railway. The system was installed in 1911, and has been working continuously since that time. Each of the twelve separate plants has been operated during the working hours of the railway which average about fifteen hours daily for every day of the year, so that at the present time each plant has run for some 66,000 hours. Compared with the average running of a ventilating plant used under ordinary conditions the "Ozonair" installation has up to the present time given the equivalent of some twenty-six years' service. When it originally commenced working its output was 80,000,000 cu. ft. per day. The daily output is now 110,000,000 cu. ft., and this has been obtained without any material alteration of the machinery or any addition to the consumption of power. At the end of what may be fairly taken as twenty-six years' service, the original plant is stated to be in perfect working condition and giving an increased output of some 37½ per cent. above the original.

SUSPENDED SCAFFOLDING | **TUBULAR SCAFFOLDING AND CRANE STAGINGS.** | **"SCAFFIXER" SCAFFOLD TIES**
(For Sale) BUILDERS' PLANT (For Hire)
SCAFFOLDING (GREAT BRITAIN) LTD.
Incorporating—
The Tubular Scaffolding Co., Ltd., and The Patent Rapid Scaffold Tie Co., Ltd.
Telegrams: "Scaffixer, Claproad, London."
43 LANSDOWNE ROAD, STOCKWELL, LONDON, S.W.8.
Telephones: London—Brixton 330. Birmingham—Victoria 187.

EASTWOODS LIMITED
STOCK FLETTON AND RED BRICK
MANUFACTURERS
CEMENT, LIME & BUILDERS' MERCHANTS
HEAD OFFICE. 47 BELVEDERE RD. LONDON, S.E.1.
PHONE. HOP 3448

The Week's News

A New Berkshire Church.

A new church is being erected at Burgh- eld, Berks.

The late Mr. E. Keynes Purchase.

Mr. E. Keynes Purchase, F.R.I.B.A., ft £39,166.

Cottage Baths for Nottingham.

At Nottingham, cottage baths are to be ected by the Corporation.

New Dance Hall for East Ham.

At East Ham a hall for 1,000 dancers. ith an annexe to hold twenty billiard bles, is being built.

New Barracks for Mansfield.

New headquarters for the Notts Terri- rial Army Association are to be erected Mansfield, at a cost of £7,364.

New Park for Mitcham.

Mitcham Council propose to lay out a w park with tennis courts and bowling een, at a cost of £9,000.

Warwickshire Church Enlargement.

A legacy of £1,000, left by Miss Nicklin St. Laurence's Parish Church, Foleshill Varwickshire), is to be devoted towards larging the fabric.

Housing at Chertsey.

A lay-out for a site for 141 houses has en passed by the Council. A bridge to st over £3,000 is to be erected over the ell-known Sunbury watersplash.

New Bridge for Weymouth.

Expert advice is to be called in regard the building of a new bridge over eymouth Harbour, at an approximate st of £40,000.

Catalogues Wanted.

Manufacturers of building materials e invited to forward their priced cata- gues to Mr. J. D. Gordon, A.R.I.B.A., chitect and civil engineer, 21 Main reet, Bangor, Co. Down.

New 'Bus Centre for Hanley.

It is understood that plans for the pro- osed new 'bus centre for Messrs. Cooke, obinson & Co., on the site of Palais de anse, Hanley, have been prepared by essrs. Ford and Slater, F.R.I.B.A.

New Cinema at Whitley Bay.

The reconstruction of the Empire nema, Whitley Bay, is rapidly approach- ig completion. Seating accommodation ll be provided for about 1,200 persons, most double the previous accommoda- on. The architects are Messrs. Browne d Glover, Newcastle and London.

New Shipping Offices for Osaka.

The Acting British Consul at Osaka ports that a well-known Japanese ipping company proposes to erect new ice buildings in Osaka, commencing erations during the coming autumn. he building will be eight or nine stories gh, and will be the second largest in pan. There is likely to be an opening r the supply of building materials of rious kinds. Applications for further rticulars should be addressed to the epartment of Overseas Trade, 35 Old een Street, Westminster, S.W.1.

Warlingham Sewerage.

The Godstone Rural District Council are considering the question of sewerage for the district of Upper Warlingham, and have asked Messrs. W. H. Radford and Son, of Nottingham, to submit a report.

Weymouth Improvement Schemes.

Having completed the Greenhill Gardens extension scheme, the Weymouth Corporation are now considering other big town improvement schemes. It has been decided to build a new concert pavilion in the Alexandra Gardens, and also to widen the esplanade leading to the gardens and pavilion, at a cost of £10,000.

Dorset Beauty Spot in Danger.

The proposal of the War Office to acquire land between Lulworth Cove and Arish Mill Gap for a tank gunnery school is being strenuously opposed by the local inhabitants. The land at that part is regarded as one of the beauty spots of Dorset, and is greatly frequented by visitors.

Mr. George Hicks Resigns.

Mr. George Hicks has decided to resign the presidency of the National Federation of Building Trade Operatives. In a letter to the executive he says his decision is irrevocable, and he asks the delegates attending the annual conference of the Federation, which begins to-day at Ilfracombe, to appoint his successor.

The Society of Engineers.

By permission of the authorities of the British Empire Exhibition (1924) Inc., a visit of members of the Society of Engineers and their friends has been arranged to Wembley to view the construction of the exhibition and the stadium on September 19 at 2.30 p.m. Members wishing to attend should apply to the secretary, Mr. A. S. E. Ackermann, 17 Victoria Street, Westminster, S.W.1, by first post on September 17. The application should be accompanied by a remittance of 1s.

The Welsh National Eisteddfod.

At the Welsh National Eisteddfod at Mold, the prize for architectural design was awarded to Mr. David J. Williams, a student in the School of Architecture at the Technical College, Cardiff. The subject for the design was an entrance archway in stone with iron gates suitable for a memorial recreation ground. Mr. Williams' success is particularly praiseworthy in that he has studied under considerable disadvantage, inasmuch that during the early part of his course in architecture he continued his regular work in a coal mine.

Sketching Tour in Normandy.

A sketching tour to Normandy for architects and their friends is being organized by Mr. G. A. T. Middleton, A.R.I.B.A. The party will leave London on the evening of September 10, and return on the morning of September 22. The places to be visited will, it is hoped, include Havre, Caen, Bayeux, Lisieux, Evreux, and Rouen, and there will be time for excursions from some of these places for such as may desire to take them. On the return, the journey from Rouen to Havre will be made on the river steamer. Those wishing to take the tour should communicate with Mr. G. A. T. Middleton, A.R.I.B.A., Hartley, Cranbrook, Kent. Passports will be necessary.

Miners' Welfare Schemes.

It is understood that the Hamilton Committee of the Miners' Welfare Fund have decided to erect institutes at Burnbank, Low Waters, and Fourth Ward. Plans for the proposed institute in Burnbank have been prepared by Mr. Alex. Cullen, A.R.I.B.A., P.A.S.I., and are ready for submission to the Central Committee in Glasgow, subject to whose approval a grant will be forthcoming to enable the local committee to proceed with the scheme. The institute comprises a library, a reading-room, a hall with accommodation for between four and five hundred, spray baths for both ladies and gentlemen, and a pavilion for indoor games, with a caretaker's house adjoining.

The late Sir Henry Holloway.

We regret to record the death on August 5 of Sir Henry Holloway, J.P., governing director of the firm of builders and contractors, Holloway Brothers (London), Limited. Death occurred at his London house, Draxmont, Wimbledon Hill. Born on August 5, 1857, the fourth son of the late Thomas Holloway, of Lavington, he founded the business which bears the family name in conjunction with his brother, the late Thomas Holloway, J.P., in 1882. Sir Henry Holloway—he was knighted in 1917—was also a member of the boards of several other prominent companies, and was a past president of the Institute of Builders and of the London Master Builders' Association. He married in 1881 Annie Jane, eldest daughter of the late John Gollop, of Clapham, and had seven children.

Industrial Standardization.

A second unofficial conference of secretaries of the various standardizing organizations now in existence has recently been held in Zurich, Switzerland. The secretaries of a number of organizations which have come into being since 1921 were present and reports on the position in their countries with regard to standardization were received with much interest. A general discussion took place in regard to the organization and methods of working, the practical application of the standards and also the extent to which international collaboration is taking place at the present time and the possibilities of making it more effective. The conference being entirely unofficial has no executive authority, and the recommendations made by the secretaries as a whole will be placed before the executives of the national organizations.

A Correction

The advertisement of Messrs. Archibald Low & Sons, Ltd., Merkland Works, Partick, Glasgow, in our issue of June 27, was worded somewhat ambiguously. It rather suggested that the heating as well as the sanitary work in the Royal Hospital for Sick Children and the Western Infirmary, Glasgow, was carried out by them, whereas the heating installation was done in each case by Messrs. J. Boyd & Sons, Paisley.

Trade and Craft

New Catalogue of Sanitary Fittings.

Sanitary goods of all kinds—as supplied to the Government Departments, London County Council, the Port of London Authority, and other public bodies—are illustrated and described in a new catalogue just issued by Messrs. J. H. Sankey and Son, Ltd. (Canning Town). The extensive stocks of the company comprise all ordinary shapes and sizes and a large number of special designs. Copies of the catalogue can be obtained from the head office of the company, Essex Wharf, Canning Town, London, E.16.

Asbestos Cement Roofs.

The amalgamation, last year, of the Poilite section of Bell's United Asbestos Company and the British Everite and Asbestilite Works, makes, it is claimed, the new company—Bell's Poilite and Everite Co., Ltd.—the largest producing source in the world of asbestos cement materials. Over twenty years ago asbestos cement was first used for roofing purposes on the Continent, and since then it has been used in all parts of the world under every sort of condition, and is said to get harder and stronger the longer it is exposed to the weather. The fact that an asbestos cement tiled or sheeted roof weighs only 2¾ cwt. per square is in itself sufficient argument for the utility of this material. Other advantages claimed are its non-absorptive qualities and absolute permanence. Messrs. Bell's were alive to the fact that their asbestos cement products known as "Poilite" and "Everite," besides being efficient from the engineer's point of view, should also be produced in a form in which it would be acceptable to architects, for use on their most important buildings, and in which it would be right from the æsthetic point of view. They accordingly appointed as their adviser Mr. Francis Bacon, the architect, who was originally a pupil of Sir Arthur Blomfield and Sons, and subsequently for a great many years worked with Mr. Mervyn Macartney. Mr. Bacon was one of the contributors of measured drawings and photographs to the "Practical Exemplar of Architecture," and necessarily, therefore, he became imbued with the highest aspirations of architecture. Chief among the specialities of the firm is a "Poilite" pantile, made in russet-brown colour. These pantiles have somewhat greater thickness than the ordinary asbestos tile, and the light and shade produced by the bold roll of the tile causes one to practically lose sight of the thickness of the material. Some of these pantiles are moulded with a rough surface and some are somewhat smoother, and thus the effect of the uneven colouring is enhanced. We understand that leading authorities, such as Mr. Paul Waterhouse, have used these pantiles on their work. Some charming sketches illustrating Bell's Poilite products can be seen in their advertisements appearing in the JOURNAL.

"Relay" Automatic Telephones.

The "Relay" Automatic Telephone Company's exhibit at the Shipping, Engineering, and Machinery Exhibition to be held at Olympia from August 31 to September 22, will consist of a complete private automatic telephone exchange. This exchange comprises the automatic switchboard, power board, two sets 24-volt batteries, and telephone instruments all connected up for use. The switchboard consists of an iron frame into which the relay groups are fitted; these groups can be increased as required from time to time without putting the service out of action. The relay takes the place of the human operator, and by a series of electrical circuits actuated through the dial on the telephone instrument the caller becomes his own operator, and can automatically get into touch with any connection required within four seconds. Instruments of the Post Office pattern will be exhibited with a dial attachment, also a convenient form of box type instrument with combination hand telephone, which is recommended for both desk and wall use. An important feature that will be observed with regard to the wiring system is that two wires only are necessary from each telephone to the switchboard, and that the caller can connect himself to any of the other telephones served by the switchboard.

Road Reconstruction in Whitehall.

Whitehall and Parliament Street are being reconstructed by The Improved Wood Pavement Co., Ltd., for the Westminster City Council under the direction of the city engineer and surveyor, Mr L. J. Veit. The old concrete foundation is being replaced by 9 in. of reinforced concrete, B.R.C. Fabric Ref. No. 9, being the reinforcement selected. B.R.C Fabric is made by the British Reinforced Concrete Engineering Co., Ltd., at Manchester.

H. H. MARTYN & Co. LTD
CHELTENHAM.
By Appointment.
Architectural Decorators
— to —
H.M. King George V.
BUSH HOUSE LONDON.
Bronze Doors and Decorative Metal Work in above was executed in our Foundries.
BRONZE and IRON FOUNDERS
AND
ARCHITECTURAL DECORATORS
IN ALL MATERIALS
Work executed and fixed in all part of the world t Architects' own designs.
London Office: 5 Grafton Street, Bond Street, W.1

SUSPENDED SCAFFOLDING | TUBULAR SCAFFOLDING AND CRANE STAGINGS. | "SCAFFIXER" SCAFFOLD TIES
(For Sale) BUILDERS' PLANT (For Hire)
SCAFFOLDING (GREAT BRITAIN) LTD.
Incorporating—
The Tubular Scaffolding Co., Ltd., and The Patent Rapid Scaffold Tie Co., Ltd.
Telegrams: "Scaffixer, Claproad, London." 43 LANSDOWNE ROAD, STOCKWELL, LONDON, S.W.8. *Telephones:* LONDON—BRIXTON 330. BIRMINGHAM—VICTORIA 187.

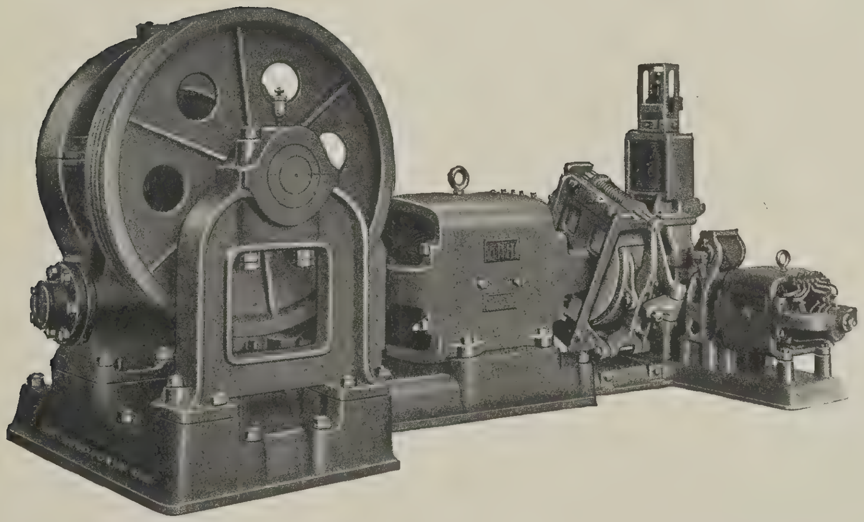
G. JACKSON & SONS, Ltd.,
49 RATHBONE PLACE, LONDON, W. 1.
FIBROUS PLASTER,
FRENCH "STUC," CARTON-PIERRE, WOODWORK, &c.

BUSH HOUSE.

This splendid modern building is fitted with all latest improvements throughout, including

4 PATENT MICRO DRIVE ELECTRIC PASSENGER

LIFTS



PATENT MICRO DRIVE SELF-LEVELLING MACHINE.

WAYGOOD-OTIS LTD.

54 and 55 FETTER LANE, LONDON, E.C.4,
62 and 63 LIONEL STREET, BIRMINGHAM,
and Principal Provincial Cities, and abroad.

Electrical Notes

The Electrification of Russia.

IT is probable that the big scheme for the electrification of Russia which was brought forward in 1920–21 has not been entirely lost sight of outside that country. According to "The Electrical Review," the scheme, which was prepared by the State Commission on Electrification (Goelro) was approved by the Ninth Pan-Russian Conference of Soviets by a decree which was issued on December 21, 1921, ordaining the establishment of State regional generating stations at the cost of State funds. The project proposed the erection of hydro-electric and steam generating stations, which would serve industrial regions in the North-west, the Central industrial region, the Southern mineral industrial region, the district of the Urals, the Volga region, the Caucasus, Turkestan, and the Kuznetsk region in Siberia. The stations, according to the original scheme, were to be thirty in number, and to have a total capacity of plant installed amounting to 1,500,000 h.p. Besides the erection of new stations the decree provided for the utilisation of the existing generating stations by way of their connection with the general supply network in contemplation. At the same time, the decree granted the right to local authorities, co-operative societies and private individuals to establish generating stations of local importance on their own account or with the participation of the State.

The serious situation of the State budget, which has not sufficed for ordinary State requirements, has not permitted of the development of the general scheme at the cost of the budget on the extensive scale that was originally proposed. It has consequently been necessary, a Russian newspaper states, to invite funds from the public for the creation of sources of energy, even if the stations are of local importance.

As to the work hitherto carried out in connection with the realization of the general scheme, the organ of the Council of Labour and Defence states that in the North-western region the Volchoff hydro-electric station, with a proposed capacity of 50,000 kw., is in course of erection. The principal work in the construction of the Volchoff station is the placing of caissons for the foundation of the power station, the erection of an ice-resisting wall, and the connection of the caisson system of the power station wall with the point of contact with the dam. In the second half of the summer the construction of the dam will be commenced, and in the autumn work in the power station will be taken in hand.

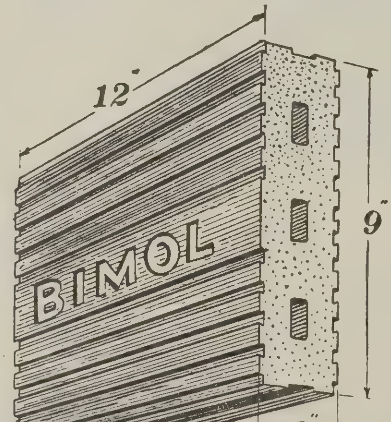
Besides these operations the construction of a sub-station near Petrograd will be proceeded with to receive high-pressure current from the Volchoff station, and the installation of a transmission line. This line will be hung on wooden supports except where it crosses the river Volchoff, and part of the line near Petrograd, where it will be carried on steel towers.

In this year's constructional programme is also included the first section of the peat-fuel station Krasny Oktyabr, and the completion of the station building.

Extensive work to complete the Kaschir station is in view, which will require two generating sets, the installation of which will begin in the following financial year and improvements will be effected in the consumption of low-grade Moscow coal, on which the station runs. The construction of the Kizel district station (6,000 Kw.) in the Ural, is to be completed. The building is at present in progress, besides three sub-stations and the installation of boilers and turbo-generators. Money scarcity is holding this station back. The Nischegorod station, of 20,000 kw., is in course of construction, and is to be completed in 1925. The temporary Schatur station (5,000 kw.) has been finished and a beginning has been made with the permanent station (45,000 kw.), which is to be brought into service in 1927. The plan includes the installation of a high-pressure line from Schatur to Moscow, and two sub-stations.

Out of the thirty stations embodied in the original scheme the official organ states that seven stations are in course of equipment of a total capacity which will reach 193,000 kw. in from three to four years from the present time. It is considered that this achievement will not be unimportant having regard to the conditions under which Soviet Russia has had to begin the realization of the electrification scheme.

BIMOL BLOCKS
Made from **MOLER** earth



FOR
BETTER BUILDINGS
LIGHT - STRONG - FIREPROOF
SOUNDPROOF - NON-CONDUCTING
EASY AND RAPID TO ERECT
SEND FOR PARTICULARS TO "A" DEPT.
The BUILDING & INSULATING MATERIAL CO., Ltd.

DENE HOUSE, ELLISON PLACE, NEWCASTLE 'Phone: Cent. 1044
128 HOPE STREET, GLASGOW 'Phone: Cent. 1053
198 WEST STREET, SHEFFIELD 'Phone: Cent. 4038
WESTERN MAIL CHAMBERS, CARDIFF 'Phone: Cardiff 2892
and
20 ESSEX STREET, STRAND, LONDON, W.C. 2
Telephone: CENTRAL 8716-7. Telegrams: CHALKINESS, ESTRAND

JACKSON & BOYCE
19 BERNERS STREET. LONDON. W.1.
MUSEUM 7500 & 7501.
A VARIED DISPLAY OF ELECTRIC LIGHT FITTINGS MAY BE SEEN IN OUR NEWLY EXTENDED SHOWROOMS.
CONTRACTORS FOR WIRING AND COMPLETE GENERATING PLANTS

R. A. A.

The Week's News

New Cinema for Knowle.

A new cinema is to be erected at Kowle.

Islington Cattle Market.

£3,000 is to be spent on the repair of the Mtropolitan Cattle Market, Islington.

New Library for Westminster.

Westminster City Council are to build a ew library in Wardour Street, W.

Health Week.

Health week will be held under the pronage of the King and Queen from Ctober 7 to 13.

Building at Torquay.

Several big schemes of building developnt in some of the most beautiful parts Torquay are to be commenced shortly.

Swimming Bath for Frimley.

A scheme for the provision of a swimmng bath is under the consideration of t Frimley Urban District Council.

Chesterfield Water Supply Scheme.

A water supply scheme for Staveley, eimated to cost £80,000, is being prepred by the Chesterfield Rural District Cuncil.

Lleyn's Road Schemes.

Lleyn Promontory Council have deced to apply to the Government for a gnt of £20,000 towards the scheme for wlening and improving roads.

Kirkstead Monastery.

A movement is on foot for the restoraon of St. Leonard's Church, Kirkstead, Licolnshire, and for carrying out excavatins on the adjacent site of the ancient mnastery.

Hendon Town-planning Scheme.

The Hendon Rural District Council hve prepared a comprehensive town-pnning scheme, which makes great canges in the rural districts of Pinner, Hadstone, Harrow Weald, and Stanmre.

Building at Southend-on-Sea.

Building operations are very brisk, and huses are completed at the rate of three eery working day, and are often occupied bfore they are completed. The prices rlized for property are amongst the hghest in the country.

More Houses for Dewsbury.

Dewsbury Town Council have decided t take over the Wakefield Road Housing se at a cost of £2,164, and lay it out vth a view to offering building plots for se by auction to private persons.

Housing Sites Given Away.

To encourage private enterprise to hlp overcome the housing shortage, the Vhitehaven Town Council has decided, sbject to the approval of the Ministry o Health, to give free sites to ratepayers dsirous of erecting houses for personal ocupation. If the houses are erected i accordance with the last Housing Act te tenants will also receive the Governmnt subsidy of £120.

New Housing Estate for Burnage.

Plans have been prepared for the Mancester Corporation Housing Committee o the lay-out of 850 houses at Burnage. he cost of the land—which the comttee are advised to purchase—is £9,000.

Housing at Southport.

The Ministry of Health have agreed to release to the Southport Corporation the housing site at Crossens, in order to enable the Corporation to dispose of the land at a total cost of £1,954. It is proposed to sell the land to private builders.

The English Church at Aix-les-Bains.

The repairs to the English church at Aix-les-Bains have been completed. The roof of the vestibule has been entirely renewed, the stained-glass windows restored, electric light has been installed, and other improvements to the structure have been made.

Development of Porthcawl.

A syndicate has completed negotiations for the purchase of a large tract of land extending from the centre of Porthcawl to the Ogmore River, with a sea frontage of nearly two miles. It is intended to lay the estate out with residences, shops, places of amusement, and recreation grounds.

Southsea Common.

Portsmouth Corporation have sealed an agreement with the War Office for the purchase of Southsea Common at a cost of £45,000. Competitive schemes are to be invited for its lay-out, on which it is proposed to expend a sum of £50,000. A prize of £250 is offered for the accepted scheme.

Industrial Development near Shrewsbury.

The prospect of Battlefield—the scene of the Battle of Shrewsbury—becoming a big industrial centre was mentioned at a recent meeting of the Atcham Rural District Council. The Sanitary Committee reported that general approval had been given to plans submitted, subject to further information. It is said that huge steelworks are to be opened.

Featherstone Building Scheme.

Featherstone Urban District Council have received the sanction of the Ministry of Health to borrow £5,530 for the erection of fourteen houses in Brookway, adjoining St. Thomas's Church, Purston. The Council have adopted the plans of their surveyor for the relaying of the Snydale outfall works sewer on the existing line, at a cost of £5,000.

The Decorators' Exhibition.

Almost everyone is interested in decoration, and the idea of a huge exhibition to be opened on October 17, at the Holland Park Hall, London, W., at which will be shown the best and the latest in wallpapers, cretonnes, wall finishes, of every kind, and the hundred and one interesting impedimenta of the house decorator's craft, will make a wide appeal. Some of the exhibits will be purely technical, but they will be none the less interesting for that, for the lay visitor likes to get a glimpse of the works now and then, and is much interested in the means employed to get results. To the craftsman the means is of as much interest as the end.

New Recreation Ground for Braintree.

Mr. William Julian Courtauld, ex-High Sheriff of Essex, who a few months ago gave a site of seventeen acres for a recreation ground for the joint towns of Braintree and Bocking, has sent a cheque for £1,600 to be added to the £800 collected by the inhabitants towards the cost of laying out the ground, and has also promised to erect a sports pavilion.

A Big Block of London Flats.

The incomplete Park Lane Hotel is to be converted into flats. There will be 900 suites of rooms, and tenants will have at their disposal a ballroom, medical and turkish baths, a gymnasium, and a roof garden. In addition, a public restaurant will be provided. The scheme is estimated to cost £50,000, excluding the purchase price.

Lord Bolton's Housing Scheme.

Lord Bolton, of Hackwood Park, Basingstoke, in order to facilitate the building of houses for the working classes, has allotted frontages on four of the main roads leading out of Basingstoke and convenient of access to the centre of the town. The sites each cover about a quarter of an acre, and are on roads which are already sewered and have water, gas, and electricity services.

Housing at Leigh.

Leigh Town Council have resolved to grant the Leigh and District Master Builders' Association a lump sum of £100 for each house erected by private enterprise. It was stated that the building of fifty houses would commence in a few days. It was also resolved that the Housing Committee should consider the question of seeking tenders for the erection of 500 houses for the Corporation.

The French Exhibition of Industrial Art.

The Paris Exhibition of Industrial Art relating to sports will be housed on the grounds in which the Olympic games are held—Colombe Stadium—from May 15 to July 27, 1924. Objects intended for the show must be delivered between March 15 and April 15, and they will be admitted to the exhibition by an international jury composed of personages well known in the worlds of art and sport. Nothing will be exhibited the form of which does not strictly accord with its use, and each object must attain beauty by attention to its contour, quality of material, and perfection of execution. Further particulars can be obtained from the Commissariat Général des Arts et Relations Extérieures, 30 Rue de Grammont (Paris Building), Paris.

Roman Finds at Bath.

Excavations at the Roman baths at Bath are yielding much of interest to archæologists. The large swimming bath which was almost covered by the later Old Kingston baths has now been fully defined, and hypocausts, which heated the chambers to the east, discovered. A portion of the floor, covered with the original Roman lead, and a cistern or tank of beautifully preserved stonework, have also been found.

New Road to London Docks.

The London Chamber of Commerce have decided to call a general meeting early in the autumn to urge the Government to consider the question of constructing a great new arterial road to the London docks. At the present time there is a tremendous amount of congestion on the existing roads, and when the large dock extensions now being embarked upon by the Port of London Authority are completed, the roads will become more and more inadequate to deal with the vast amount of traffic to and from the docks.

The late Mr. Peter Marshall.

We regret to record the death of Mr. Peter Marshall, of The Hollies, Handsworth, at the age of seventy-six. He had been in failing health for some time. Articled as a surveyor to Mr. George Unwin, of Whitwell, he came to Sheffield in the 'seventies, and entered the service of the late Mr. Frederick Fowler, whose chief assistant he was until 1884. In that year he became partner with Mr. Reginald W. Fowler, in the firm of Fowler and Marshall, and they carried on practice together until three years ago, when Mr. Marshall retired owing to ill-health. He had been president of the Sheffield Society of Architects and Surveyors.

Wembley's Conference Programme.

A series of conferences on subjects of Imperial and international interest is to be one of the features of the British Empire Exhibition at Wembley next year. Though the exhibition is still nine months ahead, considerable progress has been made in drawing up a programme, and already many very important conferences have been arranged. Lord Derby is to preside at the first World Power Conference, which the British Electrical and Allied Manufacturers' Association has in hand in co-operation with technical and scientific institutions and associated organizations in Great Britain and other countries. The conference will consider power resources, power development, and power application, and it is anticipated that a very large number of delegates from all over the world will attend. The conference will last at least a fortnight, and over 200 papers will be read and discussed. The Textile Institute of Manchester, in co-operation with the leading textile federations and associations, is organizing an Empire Textile Conference, and the convention of the Associated Advertising Clubs of the World, which is being organized by the Thirty Club of London, will make Wembley the focus of all the principal advertising organizations. The Institution of Mining and Metallurgy and the Decimal Association have also arranged to hold conferences. Apart from open conferences of this kind many industrial and other organizations have already arranged to hold their annual congresses at Wembley.

Seven Subways for Piccadilly Circus.

Further particulars are available of the proposed rebuilding of the Underground station at Piccadilly Circus. The new station will be about 15 ft. immediately beneath the Circus, and will be oval in shape, with a large circulating area, from which separate escalators will connect with the Bakerloo and Piccadilly lines, thus dispensing with the present lift service. There will be six escalators. A broad subway under the Circus, completely encircling the booking hall, will be a feature of the new station. Seven entrances will be provided.

Sandown Bridge at Sandwich.

Sandwich is keenly divided upon the question of widening the Sandown Bridge. It is one of the main approaches, and forms part of the old gate through which Queen Elizabeth passed on her State entry into Sandwich in 1572. Although petitions signed by over 300 people have been received protesting against the reconstruction of the bridge on the grounds that the architectural beauty and historical associations of the town would be affected, the Town Council have decided to proceed with the alterations.

Hydro for Vange.

Plans are in preparation for the erection of a hydro at Vange, a village in Essex, where a medicinal spring, it was claimed some time ago, has been discovered on a farm. A Westcliff firm of
architects, it is stated, have been a
pointed to design the buildings, upo
which a sum of £75,000 is to be spen
The scheme provides for a fully-equippe
hydro incorporating the best Englis
and Continental features, with facilitie
for concerts, golf, tennis, and othe
recreations.

Northern Architectural Association.

There was a large attendance at th
outdoor meeting of the Northern Archi
tectural Association, held at Durham. Th
party included several members from th
Tees-side branch in addition to those fron
the Central District. The President, M
W. T. Jones, F.S.A., F.R.I.B.A., con
ducted the party round the Castle, spok
upon its history and referred to th
numerous points of architectural interest
Tea was served in the dining hall, at th
invitation of the President, who wa
accorded a hearty vote of thanks on th
motion of Mr. A. B. Plummer, Tyne
mouth, seconded by Mr. Wm. Milburn, o
Sunderland. After tea the party was con
ducted round the Cathedral, and als
visited several other architectural feature
of the city.

Glasgow Housing Exhibition.

Many new features will be introduce
in the forthcoming Housing and Healt
Exhibition which the Glasgow Corpora
tion have arranged to take place in th
Industrial Hall, Kelvin Hall, from Octo
ber 1 to 20. This will be the fifth show o
the kind promoted by the civic authori
ties of the second city of the Empire
and already it promises to be a grea
success. Applications for space so fa
have been exceedingly good. Outstand
ing sections include building materials
sanitary appliances, lighting and heat
ing, decoration, and furnishings. Th
display of goods in all these department
will be such as to warrant a large at
tendance of the general public. A yea
ago the exhibition was visited by man
thousands of spectators, and the forth
coming show in view of its additiona
attractions is sure to be even much mor
largely attended.

SUSPENDED SCAFFOLDING | **TUBULAR SCAFFOLDING AND CRANE STAGINGS.** | **"SCAFFIXER" SCAFFOLD TIES**

(For Sale) BUILDERS' PLANT (For Hire)

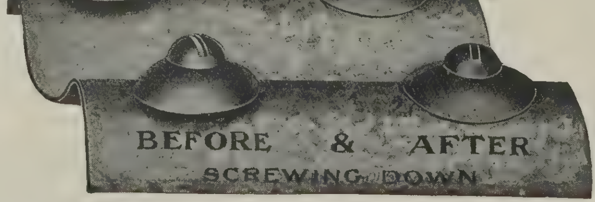
SCAFFOLDING (GREAT BRITAIN) LTD.

Incorporating—
The Tubular Scaffolding Co., Ltd., and The Patent Rapid Scaffold Tie Co., Ltd.

Telegrams: "Scaffixer, Claproad, London."
43 LANSDOWNE ROAD, STOCKWELL, LONDON, S.W.8.
Telephones: London—Brixton 330. Birmingham—Victoria 187.

"LIMPET" PATENT BOLTS & WASHERS

For CORRUGATED IRON SHEETS and Asbestos Cement Corrugated Sheets



"Limpet" Washers make an Absolutely Watertight Joint. They prevent Leakage and Corrosion round the Bolt Holes.
ADOPTED BY THE INDIAN GOVERNMENT, CROWN AGENTS FOR THE COLONIES, AND THE LEADING RAILWAY CO.'S

PRICE'S PATENT

The most approved Fixing for Joining Corrugated Iron Sheeting together.

REGISTERED TRADE MARK
LIMPET

Full Particulars and Samples from
WILLIAM JACKS & CO. Winchester House, Old Broad Street, LONDON, E.C.2.
Agent for Scotland: FRANK G. PRICE & Co., 115 Bothwell St., Glasgow.

The Week's News

From Church to Canteen.

St. James's Church, Kennington Park Road, S.E., is to be nverted into a canteen.

Improvements at Whitley Bay.

Among the many important improvements being carried t at Whitley Bay is the erection of a number of shops on e lower promenade.

New Parade for Portsmouth.

£30,000 is to be spent by the Portsmouth Corporation on e construction of a Grand Parade to link up Southsea mmon with old Portsmouth.

New Bridge over the Seine.

The largest reinforced concrete bridge in the world has been ened to traffic across the Seine at St. Pierre-du-Vauvray ure). It is about 400 ft. long and 25 ft. wide.

London's Open-air Swimming Baths.

A new London County Council swimming bath at Highbury ields, N., is to be opened at the end of this month. Other ths are being constructed at Southwark and Peckham Rye.

The R.I.B.A. Kalendar.

The Kalendar for the coming Session is now in course of eparation, and changes of address, etc., should be notified the Secretary, R.I.B.A., 9 Conduit Street, W.1, as soon possible.

Manchester's Relief Schemes.

The Manchester Corporation intend to spend £250,000 on ad schemes, which will employ 2,000 unemployed for a year. his is in addition to £67,000 already authorized by the High- ays Committee.

Church Tower for City Girls.

It is proposed to convert the 100 ft. high square tower of . Mary Somerset in Upper Thames Street into free rest oms for business women. The church, of which the tower as a part, was built by Wren in 1695, but it was demolished 1871.

Southsea Common.

Prizes to the value of £400 are being offered by the Ports- outh Corporation for the best designs of the beautification Southsea Common, which they have just purchased from e War Office for £45,000. The scheme will involve a total st of about £100,000.

The Queen and Princess at Old Church.

The Queen, Princess Mary, Prince George, and Viscount ascelles recently visited the Norman Church of Adel, near eeds. The Rector met the Royal party at the gate and alked with them to the church, where he pointed out the any features of architectural interest.

Mr. J. R. Naylor's Estate.

Mr. John Reginald Naylor, of The Hermitage, Duffield, chitect and surveyor, surveyor to the Royal Agricultural ciety and architect of several large picture houses, and a ember of the firm of Naylor & Sale, Derby, who died on ebruary 4 last, aged sixty-nine years, left estate of the gross lue of £28,726, with net personalty £9,842.

Worthing Developments.

Building operations at Worthing are proceeding at an traordinary rate, and the constructional cost of building mmenced within the past three months is estimated at over 00,000. Work on the South Street Arcade has commenced, d when completed, will provide an imposing approach to e pier. The architect is Mr. Peter D. Stonham, of Eastbourne.

Malhamdale and Proposed Hospital.

Dr. J. R. Hutchinson, on behalf of the Ministry of Health, nducted an enquiry into the application of the West Riding unty Council for sanction to borrow £240 for the purchase a site near Airton for a smallpox hospital. The site is in the cturesque Malhamdale and residents opposed it on the ground its unsuitability for the purpose and of its prejudicial effect pon the dale as a holiday and residential place. The County ouncil approved of the site because it was in the centre of the istricts it was intended to serve; there was no house within a quarter of a mile, and only one within half a mile. There was an adequate water supply. The hospital would not spoil the dale as a beauty spot. Objectors argued that, while the place was a swamp in winter, there would not be enough water for the hospital in summer. There were many sites much more suitable.

Leamington's Housing Scheme.

Leamington Town Council have decided to approve a scheme for the erection of 260 additional houses for the accommodation of the working classes. The scheme provides scope for private enterprise, but should this fail the Council will make up the deficiency. Rushmore Farm is the site fixed upon.

Southend-on-Sea Improvements.

The special Town Hall Committee have been instructed to submit to the Town Council plans for a new town hall and municipal offices. At present the work of the borough officials is carried on under great difficulties. Sanction has been obtained for the borrowing of £5,500 for the erection of a new police-court, which will be proceeded with as soon as possible.

Bournemouth Improvements.

The contract for the carrying out of the new promenade to the east of Boscombe Pier has been accepted by the Corporation and the work will be commenced almost immediately. The cost will probably amount to about £60,000. Other important works are being arranged for in the near future, including the completion of the enlargement of the Meyrick golf links.

The late Mr. W. Dixon.

We regret to record the death of Mr. W. Dixon, Licentiate R.I.B.A., of the firm of Messrs. R. and W. Dixon, architects and surveyors, Barnsley, at the age of sixty-two. He was articled to the late Mr. James Lumley, C.E., Bradford, and afterwards entered the office of his brother, ultimately becoming a partner, and was engaged mainly in the surveying part of the practice.

Big Waterways Scheme.

A scheme costing £3,750,000 for improving the waterways between Birmingham and Bristol was considered at a meeting in Birmingham of the National Council of Inland Waterways. It was decided that the Birmingham and Worcester section offered immediate practical possibilities for developments, which would mitigate unemployment during the winter and stimulate trade. The Minister of Labour is to be invited to a conference in Birmingham, when the project will be discussed.

New Observatory Site.

News that the magnetic section of Greenwich Observatory is to be removed to Holmbury Hill, near Shere, Surrey, was at first received with alarm by residents there, says Sir Vincent Baddeley, First Principal Assistant Secretary at the Admiralty They imagined an ugly building would be erected, spoiling their beautiful scenery, but they have now been assured that this will not be the case. The magnetic section is being removed from Greenwich at the expense of the Southern Railway, the electrification of whose line has upset the working of the Admiralty's instruments at the Observatory.

Holmbury Hill.

Following the concession of the Admiralty to purchase and add to Holmbury Hill an area of private land equal to that they intend to occupy for the new magnetic testing station, the Commons and Footpaths Preservation Society has recommended that the commoners' opposition should be withdrawn. The Society, it is stated, have received a further assurance from the Admiralty that the proposed buildings and fences "shall be of an artistic character," and that everything will be done to prevent the disfigurement of the place.

Housing Progress in Scotland.

The following figures show the progress that has been made in State-aided housing schemes in Scotland to July 31, 1923: Permanent houses completed, 18,614; temporary, 665; reconstructed, 101; houses completed under the Private Subsidy Scheme, 2,271; making a total of 21,651. There are 3,305 houses at present under construction in connection with housing schemes carried out by local authorities and public utility societies. The total amount paid by the Scottish Board of Health in respect of the 2,271 houses completed under the Private Subsidy Schemes is £544,570.

The Week's News—*continued.*

£75,000 Essex Hydro.

Following the recent discovery of medicinal springs at Vange (Essex), plans are in preparation for the erection of a new hydro there. A Westcliff firm of architects have been appointed to design the buildings, upon which £75,000 are to be spent. The scheme provides for a fully-equipped hydro, incorporating the best English and Continental features, with facilities for concerts, golf, tennis, and other recreations.

Sheffield Housing Progress.

The Estates Committee of the Sheffield City Council have approved of the third, fourth, and fifth instalments of the Manor Housing Scheme (150 houses each). A lay-out plan showing forty-seven houses to be erected on the Wincobank Hall site has also been approved. Out of 2,418 houses in the various State-assisted housing schemes in progress in the city, 2,223 are now completed, and 186 are in hand.

Trade and Craft

Fan Standardization.

The Council of the Institution of Heating and Ventilating Engineers some time ago appointed a committee known as the Fan Standardization Committee, having representatives of both fan manufacturers and users, together with representatives from the Admiralty and H.M. Office of Works. This committee has been holding meetings at regular intervals since the spring of last year. They find that there are many difficult problems to settle, and that very considerable differences of opinion exist, both amongst the fan makers and also amongst the users, as to the correct terms to use, and as to the best method of testing fans. They hope, however, eventually to clear up all misunderstandings and ambiguities, and to issue a standard list of terms, also to define a standard method of fan testing and a clear method of listing fan performances.

G.E.C. Reduced Prices.

The price of three of the most popular street lighting lanterns of the General Electric Company, Ltd.—the "City," the "Birmingham," and the "Boro"—has been greatly reduced. The "City" lantern has been specially designed for use with "Osram" gasfilled lamps of all sizes from 150 to 1,500 watts. The reflector is designed to give a very wide dispersion of light. A special system of ventilation has been provided, which while giving a large radiating surface allows a current of air to be drawn continuously over the lamp. Another noteworthy feature is the provision of a simple and substantial focusing device. The glasses are wired to minimize risk of accident through breakage when suspended. Safety chains are also provided so that the globes can be lowered for cleaning. A special U-section rubber gasket forms a watertight joint between the rim of the glass and the lantern and guards the rim against breakage. The "Birmingham" lantern has a vitreous enamelled steel body, finished green outside and white inside, and the "Boro" lantern has a vitreous enamelled steel body, finished green outside with white reflecting surface, and cast-iron top. The head office of the company is Magnet House, Kingsway, London, W.C.2.

Floodlighting of Waterloo Bridge Hoarding.

In a recent issue we gave particulars of a hoarding at Chiswick, illuminated by G.E.C. floodlights, mounted on brackets projecting from the top of the hoarding. We now give details of an example where the direct type of floodlight projectors are mounted some distance in front—the hoarding in Wellington Street, facing Waterloo Bridge. This hoarding is 40 ft. square, and is illuminated by a battery of five G.E.C. floodlights, type I.E.2/93, three being equipped with 500 watt Osram gasfilled lamps, and the remaining two with 300 watt lamps. The current consumption, therefore, is approximately, 1·3 watts per square foot. The G.E.C. floodlight projector used has a substantial copper housing, lined inside with high-grade mirror glass. It is particularly suitable for floodlighting installations where a horizontal beam can be used, and the figures quoted above show that it will give excellent results for a very moderate expenditure of energy. Further information regarding the use of floodlighting, for the illumination of either hoardings or the exterior of buildings, can be obtained from the Illuminating Engineering Dept. of the G.E.C., Magnet House, Kingsway, W.C.2.

Sanitary Fittings.

A new list of sanitary fittings has just been issued for the use of architects by Messrs. A. Emanuel and Sons, Ltd. All the fittings shown are modelled on the latest lines of sanitation, and comprise some of the best of the different types manufactured by the firm. Each article is illustrated, and useful details—such as a description, sizes, and cost of the articles—are given to enable architects and their clients to make their selection with the minimum of trouble. Each model is notable for its own particular design and finish, and it should be easy from the selection of fittings illustrated to choose one well able to comply with the artistic and utilitarian requirements of the most fastidious client. The company extend a cordial invitation to architects and others to visit the showrooms at 7, 9, 11, and 13 George Street, Manchester Square, London, W.1. Here there are exhibits in gas, electric, and sanitary engineering covering a wide range in design and value.

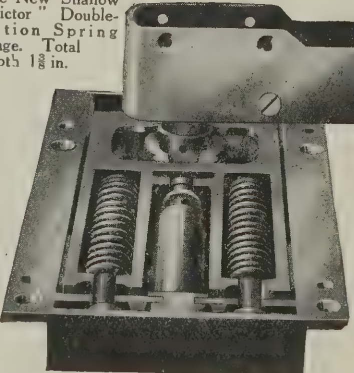
G. JACKSON & SONS, Ltd.,
49 RATHBONE PLACE, LONDON, W.1.
FIBROUS PLASTER,
FRENCH "STUC," CARTON-PIERRE, WOODWORK, &c.

Door "VICTOR" Springs, etc.

ROBERT ADAMS
3 & 5 EMERALD ST.,
LONDON : W.C.1.

Specialities :
"VICTOR" Door Springs, Fanlight Gearing, Panic Bolts, Sash Balances, Brassfoundry and Locks, etc., etc.

Price Lists post free on application.



The New Shallow "Victor" Double-Action Spring Hinge. Total Depth 1⅝ in.

VICTOR TRADE MARK ESTABD 1879

Supplied for notable Buildings everywhere including :
New London County Hall
Bush House
Peter Robinson's New Premises
Messrs. Lyons' New Restaurant, Coventry Street
New Public Offices, Dublin
Messrs. Liberty's
Messrs. Selfridge's
Messrs. Gorringe's
Messrs. Hamley's
Messrs. Whiteley's
Messrs. Marshall & Snelgrove's
Galeries Lafayette
Furness-Withy Buildings
New Royal Theatre, Drury Lane

The Week's News

Burton-on-Trent Garden Suburb.

Plans for a model suburb between Horninglow and Stretton e being prepared for the Burton-on-Trent Corporation.

Bradford's Slum Areas.

A scheme for the clearance of slum areas at Bradford is efore the Ministry of Health. It is estimated that there are ,000 back-to-back houses in the city.

Concert Hall for Ilfracombe.

Plans of the proposed concert hall at Ilfracombe have been epared by Messrs. Matcham & Co., of London. The need r a first-class concert hall has been long felt.

The Old Pagoda Stands.

While nearly all the buildings of modern architecture and onstruction in Tokio have collapsed, the pagoda in Uyeno ark, which was about the only remnant of ancient architecure in the capital, is reported to be intact, says Reuter.

Church Restoration at Manaton.

It has been found necessary to embark on a scheme of storation of Manaton Church at an estimated cost of £2,500 consequence of the condition of the roof. Several sums owards the cost have already been promised. The screen of he church is well known for its beauty.

New Pier, Hove.

Hove is to have a residential club at the head of a new pier. he club will have forty bedrooms and a lounge restaurant. robably building will start next month, and will take eighteen onths to complete. The scheme will cost £80,000, and will clude a theatre, bandstand, kursaal, dance-hall, and public staurant.

Change of Address.

Mr. Frank A. Coyle, M.S.A., has changed his address from West Parade, Consett, to 29 Newmarket Street, Consett. o this address recent catalogues, etc., may be sent. Mr. oyle has a considerable amount of work on hand, including .C. school buildings at Consett, Leadgate, Stanley, etc., in he county of Durham.

Housing at Yeovil.

Yeovil Corporation's fourth housing scheme is nearing ompletion. Although over 270 houses have been erected by he Corporation, and over 180 in the rural district, the problem as far from solution as ever. The Council have agreed to rect another 160 houses, and 60 of these will be built in a new art of the town known as Westland.

Southwark Cathedral.

An appeal is to be made for a fund to meet the cost of the enovation of Southwark Cathedral. The condition of the abric is causing considerable anxiety to the chapter. A cheme for the renovation of the Gower tomb, erected to the emory of England's first great poet at a cost of about £300, also being considered.

Old Eton Frescoes.

The panelling and thick canvas placed over the ancient ural paintings in Eton College in 1847 to protect them when he stalls were erected have been removed. The paintings epresent some of the miracles, and are believed to have een carried out by William Baker about 1488. In 1699 the aintings were concealed under wainscoting, and were not gain discovered until 1847.

Proposed New Cinema, West End.

The scheme for the erection of a great cinema, on the model f one of America's finest picture houses, at the eastern end f Oxford Street was taken a step further during the latter part f last week. The proposals provide for a large hotel, resaurant, and other attractions; and it is said that arrangements re contemplated for an entrance direct from the enlarged ottenham Court Road Tube Station, now in course of contruction.

Homes for Defective Blind Children.

The Braille and "Servers of the Blind" League who are stablishing the Ellen Terry National Homes for Defective lind Children have purchased a home at Reigate, Surrey. egotiations are also taking place for additional homes in the north of England, but the scheme cannot be completed unless the public come to the aid of the League. Buildings exist in the grounds already purchased which can easily be adapted, if the money can be found for the alterations, for training defectives in the light employment suited to their capacities. The Ministry of Health, local authorities, and blind institutions are giving the heartiest welcome and support to the scheme. Contributions in aid of the work should be addressed to Miss Ellen Terry, President, the Braille and "Servers of the Blind" League, 3 Upper Woburn Place, W.C.1.

Seventeenth-Century Art.

Dr. Percy Dearmer will begin a course of lectures on Seventeenth-century Art in the Great Hall of King's College on Tuesday, October 9. The lectures, which will be illustrated by lantern slides, will be on the ten Tuesdays of term at 5.30 p.m. Admission for non-members of the University is by a shilling ticket obtainable at the door. The course will begin with summaries of sixteenth-century painting, and will include Baroque architecture, Bernini, El Greco, and Velasquez.

Feltham Garden Suburb.

The scheme to develop some 220 acres of land at Feltham, forming part of the security of the debenture holders of Whitehead Aircraft (1917) (Limited), has received the sanction of the Court. It is proposed to create a garden suburb, consisting of 1,800 houses, built eight to the acre, thirty shops, six public buildings, open spaces, and factory accommodation. The site is within twenty-five minutes of Waterloo. On the estate is Hanworth Park Mansion, which, with its grounds, will be used as a club-house for the use of residents.

The Burma Society of Architects.

At the first annual general meeting of the Burma Society of Architects held on June 15 in Rangoon, Mr. E. J. Pullar, F.R.I.B.A., was elected president; Mr. T. O. Foster, F.R.I.B.A., vice-president; and Mr. L. A. Box, Lic.R.I.B.A., Mr. W. E. de Souza, A.R.I.B.A., and Mr. J. L. Feirn, A.R.I.B.A., honorary secretary and treasurer, members of the Council.

It was resolved that a copy of the rules and regulations of the Society be forwarded to the secretary of the Royal Institute of British Architects for approval and for the purpose of affiliation.

A National Gas Exhibition.

Under the patronage of the King a National Gas Exhibition, demonstrating the service of gas in the home and industry, will be opened at the Bingley Hall, Birmingham, on Monday, September 17, and will continue until Wednesday, October 3. A comprehensive display of the activities of the Gas Industry, such as has not been seen since the National Gas Congress and Exhibition held in London in 1913, cannot fail to interest and indeed benefit the public, every section of which is vitally affected by the provision of cheap and efficient light, heat, and power.

Town Planning.

Mr. Thomas Adams, of the firm of Thomas Adams and Longstreth Thompson, town-planning consultants, 121 Victoria Street, Westminster, has been appointed chief consultant to the committee on the plan of New York and its environs. The plan of the committee deals with an area of 5,220 square miles, having a population of about 9,000,000. In addition to the New York work, the firm is engaged in preparing regional plans for the West Middlesex and Thames Valley regions of Greater London, affording opportunities for interesting comparative studies to be made of conditions in London and New York.

The L.C.C. Central School of Arts and Crafts.

Architecture and building crafts, painted and sculptured architectural decoration, stained glass and furniture form an important part of the instruction to be obtained at the London County Council Central School of Arts and Crafts, which re-opens on September 24. The classes in architecture and building, under the direction of E. S. Andrews, B.Sc., S. B. K. Caulsfield, F.R.I.B.A., B. Oliver, F.R.I.B.A., C. Spooner, F.R.I.B.A., and F. H. Mansfield, Licentiate R.I.B.A., are planned to meet the needs of those working for the R.I.B.A. examinations. A prospectus and time table can be obtained from Mr. F. V. Burridge, R.E., the principal of the school, at Southampton Row, W.C.1.

New Inventions

Latest Patent Applications.

20243.—Bille, L.—Buildings, etc. August 8.
20397.—Insley Manufacturing Co.—Apparatus for handling building material. August 10.
20186.—Price, F. G.—Roofing-tiles, etc. August 8.
20431.—Taylor, R. P.—Building construction. August 10.
20628.—Glynn, J. P.—Reinforced-concrete floors and roofs. August 14.
20535.—Hartmann, O.—Ceiling of slabs. August 13.
20698.—Lombardi, L.—Central heating of buildings. August 14.
20903.—McNay, J. T.—Adjustable framing or supports for concrete floors, beams, etc. August 17.
21143.—Building Accessories and Flooring Co., Ltd.—Manufacture of asphalt. August 21.
21239.—Cuming, A. J. Roach.—Collapsible coverings for framework buildings, &c. August 22.
21061.—Owen, E. J.—Building construction. August 20.

Specifications Published.

201284.—Robert, E. W., and Lesse, L. F. W.—Building unit and method of erecting floors or roofs and ceilings therewith.
201306.—Jones, J. E.—Adjustable mould for manufacturing concrete blocks, slabs, quoins, and the like.
201316.—Beierach, H.—Building unit.
192377.—Robertson Co., H. H.—Building material.
201509.—Haramiishi, M.—Ferro-concrete floors and walls.
201726.—Radiation, Ltd., and Harvey, F.—Flues, chimneys, and the like.
201743.—Rangeley, S.—Building-block.
201813.—Cruijff, C. J.—Method and material for constructing or repairing dust-free roads and for other purposes.
189778.—Magelssen, N.—Fireproof building panel or plate.
201836.—Metzke and Greim Tief-Und Hochbau.—Connection plate for the connection of building elements in wood construction.
194264.—Gronroos, H.—Process for manufacture of building materials or the like, such as building stone, roofing tiles or slabs, wall-covering plates, partition blocks and the like.
202032.—Annison, R. H.—Constructional units for use in steel piling, bridge construction, and for other purposes.
202129.—Dudley, J. G.—Cement-coated metal-framed buildings and other structures.
202230.—Mackay, H. A.—Bituminous emulsions and their use in road-making and the like.

Abstracts Published.

199527.—Slab buildings.—Lowry, S. S. (Representative of Lowry, F.), of 12 Bailey Road, Leigh, Essex.—In slab buildings with double, treble, or other hollow walls, the site concrete is provided with a toe, and the walls are tied at the floor and eaves levels by breeze concrete bonding courses on which the joists rest and to which wall-plates may be nailed. Channels and draining holes are provided in the courses. The ground joists are of breeze concrete and have lateral perforations for air circulation; they may also have a coating of damp-proof material on the upper face. Window jambs are similar to the courses.

199758.—Reinforced-concrete.—Haramiishi, M., of 369 Hon-Machi, Kochi-shi, Kochiken, Japan.—In a ferro-concrete structure, one or more reinforcing-rods are joined by autogenous welding to a metal plate, which may have an extension forming a bracket. The plate may be parallel to the rods or at any angle thereto. In a modification the rods are autogenously welded to other reinforcing-rods, which are also welded to a plate adapted to be secured to a plate welded to the reinforcing-rods of a column.

200276.—Floors, roofs.—Rings, F. C. C., 146 Church Road, Upper Norwood, and Anglo-Danish Concrete Construction Co., Ltd., 7 Norfolk Street, Strand, both in London.

The above particulars are specially prepared by Messrs. Rayner & Co., registered patent agents, of 5 Chancery Lane, London, W.C.2, from whom readers of the JOURNAL may obtain all information free relating to patents, trade marks, and designs. Messrs. Rayner & Co. will obtain printed copies of the published specifications and abstract only, and forward on post free for the price of 1/6 each.

ADELAIDE HOUSE
LONDON BRIDGE.

THE WHOLE OF THE GRANITE WORK IN THIS BUILDING
IS BEING SUPPLIED AND FIXED BY
BROOKES LIMITED

Head Offices & Quarries: HALIFAX, YORKS.
London Offices: 65 VICTORIA ST., WESTMINSTER.
Manchester: 8 EXCHANGE STREET.

SUSPENDED SCAFFOLDING | TUBULAR SCAFFOLDING AND CRANE STAGINGS. | "SCAFFIXER" SCAFFOLD TIES
(For Sale) BUILDERS' PLANT (For Hire)
SCAFFOLDING (GREAT BRITAIN) LTD.
Incorporating—
The Tubular Scaffolding Co., Ltd., and The Patent Rapid Scaffold Tie Co., Ltd.
Telegrams: "Scaffixer, Claproad, London." 43 LANSDOWNE ROAD, STOCKWELL, LONDON, S.W.8. *Telephones:* LONDON—BRIXTON 330. BIRMINGHAM—VICTORIA 187.

G. JACKSON & SONS, Ltd.,
49 RATHBONE PLACE, LONDON, W. 1.
FIBROUS PLASTER,
FRENCH "STUC," CARTON-PIERRE, WOODWORK, &c.

Pearline

Paint More Save More

THE fact that the demand for Pearline Enamel is steadily increasing is one of which we are proud. It shows that the care bestowed upon the selection of the raw materials and upon the various processes of manufacture has been well worth while. Supervision at every stage has enabled us to produce an enamel of super quality at a reasonable price. The practical Decorator realizes that Pearline Enamel can be used upon his best work with perfect safety—it can be relied upon to give good results because it is tested at every stage during manufacture.

Specify Pearline for all painted surfaces.

obt. Ingham Clark & Co. Ld.
est Ham Abbey - - London, E.15.
Associated with R. Gay & Co., Ltd.
Manufacturers of Impenetrable Guaranteed Paint.

The Creed of Service

THE PRACTICAL UTILITY OF SCIENCE IS THE "end-in-view" of every scientist who holds that "Science is for Life—not Life for Science."

This is the whole creed of service.

HOLOPHANE LTD.

felt that the Science of Lighting was not complete until all lighting problems could be solved successfully from the architect's point of view and in accordance with the recommendations of Doctors and the requirements of Legislation.

A scientific
SERVICE
to the Architect

Holophane Limited, for a long period of years, has had practical experience of solving lighting difficulties on precisely these scientific and progressive lines. In the course of time facts and data have been accumulated, collated, and tabulated. This experience and information, together with the services of competent engineers, is readily available to architects—and is given gratis.

Enquiries are invited. Brochure dealing more fully with the subject gladly sent on request.

HOLOPHANE LTD.
Architectural Department,
23 Elverton St., Vincent Sq., Westminster, S.W. 1
(Immediately behind the Horticultural Hall)

Electrical Notes: Uniformity in Commercial Practic

UNIFORMITY is, in many phases of life, the least desirable thing. In commercial practice, however, and particularly in the rendering and paying of accounts, the need for a measure of uniformity is evidenced in several ways. Just as one cheque is much the same as another and can be drawn and presented in the same way, so the various transactions which are entered into every day might be brought into line with each other, according to the particular customs of the different branches of industry.

One good sign is to be observed in the large, and increasing, number of firms which provide a form of receipt on the back of their cheques. This device, besides being thoroughly efficient, may be recommended as a simple and economical method. The one proviso that might be made is that the bank pass book should be agreed with the firm's cash book every month, but as this should be done in any case, it is hardly necessary to call attention to it here.

My present consideration is commercial practice as between firm and firm; my endeavour is to give expression to the need of some generally agreed way in which transactions might be conducted between buyer and seller. Quotations, orders, invoices, payments, packing charges—all these details apply to almost every sale in any of the manufacturing trades, yet every firm has its own peculiar methods and requirements.

Let it be said at once that quotations should always include delivery charges to customer's address or British port and each quotation should be numbered as a means of reference for both parties. Where several similar machines are quoted for at the same time, confusion may very easily arise unless such a safeguard is adopted.

The order form needs to be printed so that a mark of reference indicating the works order or other purpose for which the goods are required, may be written against the serial number. Order forms are of every possible kind, and the lists of instructions found upon many of them are, in their variety, not a little bewildering. As suppliers, many people insist upon "strictly net" terms, with a request that payment shall be made on a certain day of the month following delivery; as purchasers the same people may (and often do) stipulate for 2½ per cent. discount and payment at the end of the month following delivery. No accountant can fail to have noticed numerous instances of this. The co-operation of trade associations must be sought before any solution can be found. They, by circularizing their members and obtaining copies of order forms used by members, will be able to find a level on which most are agreed. Further, the drawing-up of a suggested standard order form would place their findings on a practical basis. A uniform statement of terms on the order has its value in the fact that the order controls the whole transaction.

With advice note and invoice, standardization of procedure rather than of form is necessary. The first should be sent the same day as goods are dispatched, the second on the following day at the latest. This generally adopted, would help the accounts departments of both parties, and, while not entailing any increase of work, would make for a higher standard of efficiency. The practice of sending, at the end of the month, one invoice covering several consignments, leads to disorganization at one end and delayed settlement at the other. It is, of course, essential that the customer's order number and reference be quoted on advice and invoice.

It is difficult to understand why so many firms never send statements. The monthly statement of account is the only means of checking the buyer's with the seller's entries for the month concerned, and where invoicing has been kept up to date, there is no reason why statements should not be dispatched before the fifth of the following month.

While there may be many ways of rendering packing charges, there is only one accepted way of dealing with them, and that is by striking them off the invoice. Here all interest in them—from many a customer's point of view—ceases. "No one was ever put into court for non-payment of packing charges" seems to be a not uncommon impression. F. W. POPE.

LIGHTING & COOKING
IN THE COUNTRY.

The **SILVERLITE GENERATOR** starts and stops automatically, and is so simple that it can be attended to by a maid.

Erected under a three years' guarantee. Well known for its great reliability and wonderful economy.

Gives a soft light more brilliant than electric, and at a fraction of the running and maintenance costs.

NON-EXPLOSIVE
NON-POISONOUS

ALL FITTINGS SUPPLIED WITH SWITCH TAPS.

INSTALLATIONS planned to architects' requirements.

ESTIMATES FREE.

Tel. No. Padd. 2187

SPENSERS
Artistic Lighting Specialists,
6N London Street,
London, W. 2,
(*opposite Paddington Stn.*),
AND
119 George Street, Edinburgh.

SILVERLITE

JACKSON & BOYCE
19 BERNERS STREET. LONDON. W.1.
MUSEUM 7500 & 7501.

A VARIED DISPLAY OF ELECTRIC LIGHT FITTINGS MAY BE SEEN IN OUR NEWLY EXTENDED SHOWROOMS.

CONTRACTORS FOR WIRING AND COMPLETE GENERATING PLANTS

R.A.A.

The Housing Problem

More than 300 delegates from all parts of the country assembled at Rhyl for the opening of the annual conference of the Sanitary Inspectors' Association, and amongst the important subjects discussed were public health administration, slum clearance, and the position of the sanitary inspector in the public service. An address was given by Mr. W. Addington Willis on the subject of the provision and supervision of houses, in the course of which the speaker said that the method of rehousing generally adopted, at least in London, had been to erect what their creators, out of compliment to themselves, called "model" dwellings, which in many cases possessed neither the architectural beauties of a barracks nor the airiness of a workhouse. With regard to the shortage of houses, he could find nothing to account for the disastrous falling off in private building efforts except the imposition of the land values duties. The repeal of these duties might improve the position, but financial confidence was almost as vulnerable as Humpty Dumpty.

As to the cost of housing, Mr. Willis said that it would be interesting to discuss how the cost of £235 for building a house in 1915 became £1,018 in 1919-21. The commercial man might airily dispose of the matter as resulting from the operation of the law of supply and demand—in which national emergencies tended to become a mere euphemism for making the most of the necessities of other people. In the matter of materials the authorities stood between profiteering, if prices were not controlled, and an insufficient supply of materials, if control was exercised. Skilled labour was at present seriously deficient, he went on, and without the co-operation of the unions concerned little or no headway could be made in supplying that deficiency. Howsoever and by whomsoever houses were to be built, the success of the Ministry of Health scheme depended largely upon those who controlled labour, materials, and money. Selfish obstruction by Labour, the greed of manufacturers and vendors of materials, or the distrust of financiers or investors might easily bring to nought the newly devised plan. A generous co-operation between all these was essential.

Leicester School of Arts and Crafts

Mr. John Platt, A.R.C.A., the principal of the Leicester School of Arts and Crafts, has arranged a very attractive programme for the winter session which commences this month. The courses in connection with the department of architecture and building have been arranged in conjunction with the Leicester and Leicestershire Society of Architects in accordance with a syllabus drawn up by the Board of Architectural Education of the Royal Institute of British Architects, providing for a preliminary training in day classes for two years, together with further training in evening classes during pupilage.

The details of the course include the history of architecture; architectural drawing and design; building construction; structural engineering; carpentry and joinery; plumbing, brickwork, modelling, letter cutting, stone carving, ornamental plasterwork, and leadwork, house painting and decorating, sign writing, and stained-glass work.

Arrangements have been made for the students to spend about one-half of the summer vacation on building works in progress, so as to enable them to become conversant with modern building methods in operation.

The head of the department is Mr. George Nott, A.R.I.B.A., who with Mr. S. R. Watson, A.R.C.A., will lecture on architectural design and history, drawing, and perspective. Mr. Arthur F. Bryan, A.R.I.B.A., and Mr. T. Haird, A.R.I.B.A., will lecture on building construction, building science, and calculations.

The prize scheme is on a generous scale. In addition to prizes for measured drawings and sketches offered by the local society to pupils and assistants, there is the David M. Nesbit prize of ten guineas (divided into seven guineas and three guineas) to be awarded for the best and second best designs for a terminal station for a motor omnibus company. Mr. William Keay, M.Inst.C.E., F.S.I., county architect, has kindly consented to act as adjudicator in this competition.

New Inventions

Latest Patent Applications.

21855.—Case, G. D.—Treatment of wood, etc., when used with cement, etc. August 30.
21881.—Gibb, H. R.—Ladders and platforms, or scaffold attachments therefore. August 30.
21830.—Laurie, A. P.—Preservation of stone. August 29.
21979.—Makram, T.—Means for interconnecting building-blocks. August 31.
21827.—Mower, G. A.—Fire-sprinkler systems, etc. August 29.
21870.—White, A. E.—Apparatus for forming concrete piles. August 30.

Specifications.

202534.—McNaught, W. M.—Ridge-roof ventilators and the like.
186344.—Limousin et Cie.—Construction of concrete vaulting for hangars or sheds for airships and analogous engineering structures.
187956.—Treitel, H., and Kammerziegelges.—Manufacture of hollow bricks closed on all sides.
199694.—Ash, R. M.—Rubber-faced paving-setts, and the like.
202572.—Henderson, A.—Concrete beams, girders, and columns.

Abstract.

200475.—Sound-deadening in buildings.—R. Guastavino, 1133 Broadway, New York, U.S.A.—The walls and ceilings of auditoriums are faced with natural porous stone blocks or slabs cut and laid so that the pores open into the exposed face. Large pores may be closed by the porous composition described in specification 110,194, and the same composition may be used as a backing to form compound blocks to be laid with or without mortar or cement. An air space or fibrous or granular material may separate the porous natural stone from the backing or base.

The above particulars are specially prepared for the "Architects' Journal" by Messrs. Rayner & Co., registered patent agents, of 5 Chancery Lane, London, W.C. 2, who will give all information and advice quite free to all readers of this JOURNAL on matters relating to patents and inventions. Messrs. Rayner & Co. will obtain printed copies of the published specifications and abstract only, and forward on post free for the price of 1/6 each.

Trade and Craft

Corrigendum.

Owing to a mis-hearing in telephoning, the Tees Side Bridge and Engineering Works, Ltd., were represented by a wrong title in our mention of the work they carried out at Wembley at the British Empire Exhibition.

Change of Title.

The works, businesses, and goodwill of the London Brick Co., Limited, the Star Pressed Brick Co. (Whittlesea), Limited, Dogsthorpe Star Brick Co., Limited, and the Warboys Brickworks Company, have been amalgamated with those of B. J. Forder and Son, Limited, and the united businesses will be carried on under the style and title of London Brick Company and Forders, Limited, at the company's head office, Africa House, Kingsway, London, W.C.2.

A Ball-bearing Curtain Rail.

We have received from Messrs. Henry Allday and Son, Ltd., of Connaught Works, Regent Place, Birmingham, a sample of a new curtain rail and suspender which they have recently placed upon the market. With such a fitting to one's casements or doors, all tugging at curtains in the effort to draw them across is done away with, as the curtain-rings are ball-bearing and run on a brass rail, which can be bent by hand to fit any shape window. The price per foot is only 3s.

Trade and Craft—*continued.*

Road-making on the Screen.

A special film has been shown at the Picture House, Commercial Road, Portsmouth, illustrating the modern methods of constructing concrete roads. It depicts the transformation of marshy land into reinforced concrete roads, and the laying of B.R.C. No. 9 Fabric which reinforces the 6 in. of concrete. An invitation to see the film was extended to the delegates to the Municipal Tramways Association Conference, which met in Portsmouth, and a large number of the delegates witnessed it.

The Gas Industry in Conference.

The twelfth annual conference of the British Commercial Gas Association is to be held in Birmingham under the presidency of Alderman J. H. Lloyd, on Monday, Tuesday, and Wednesday, October 1, 2, and 3—the three concluding days of the National Gas Exhibition, which opens at Bingley Hall, Birmingham, on September 17.

The Right Hon. J. R. Clynes, M.P., will attend the conference and deliver an address on "Goodwill in Industry" at the Tuesday morning session; while in the afternoon Sir Frederick Mott, K.B.E., M.D., F.R.C.P., F.R.S., will take the chair at a session devoted to the subject of "Gas Service and Domestic Economy." At this and at two other sessions dealing with "Gas in Industry" and "Gas in Catering," papers will be read followed by discussions in which the public is invited to take part.

Change of Address.

The Library Bureau inform us that on and after September 10 they are vacating their premises at No. 4 Cheapside and are removing temporarily to No. 2 Ludgate Hill, pending the acquisition of larger and more convenient premises.

"Alundum" Safety Products.

"Endurance and Safety" is the title of an interesting little booklet which has just been issued to explain the physical properties of the "Alundum" safety products and the success secured by their use in this country. For many years the Norton Company, of Worcester, Mass., U.S.A., and Hamilton, Ontario, Canada, have developed the manufacture of abrasive wheels for grinding and finishing material in the course of manufacture, and there are now very few industries in which their wheels are not known and used. "Alundum" safety products are a development of these "Alundum" abrasive wheels.

"Alundum" safety floor tiles and stair treads are suitable for floors and slopes of vestibules, corridors, landings of lifts, and around dangerous machinery. They may be fixed on any good foundation or other secure base. The stair treads are for wood, stone, or iron stairs, and may be secured by screws or bolts, let in flush with the top face, or, in the case of stone stairs, laid on cement.

"Alundum" safety mats are built up on a wire netting reinforcement and cemented together with mastic. They are suitable for stair nosings and running boards of tramcars, omnibuses, trains, etc. Fixing is by means of screws or nails, and the edges supported with fillets of wood or metal. They may be also obtained encased in a metal tray for use where the ordinary mat is not as suitable.

"Alundum" safety aggregates may be mixed with cement and marble chips to make Terrazzo floors more durable and slip-proof. They are carefully graded into colours and are supplied in four sizes.

Similar in composition and size are the crushed aggregates which are suitable for industrial floors where expense is a consideration, and where colour is not of great importance. They should be sprinkled on the top layer of cement and smoothed down with a trowel.

Among the more important uses to which the tiles have been put around London are Victoria (District) and Wembley Park stations. At Victoria Station at least 200,000 people use these steps every week, and at Wembley Park Station, reconstructed for the British Empire Exhibition, over 3,000 tiles have been installed. The sole agents for the products in this country are Messrs. Charles Churchill & Co., Ltd., whose London office is 9–15 Leonard Street, E.C.2.

THE whole of the Interior Ornamental Plasterwork and Colour Decorations of the

NEW TIVOLI

were executed by

F. DE JONG & Co., Ltd., 84 Albert Street, N.W. 1

SUSPENDED SCAFFOLDING | TUBULAR SCAFFOLDING AND CRANE STAGINGS. | "SCAFFIXER" SCAFFOLD TIES

(For Sale) BUILDERS' PLANT (For Hire)

SCAFFOLDING (GREAT BRITAIN) LTD.

Incorporating—

The Tubular Scaffolding Co., Ltd., and The Patent Rapid Scaffold Tie Co., Ltd.

Telegrams: "Scaffixer, Claproad, London."

43 LANSDOWNE ROAD, STOCKWELL, LONDON, S.W.8.

Telephones:
LONDON—BRIXTON 330.
BIRMINGHAM—VICTORIA 187.

Fiberlic

"THE WALLBOARD WITH A REPUTATION."

MACANDREWS & FORBES LIMITED, 65 SOUTH MOLTON STREET, LONDON, W.1.

New Inventions

Latest Patent Applications.

22446.—Hobdell, Way & Co., Ltd.—Insulated walls, &c. September 6.

22204.—Monaghan, E.—Building-blocks, &c. September 4.

22159.—Rammage, A.—Hollow Walls. September 3.

Specifications Published.

02423.—Lancaster, G. W.—Window structure and plurality of closures therefor.

02856.—Mobbs, S. W.—Groynes or walls for coast protection and the like.

02921.—Abraham, H.—Roofs.

Abstract Published.

01098.—Concrete building-blocks.—A Henderson, Room 807, First National Bank, Pittsburg, U.S.A.—Building-blocks are provided at each end with a recess having projections substantially flush with the end of the block. The projections are in the form of spaced lugs having their walls parallel with the walls of the recess and the block. Passages opening at their ends into the recesses extend through the blocks, and keyways are formed in the sides and ends. Reinforcing rings may be embedded in the blocks. In a modification the block is hollow, and a projection is surrounded by a recess, this type being adapted for conduits, &c.

The above particulars are specially prepared for the "Architects' Journal" by lessrs. Rayner & Co., registered patent agents, of 5 Chancery Lane, London, V.C.2, who will give all information free on matters relating to patents, trade marks, nd designs. Messrs. Rayner & Co. will obtain printed copies of the published pecifications and abstract only, and forward on post free for the price of 1/6 each.

The Building Industry

A correspondent in "The Times Trade Supplement" vrites : The need for proper housing, not only for the workng classes, but for every class, the vital necessity for offices, hops, factories, garages—almost every conceivable type f building—essential to the expansion of commercial ndertakings, are voiced on every hand. No one doubts he need. And yet progress is denied. Not entirely, it is rue; for so great is the demand that, in spite of all opposiion, here and there are to be seen the out-croppings, as it vere, of an irresistible pressure. It would appear as if the ndoubted leeway of the last fifteen years must be made ood without delay.

Any very decided revival of trade will be followed very hortly by a shortage of labour. Though in part the loss of ife during the war and the non-return to the industry of nen who found other occupation during the war may be the ause of this deflation, there is a third and far more effective ause. This is the lack of apprentices. Whatever the reason he lack is there, and the cure is readily to be seen. Far nore important to the industry, and consequently to the ommunity, than the settlement of disputes over wages or he improvement of the status of the workman, is the trainng of an adequate supply of young men to carry on the vork of their predecessors in supplying the buildings necesary to the community. The greatest need of the industry t the present time is the establishment and general acceptnce of some jointly agreed apprenticeship scheme. Such scheme, owing to the urgency of the forthcoming demand, nust, like the shortened course of instruction in military natters which obtained during the war, be curtailed in vhatever way that is possible, if it is to be effective within he period which now remains before a revival of industry nay reasonably be expected.

That a revival—it should not be called a boom—in uilding is to be expected shortly there can be no doubt. The signs are evident to those with understanding and experience.

The first sign is apparent in the offices of architects, who, perhaps more particularly in the provinces, are becoming increasingly busy.

Trade and Craft

Messrs. John Tann's Safes.

Messrs. John Tann, Ltd., send us particulars of tests carried out upon safes made by them. Although gelignite, oxy-acetylene blow-pipes, and high-speed electric drills were employed, the safes withstood all attempts to open. So far as anything that has been made by man can be, Messrs. John Tann's safes may be said to be indestructible by fire and invulnerable to the modern burglar.

A Booklet Worth Writing For.

An informative booklet is that issued by the Spedol Manufacturing Co., Ltd., of Brentford, Middlesex. The booklet gives full information about the firm's manufactures, which include, in addition to high-grade paints, varnishes, liquid dryers, Spemac enamels, the well-known rust-resisting coating marketed under the title of "Ferroarmor." The booklet has the merit of being printed in good readable type. A copy will be posted free upon application being made to the Spedol Manufacturing Co., Ltd., Brentford, Middlesex.

The Possibilities of Portland Cement.

At the West End Cinema, Coventry Street, W.1, a series of pictures showing the possibilities of white Portland cement stucco in relation to exterior finish were shown and explained in detail by Mr. Frederic Coleman of the Adamite Co. A film, made in America, was first presented, illustrating not only the various types of houses texturally finished in stucco, but the actual hand manipulation of the method of application. Rock dash, spatter dash, and stippled are three of the numerous effects obtainable by this method. "Light and shade" is produced by a turn of the trowel technically known as "feathering." Pictures of buildings recently completed in England and finished in Atlas White were seen, prominent among these being the New Tivoli Cinema.

Lantern slides of concrete statuary and sculpture were next illustrated and new methods of construction described.

Cast concrete stone is being largely used in the United States and in England for the erection of buildings; the effect is exactly similar to that of buildings constructed of real stone. In the pictures showing buildings of each material, the difference cannot be detected. Among the buildings in which cast stone was used are The Cunard Building, Liverpool, Redditch Benefit Society, and Fisher Unwin's new premises at Herne Hill. Examples of recent architectural work in New York and its environs followed, notable details being a mullioned window and a rose window with concrete stone tracery.

This exhibition will be repeated to-morrow, Thursday, the 27th inst., at the West End Cinema, and will include a further twenty-three photographs of American architectural work in New York and various American cities.

Last week's exhibition was very well attended.

School Children's Eyesight.

It may safely be said that the seeds of the all too common defects of eyesight are often sown in childhood, through inadequate, excessive, or improperly distributed artificial lighting, especially in schools. It is therefore satisfactory to learn that the London County Council some time ago carried out special experiments in order to discover the best means of school lighting, and that as a result they have already remodelled the lighting of over one hundred schools, greatly improving the illumination by the installation of a new form of superheated gas burner, which incidentally decreases both the consumption of gas and the cost of mantle renewals. This conversion to modern methods is steadily progressing and deserves the careful consideration of education authorities throughout the country.

Photographs and details of these new installations are contained in issue No. 114 of "A Thousand and One Uses for Gas," published by the British Commercial Gas Association, 30 Grosvenor Gardens, S.W.1. The publication should be carefully read by everyone interested in education and child welfare.

Trade and Craft—*continued.*

Shop Window Illumination.

No branch of illuminating engineering has made greater strides during the past few years than that of shop window illumination. Both as regards the planning of installations and the design of suitable fittings very considerable progress has been made, and the lighting in the windows of practically every large store and of an increasing number of smaller shops is of a very high order of excellence and bears eloquent testimony, not only to the skill of the illuminating expert, but also to the enterprise of the shopkeepers themselves. It is scarcely necessary to emphasize the importance of the shop window as a publicity medium, for it is due entirely to the recognition of this fact that as much care and skill are expended upon window lighting as is devoted to the illumination of a theatre or a picture gallery.

Modern practice is, in almost every instance, to install a row of lighting units on the ceiling of the window, close to the glass, the lamps being equipped with specially designed reflectors and the whole concealed by a valance or pelmet.

Of the various types of reflector produced for this purpose the most popular are the individual units, each arranged to accommodate one lamp. The "GECoRAY" reflectors recently introduced by the General Electric Co., Ltd., come under this category. They represent the latest development in window lighting equipment, and when equipped with the specified sizes of Osram Gasfilled Lamps, for which they are specially designed, they form units of the highest possible efficiency.

Guaranteed Varnish.

For years it has been deeply ingrained in the mind of the decorator that best varnish should be made from genuine copal gum, linseed oil, and American turpentine, and that its quality improves with age, but owing to disinclination amongst varnish manufacturers to give detailed information as to the constitution of their products, he has been compelled to accept what was sent him, and rely entirely upon the good name and reputation of his supplier.

To-day one firm at least, namely—Thornley and Knight, Ltd., of Birmingham (and we believe they are pioneers in this matter), are selling a varnish of very high quality at a moderate price, namely, "Tekavar," in sealed cans bearing a full guarantee on the label, not only as to its actual constitution, but giving the guaranteed age, viscosity, etc., of the varnish contained therein.

The adoption of such a varnish should remove from the decorator's mind any hesitation as to the quality of the material he is using, or his ability to please his client, not only from the point of view of the appearance of the work, but its durability also.

A Craft Education Scheme.

One of the most interesting features about the Decorators' Exhibition, which is to open at the Holland Park Hall, London, W., on October 17, will be a display of competition work by apprentices, journeymen, and employers. The painting trade has an education scheme of its own which is perhaps unique. The first interesting point about it is that it is a joint affair of employers and workmen, conducted by an education committee on which there are representatives of master decorators, the operatives, instructors, art masters, and the Ministry of Education. This committee has its own secretary and clerical staff, and it gets through a surprising amount of work, all aimed at the raising of the standard of skill of the operative painter and his employer. One of the main activities of the committee is the organization of the annual competitions, which are mainly for apprentices, but include a few classes for journeymen and employers as well.

The competitions range over a very comprehensive list of subjects, from rubbing down woodwork to the preparation of schemes of decoration and water-colour. There are thousands of entries, and they come from all parts of the country. Not all the work sent in, however, will be seen at the Holland Park Hall, for its volume is such that a system of elimination by local committees has perforce been adopted, and only the best work gets into the hands of the national selectors, who again submit the work to a final weeding out.

It is encouraging, at a time when relations between employers and workers are too often strained, to hear of a trade in which the two groups are collaborating closely, with the sole object of raising the quality of the wares they offer to the public, the wares being, in this instance, technical and artistic skill.

MELVILLE, DUNDAS & WHITSON

PUBLIC WORKS CONTRACTORS &
REINFORCED CONCRETE SPECIALISTS.

Contractors for
REINFORCED CONCRETE WORK
MUNICIPAL BUILDINGS EXTENSION, GLASGOW.

224 ST. VINCENT STREET, GLASGOW.

Telegrams—"Ferrocrete, Glasgow." 'Phones—978/79 Central.

MUNICIPAL BUILDINGS EXTENSION
GLASGOW

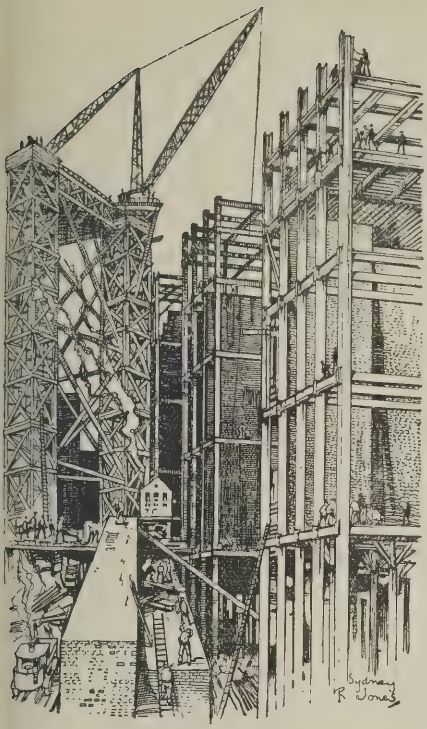
THE WHOLE OF THE MARBLE WORK IN THIS BUILDING, AS ALSO IN THE MAIN BUILDING ADJOINING, WAS SUPPLIED AND FIXED BY

GALBRAITH AND WINTON

City Offices:
185 ST. VINCENT STREET

GLASGOW

Works:
48 KELVIN STREET, N.



The Immense Strength of BRICK

Tests carried out to determine the loads required to crush various kinds of Brick have shown remarkably high figures.

A certain variety was not crushed until a pressure of 496 tons per square foot was registered — and even Brick of a common kind resisted loading up to 120 tons per square foot (Tests by W.C. Popplewell).

From ordinary walls to retaining walls, foundations, and massive piers, Brick is supreme for strength allied with proven reliability.

STRENGTH DURABILITY BEAUTY Build with BRICK

Issued by The National Building and Engineering Brick Federation.

2

BUILD WITH BRICK

"Lux in tenebris lucet"

THE PRESERVATION OF RECIPROCAL relationship between occupation and science conserves the oil in the Lamp of Knowledge and sheds light upon the Way of Progress.

□ □ □

To the Architect burdened with manifold problems and responsibilities Holophane Limited bring, for the solution of Lighting difficulties, a co-operative service which has been successfully developed over a long period of years, and perfected through contact with problems of an intricate technical character.

Service to HOLOPHANE the Architect

Architects are invited to write Holophane Limited upon any lighting difficulties and secure, gratis, the services of this unique organisation —its facts and figures—its competent lighting engineers.

□ □ □

Brochure dealing more fully with the subject gladly sent on request.

HOLOPHANE LTD.

Architectural Department,

23 Elverton St., Vincent Sq., Westminster, S.W. 1

(Immediately behind the Horticultural Hall)

Electrical Notes

Wembley's Giant Power Station.

WORK has been started on the big electric power station which is to supply the British Empire Exhibition next year at Wembley with both driving power and light. An enormous amount of current will be needed for lighting the numerous great buildings that are being erected, and for driving the machines, lifts, general services, and amusements to be installed. The power station is itself to form one of the exhibits in the Electrical and Allied Industries Section of the Palace of Engineering. Visitors will be invited to inspect the station, and see for themselves what British firms have to offer in the way of plant for generating and supplying electricity. A special gallery is being built from which visitors will be able at all times to view the machinery at work.

The requirements of the exhibition demanded a highly efficient generating plant, and the British Electrical and Allied Manufacturers' Association, whose members include all the leading makers of power plant, decided that the products of these firms could most effectively be displayed if seen actually working. The Association have accordingly assisted the consulting engineers in planning the erecting of the power station on lines that will make it representative of some forty electrical manufacturing firms.

The power station will be situated on the northern side of the Palace of Engineering. The main features will be three 1,500 kilowatt turbo generators of the most recent type, supplied with steam from two different types of water-tube boilers. Each of these generators will be the work of a different firm, and in the same way the condensing plants, air filters, rotary converters, transformers, cooling plants, switch-gear, batteries and so on, will be of varying makes. Never before in the history of electricity has there been installed in a single plant so heterogeneous a collection of machinery and apparatus. In spite of the variety of the makers participating, the whole will work together with perfect precision.

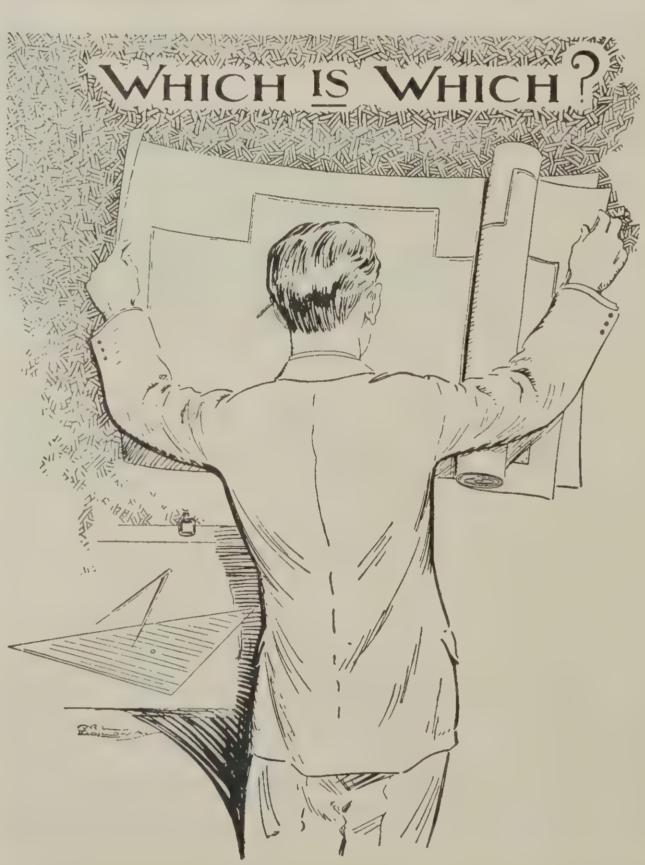
For purposes of demonstration, a very important section of the industry is showing other forms of power producers. In the main hall, though not actually in the power station, there will be exhibited a slow-speed steam set, and a horizontal internal combustion set, each generating 300 kilowatts. These will be run under load on stands, and will be coupled up to the body of the plant through panels on the main switchboard.

The whole of the electrical and allied engineering section has been organized by the B.E.A.M.A. The area which it covers is the enormous one of 4½ acres. Into that space will be crowded exhibits forming a complete catalogue of the industries represented by the Association. With very few exceptions, every branch of the industry is exhibiting, each branch being represented by a number of firms. Some concerns have taken as much as from 4,000 to 8,000 square feet for their stands.

Over 200 firms in all are participating in this section, and the result will be a spectacle full of interest and fascination to every class of visitor. Great engines of commerce involving the use of thousands of horse-power will be seen side by side with the most delicate forms of apparatus. The uses of electricity in the daily life of the average citizen will be demonstrated in a number of small exhibits of absorbing interest. Householder and housewife will both find endless little ways of economizing or of adding to their comforts in the home.

Electrical Contracts.

The following contracts have been secured by Messrs. Jackson & Boyce, 19 Berners Street, W.1: Lighting and power at Chesham House, Regent Street, which comprises the rebuilding of Nos. 132–154 Regent Street, 24–34 Warwick Street, 2–6 Beak Street, and 2 and 3 Regent Place (Messrs. Henry & E. J. Tanner, architects); lighting of 14 Old Cavendish Street, W. (Mr. Lionel Barrett, A.R.I.B.A., architect); lighting and telephones for Messrs. United Steel Co., St. Stephen's House, S.W.; lighting and power for Messrs. Standard Fruit Preserving Co.'s new premises, 11 Gray Street, S.E.; lighting for Messrs. Monnoyer British Construction Co. at 32–33 King Street, E.C. (Mr. Campbell Reid, F.R.I.B.A., architect); electric light fittings for "Kincraig," Invergordon, Ross-shire, and for "Ulvercroft," Leicester; and complete generating plant and wiring for House at "Stratfield Mortimer" (Messrs. Seth Smith and Monro, architects).


WHICH IS WHICH?

Velography

"VELOGRAPHY" copies of plans are indistinguishable from the originals.

"Velography" copies can be printed on any material, they are absolutely permanent and accurate, and may be altered by erasure or coloured just as you may require.

"Velography" copies on opaque white cloth or tracing cloth are accepted as Deposit Plans by Local Authorities.

Send us one of your own tracings, mentioning "The Architects' Journal," and we will supply you with a specimen "Velography" copy free of charge and one of our fully descriptive booklets on the process.

NORTON & GREGORY
LIMITED
Castle Lane, Westminster
LONDON, S.W.1

The Week's News

New Abattoir for Halifax.

A new abattoir is to be erected at Halifax. The estimated cost is £58,300.

New School for Brentwood.

Brentwood Urban District Council have decided to erect a secondary school for girls. The estimated cost is £20,000.

New Marine Drive for Swansea.

Swansea Corporation propose to spend £47,000 in constructing a new marine drive between Mumbles and Langland Bay.

Ripon's Historic House.

Ripon Corporation have purchased the ancient city building known as the Watchman's or Wakeman's House, and are restoring it.

Greenwich Embankment Scheme.

Greenwich Borough Council have prepared a scheme for an embankment in front of the Royal Naval College.

New Reservoir for St. Helens.

A new reservoir scheme for St. Helens, estimated to cost £100,000, has been approved by the Town Council.

Changes of Address.

Messrs. Percy Tubbs, Son and Duncan, architects, have moved to 30 John Street, Bedford Row, W.C.1. Telephone Museum 5809.

Messrs. Easton & Robertson, architects, have moved their offices to 36 Bedford Square, London, W.C.1. Telephone: Museum 6424.

Mr. John Sloan, architect, has removed his offices from the Straus Building to the 26th floor of the Pershing Square Building, 42nd Street, and Park Avenue, New York.

Messrs. Bell and Kay, A.R.I.B.A., have removed to No. 15 Wood Street, Wakefield. Their telephone number is the same: Wakefield 404.

Barry as a Holiday Resort.

Barry Urban District Council are applying to the Ministry of Health for permission to spend £40,000 in developing the town as a holiday resort.

The British Empire Exhibition.

No awards will be made at next year's British Empire Exhibition, but a commemorative medal will be issued to all exhibitors.

Hartlepool Promenade Extension.

Hartlepool Corporation have approved a scheme for the extension of the north promenade at an estimated cost of £32,000.

Folkestone Band Pavilion.

Two alternative schemes for the provision of a band pavilion are before the Folkestone Corporation. One scheme is estimated to cost £74,000, and the other £38,000.

New Bank for Norwich.

Mr. F. R. C. Palmer, F.R.I.B.A., is the architect for the new premises for the Norwich branch of the National Provincial and Union Bank. The site of the building is in London Street.

Reconstruction of London Banking Premises.

Messrs. C. S. and E. M. Joseph are the architects for the reconstruction of banking premises in Leadenhall Street, London.

Death of a South African Architect.

The death is announced of Mr. Frank Scott, of Pretoria, architect. He was partner of Mr. Frank Emley, with whom he designed many fine buildings.

Ventnor Improvement Schemes.

Local improvement schemes, involving the expenditure of over £5,000, are before the Urban District Council. Of this amount improvements to the pier will cost nearly £2,000.

Malvern Hills.

The Conservancy Board are to proceed with a Bill in the next session of Parliament, under which extended powers will be sought to prevent greater spoliation of the Malvern Hills.

The Decorators' Exhibition.

In planning the Decorators' Exhibition, which opens at Holland Park Hall on October 17, the aim has been to make it as attractive as possible. In the centre of the hall is a wide open space approximately 60 ft. square, and with lesser open spaces on either side, so that every stand in the hall can be seen to advantage. Thus the exhibition is one of broad spaces, round which the exhibits are arranged.

Openings for British Trade in Osaka.

A report has been prepared in the Department of Overseas Trade on the market in Osaka, Japan, for building materials, based on information furnished by the Acting British Consul at Osaka, before the recent earthquake in Japan. A copy of this report, together with the names of importers of building materials in Osaka, may be obtained by interested British firms on application to the Department of Overseas Trade, 35 Old Queen Street, London, S.W.1.

The British Industries Fair, Birmingham.

The British Industries Fair, Birmingham, 1924, will be held at Castle Bromwich from May 12 to 23. The exhibition was originally intended to be held in February. It is thought that the change of date will considerably enhance the success of the undertaking, especially in view of the British Empire Exhibition at Wembley running concurrently with this display, whereby it is hoped that the visitors will take the opportunity of visiting both exhibitions.

Sir Henry Holloway's Estate.

Sir Henry Holloway, J.P., of Draxmont, Wimbledon, Surrey, and Westergate House, near Arundel, Sussex, governing director of Messrs. Holloway Brothers (London), Limited, builders and contractors, who died on August 5, on his sixty-sixth birthday, left estate of the gross value of £95,502, with net personalty £84,819. The testator gives: £2,000 to the executors for charitable and religious institutions in England; £1,000 to the executors for present and former servants as they may select; £2,000 to Springfield Hall New Institute Building Fund, if not already given; and £500 to his confidential clerk, Edward Samuel Thomas.

Ancient Architecture.

Sir Banister Fletcher, F.R.I.B.A., gave the first of twenty-four weekly University Extension Lectures on "Ancient Architecture" to be delivered at 6 p.m. every Wednesday, at the Central School of Arts and Crafts, Southampton Row. During the session the lecturer will trace the evolution of architecture in ancient Egypt, Babylonia, Assyria, Persia, Greece, Rome, and Byzantium, with special emphasis on the influence of ancient art on all subsequent styles down to its adaptation to modern needs in our own day. The lectures will be illustrated by some twelve hundred lantern slides, as well as by photographs and models. This course can be taken as one year of a four-years' course by which students may qualify for the Diploma in the History of Art.

R.I.B.A. Premises.

It was hoped to finish the rebuilding of the R.I.B.A. Galleries and other alterations before the opening of the session, but unforeseen difficulties have arisen which will delay the completion until the end of December. Arrangements are therefore being made for holding the examinations in November and December at other premises. Through the generous hospitality of the Royal Society of Medicine, the R.I.B.A. general meetings in November and December will be held in the Barnes Hall of the Royal Society of Medicine, No. 1 Wimpole Street, W.1. The inaugural meeting, which will be opened by the President's address, will be held at the Royal Society of Medicine at 8.30 p.m. on Monday, November 5. On that occasion the portrait of Mr. Paul Waterhouse, Past President, which has been painted by Sir William Orpen, R.A., will be unveiled and presented to the Royal Institute, and the medal for the year 1922, which was awarded to Mr. W. Curtis Green, A.R.A., for Wolseley House, Piccadilly, will be presented to Mr. Curtis Green.

Trade and Craft

A Correction.

In the advertisement of Messrs. Thos. Faldo & Co., Ltd., in our last issue, page xxiii, it was stated that the architects for No. 65-68 Leadenhall Street, London, E.C.3, were Messrs. Kersey and Kersey. This is incorrect. The joint architects were Messrs. Richardson and Gill and Messrs. Kersey and Kersey.

The Broad View in Industry.

In his presidential address at the twelfth annual conference of the British Commercial Gas Association, Alderman J. H. Lloyd, of Birmingham, dealt with the history of the Birmingham Gas Undertaking—the largest municipal gas undertaking in the world—with the organization of the gas industry, with the work of the B.C.G.A., and with the service of the industry to the nation. In this last connection he said they had to remember—"that the motor car was made possible by the invention of the internal combustion engine, to which work our friend Sir Dugald Clerk contributed so wonderfully; that the motor-tyre industry would not have been commenced but for the solvent naphthas obtained from the distillation of coal tar; that extensive motoring has been made possible only by the application of refined tar to our roads, and that the motor industry therefore owes its important position to-day to the existence of the gas industry, and the pioneer work of its engineers and chemists. When we think also of our dyes, perfumes, and the thousands of other articles that owe their birth to the carbonization of coal on gas works, one begins to realize how many of the amenities of our life to-day can be traced to Murdock's wonderful work and all those enthusiasts who succeeded him. The service of the gas industry to the community in other directions should, I think, be emphasized; the improvement of conditions in the home by the reduction of dirt and drudgery; the greater ease, speed and certainty of cooking which has meant so much to the working man and his wife, enabling the meals of the day to be so easily prepared, and contributing to health through the provision of properly-cooked food." A fine spirit, he said in conclusion, animated the Association; for the gas industry could go about its work "in the full assurance that they are recommending what will tend to conserve our country's coal, thereby husbanding the nation's natural resources; to render the atmosphere purer, thus beneficially affecting the health of the people; to provide facilities for decreasing drudgery in the home, thereby increasing human happiness; and to raise the level of efficiency in industry, thereby adding to the nation's prosperity."

New Inventions

Latest Patent Applications.

24222.—Gironard, Sir E. P. C.—Manufacture of cement. September 28.

23880.—Newman, B. L.—Building construction. September 25.

Specifications Published.

181713.—Gouyaud, G. M.—Method of constructing reinforced concrete arches, without using moulding, arched falseworks, or scaffoldings.

203963.—Cochrane, W. R.—Making of cement from blast furnace slag.

203988.—Abraham, H.—Roofing-shingle strips.

Abstract Published.

202129.—Lathed and cemented structures.—Dudley, J. G., of Park Row Building, New York, U.S.A.—Metal skeletons covered with plastered expanded metal or lathing.—Dwellings, bridges, girders, ships, cars, vehicles, and other structures consist of a cellular metal framework composed of members welded together, a lathing of expanded metal or other metal mesh applied both inside and outside the framework and welded thereto, and a rendering of cementitious material covering the metal fabric and completely closing the cells.

The above particulars are specially prepared by Messrs. Rayner & Co., registered patent agents, of 5 Chancery Lane, London, W.C. 2, from whom readers of the JOURNAL may obtain all information free relating to patents, trade marks, and designs. Messrs. Rayner & Co. will obtain printed copies of the published specifications and abstract only, and forward on post free for the price of 1/6 each.

Fiberlic

"THE WALLBOARD WITH A REPUTATION."

MACANDREWS & FORBES LIMITED, 65 SOUTH MOLTON STREET, LONDON, W. 1.

SUSPENDED SCAFFOLDING | **TUBULAR SCAFFOLDING AND CRANE STAGINGS.** | **"SCAFFIXER" SCAFFOLD TIES**

(For Sale) BUILDERS' PLANT (For Hire)

SCAFFOLDING (GREAT BRITAIN) LTD.

Incorporating—

The Tubular Scaffolding Co., Ltd., and The Patent Rapid Scaffold Tie Co., Ltd.

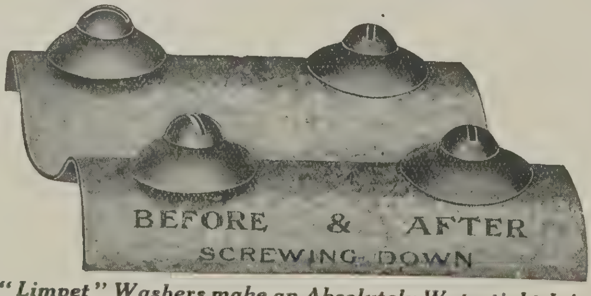
Telegrams: "Scaffixer, Claproad, London."

43 LANSDOWNE ROAD, STOCKWELL, LONDON, S.W.8.

Telephones: LONDON—BRIXTON 330. BIRMINGHAM—VICTORIA 187.

"LIMPET" PATENT BOLTS & WASHERS

For CORRUGATED IRON SHEETS and Asbestos Cement Corrugated Sheets



"Limpet" Washers make an Absolutely Watertight Joint. They prevent Leakage and Corrosion round the Bolt Holes.

ADOPTED BY THE INDIAN GOVERNMENT, CROWN AGENTS FOR THE COLONIES, AND THE LEADING RAILWAY CO.'S

PRICE'S PATENT

The most approved Fixing for Joining Corrugated Iron Sheeting together.

REGISTERED TRADE MARK

LIMPET

Full Particulars and Samples from

WILLIAM JACKS & CO. Winchester House, Old Broad Street, LONDON, E.C. 2.

Agent for Scotland: FRANK G. PRICE & Co., 115 Bothwell St., Glasgow.

Rates of Wages in the Building Trades*

The following table shows the revised rates of wages for craftsmen (bricklayers, masons, carpenters and joiners, woodcutting machinists, slaters, plumbers, sterers and painters), and labourers in the building trade. The labour rates for London were given in the Table of Current Prices published in our last issue.

Grade.	Craftsmen.	Labourers.	Grade.	Craftsmen.	Labourers.	Grade.	Craftsmen.	Labourers.
	s. d.	s. d.		s. d.	s. d.		s. d.	s. d.
.. .. ..	1 7	1 2¼	B	1 5	1 0¾	C	1 3½	11¾
1	1 6½	1 2	B1	1 4½	1 0½	C1	1 3	11¼
2	1 6	1 1½	B2	1 4	1 0	C2	1 2½	11
3	1 5½	1 1¼	B3	1 3½	11¾			

Grading of Towns.

The towns in which the above grade rates have been reported to apply are shown below, divided into their main area groups. The principal exceptions are indicated the notes appended to each Group. In towns marked* the rate for painters is 1d. less than that paid to other craftsmen, and in those marked† it is ½d. less than e craftsmen's rate.

ORTH-EAST COAST :—

Grade A.—Alnwick, Annfield Plain, Birtley, Bishop Auckland, Blackhill, Blyth, Chester-le-Street, Consett, Darlington, Durham, Ebchester, Gateshead, Hartlepools, ebburn, Hexham, Jarrow, Lanchester, Leadgate, Medomsley, Middlesbrough, Morpeth, Newcastle, North and South Shields, Seaham Harbour, Stanley, Stockton, inderland, Thornaby, Tynemouth, Wallsend, Whitburn, and Whitley Bay.

ORKSHIRE :—

Grade A.—Alltofts, Barnsley, Batley, Bingley, Birstall, Bradford, Brighouse, Calder Valley, Castleford, Cleckheaton, Cleethorpes, Colne Valley, Crosshills, Dewsbury, oncaster, Gomersal, Grimsby, Guiseley, Halifax, Harrogate, Hebden Bridge, Heckmondwike, Holmfirth, Horbury, Hoyland, Huddersfield, Hull, Ilkley, Immingham, eighley, Knottingley, Leeds, Liversedge, Mexborough, Mirfield, Morley, Normanton, Ossett, Penistone, Pontefract, Pudsey, Rawdon, Rotherham, Scunthorpe, Selby, effield, Shipley, Sowerby Bridge, Stocksbridge, Wakefield, Wombwell, and Yeadon. **Grade A3.**—Barnoldswick, Beverley, Bridlington, Goole, Hornsea, Scarborough, ipton, Worksop, and York. **Grade B3.**—Kirby Moorside, Malton, Northallerton, Norton, and Wetherby.

ORTH-WESTERN COUNTIES :—

Grade A.—Accrington, Adlington, Alderley Edge, Altrincham, Ashton-under-Lyne, Atherton, Bacup, Barrow, Birkdale, Bispham, Blackburn, Blackpool, Blackrod, olton, Broughton (Flints), Burnley, Bury, Carlisle, Chester, Chorley, Church, Cleveleys, Clitheroe, Colne, Connahs Quay, Dalton-in-Furness, Darwen, Denton, oylsden, Eccles, Farnworth, Fleetwood, Frodsham, Glossop, Great Harwood, Haslingden, Hawarden, Helsby, Heywood, Higher Kinnerton, Horwich, Hyde, irkham, Leigh, Leyland, Littleborough, Longridge, Lymm, Lytham, Manchester, Middleton, Mossley, Nelson, Ormskirk, Oswaldtwistle, Oldham, Padiham, ndlebury, Poulton, Preston, Prestwich, Queensferry, Radcliffe, Ramsbottom, Rawtenstall, Rishton, Rochdale, Runcorn, St. Annes-on-the-Sea, St. Helens, iddleworth, Sale, Salford, Shaw, Shotton, Southport, Stalybridge, Stockport, Swinton, Thornton, Todmorden, Tyldesley, Walkden, Warrington, Westhoughton, halley, Whitefield, Widnes, Wigan, and Wilmslow. **Grade A2.**—Lancaster and Morecambe. **Grade A3.**—Askam, Broughton-in-Furness, Buxton, Cleator Moor, ongleton, Coniston, Crewe, Distington, Egremont, Grange-over Sands, Harrington, Knutsford, Macclesfield, Maryport, Market Drayton, Middlewich, Millom, Mold, antwich, New Mills, Northwich, Sandbach, Tarporley, Ulverston, Winsford and Over, Whitehaven, Workington, and Wrexham. **Grade B1.**—Colwyn Bay, Conway, olywell, Llandudno, Llandudno Junction, Mostyn, Prestatyn, Rhos and Rhyl. **Grade B2.**—Bala, Cockermouth, Kendal, and Penrith. **Grade B3.**—Ambleside, angor, Bowness-on-Windermere, Carnarvon, Grasmere, Holyhead, Langdale, and Windermere. Liverpool and Birkenhead districts 1s. 9d. for plumbers, 1s. 8½d. r other craftsmen, and 1s. 4d. for labourers.

IDLAND COUNTIES :—

Grade A.—Alfreton, Belper, Bilston, Birmingham, Blackheath, Burslem, Chesterfield, Coalville, Coventry, Derby, Hanley, Heanor, Hinckley, Ilkeston, Kenilworth, icester, Lincoln, Long Eaton, Loughborough, Mansfield, Newcastle-under-Lyme, Nottingham, Ripley, Stoke-on-Trent, Sutton Coldfield, Sutton-in-Ashfield, West omwich, Willenhall, and Wolverhampton. **Grade A3.**—Atherstone, Bewdley, Boston, Brierley Hill, Bromsgrove, Burton-on-Trent, Cannock, Coseley, Darlaston, idley, Gainsborough, Gornal, Grantham, Halesowen, Hednesford, Kidderminster, Knowle, Leamington, Leek, Lichfield, Louth, Malvern, Market Harborough, atlock, Melton Mowbray, Newark, Northampton, Oakengates, Old Hill, Peterborough, Redditch, Retford, Rugby, Rugeley, Sedgley, Shifnal, Skegness, Sleaford, lihull, Stafford, Stamford, Stourbridge, Stourport, Stratford-on-Avon, Swadlincote, Walsall, Warwick, Wednesbury, Wellington, and Worcester. **Grade B1.**—Kettering and Wellingborough. **Grade B2.**—Ashbourne, Bridgnorth, Horncastle, Oakham, Oundle, Raunds, Rushden, Spalding, Thrapston, Uttoxeter, and Wirksworth. **rade C.**—Buckden, Eaton Socon, Huntingdon, St. Ives, and St. Neots. Market Harborough, craftsmen 1s. 5d., labourers 1s. 0¾d. For plumbers in the Potteries istrict and at Strafford the rate is 1s. 9d. The rate for plumbers at Leek is 1s. 6½d. and for plumbers at Chesterfield, 1s. 8d.

ASTERN COUNTIES :—

Grade B1.—St. Albans, Southend-on Sea, and Westcliff. **Grade B2.**—Norwich. **Grade B3.**—Baldock, Bedford, Berkhamsted, Biggleswade, Braintree, Cambridge, elmsford,* Colchester, Halstead, Hatfield, Hemel Hempstead, Henlow, Hertford, Hitchin, Hoddesdon, Ingatestone, Ipswich, Letchworth, Luton, Norwich, Ongar, wbridgeworth, Stevenage, Stotfold, Ware, and Welwyn. **Grade C.**—Aldeburgh, Attleborough, Aylsham, Braughing, Clacton, Cromer, Dovercourt, Dunstable, y, Fakenham, Felixstowe, Frinton, Gorleston, Halesworth, Harwich, Hunstanton, King's Lynn, Leighton Buzzard, Leiston, Lowestoft, March, Much Hadham, ewmarket, Puckeridge, Renthem, Saxmundham, Southwold, Standon, Stowmarket, Walton-on-the-Naze, Wickham Market, Wisbech, Woodbridge, Wymondham, and armouth. **Grade C2.**—Bungay, Coltishall, East Dereham, Hadleigh, Haverhill,* Royston. St. Albans, craftsmen 1s. 5½d., labourers 1s. 1½d.

OUTHERN COUNTIES :—

Grade B.—Leatherhead.† **Grade B1.**—Gosport, Portsmouth, and Southampton. **Grade B2.**—Bournemouth, Brighton (see below), Christchurch, Eastbourne, areham, Hove, Poole, Reading, and Tilehurst. **Grade B3.**—Abingdon, Addlestone, Amersham, Ascot, Ashford (Middlesex), Beaconsfield, Bracknell, Byfleet, Chesham, emborne, Egham, Eton, Gerrard's Cross, Goring, Gravesend, Guildford, Henley, Laleham, Maidenhead, Marlow, Northfleet, Oxford, Staines, Stanwell, Sunningdale, inninghill, Tonbridge, Tunbridge Wells, Wallingford, Windsor, Woking, Wokingham, and Wycombe. **Grade C.**—Arundel, Ashford (Kent), Aylesbury, Bagshot, anbury, Basingstoke, Bicester, Bletchley, Bognor, Bosham, Brockenhurst, Camberley, Canterbury, Chatham, Chichester, Chipping Norton, Deal, Dorking, Dover, areham, Faringdon, Faversham, Fenny Stratford, Folkestone, Gillingham, Godalming, Hailsham, Haslemere, Hastings, Herne Bay, Hythe, Lambourn, Liphook, ittlehampton, Lymington, Maidstone, Margate, Milford, Milton Regis, Newbury, New Milton, Newport Pagnell, Pangbourne, Petworth, Ramsgate, Rochester, indgate, St. Leonards, Sevenoaks, Sittingbourne, Strood, Stony Stratford, Thame, Walmer, Wantage, Wendover, Westgate, Whitstable, Winchester, Winslow, itney, Wolverton, and Worthing. **Grade C2.**—Alton,* Andover, Bishop's Waltham, Farnham, Godstone, Hawkhurst, Hartley Wintney,* Isle of Wight, Rye, nallfield, Staplehurst, and Uckfield. Andover, craftsmen 1s. 3d., labourers 11¼d. Bournemouth, Poole and Christchurch, craftsmen 1s. 4½d., labourers 1s. 0½d. amberley, Godalming, Grayshott and Haslemere, craftsmen 1s. 4d., labourers 1s. Guildford and Woking, craftsmen 1s. 4½d., labourers 1s. 0½d. Tonbridge and unbridge Wells, craftsmen 1s. 4½d., labourers 1s. 0½d. Brighton and Hove and Eastbourne, 1s. 4½d. for tradesmen and 1s. 0½d. for labourers. Gravesend, orthfleet and District, craftsmen 1s. 5½d., labourers, 1s. 1½d. Abingdon, Eton, Oxford, Slough, and Windsor, craftsmen, 1s. 4½d., labourers, 1s. 0½d. Dorking, aftsmen, 1s. 4½d., labourers, 1s. 0½d. Reading, craftsmen, 1s. 4½d., labourers, 1s. 0½d. Weybridge and Cobham, craftsmen, 1s. 5½d., labourers, 1s. 1½d. arious Districts covered by the Southern Counties Regional Joint Council, viz., Amersham, Ascot, Bracknell, Chatham, Gillingham, Rochester and Strood, hesham, Egham, Henley, Littlehampton, Maidenhead, Marlow, Staines, Wallingford, Winchester, Wokingham, and Worthing, craftsmen, 1s. 4d., labourers, 1s. 0d.

OUTH-WESTERN COUNTIES :—

Grade A.—Bristol. **Grade A2.**—Keynsham. **Grade B.**—Plymouth* and Devonport.* **Grade B2.**—Bath, Cheltenham, Gloucester,* Hereford,* Swindon,* and ewkesbury.* **Grade B3.**—Exeter, Newton Abbot, Portishead, Stroud† and Taunton. **Grade C1.**—Barnstaple, Bradford-on-Avon* Bridgwater, Brixham, Bruton, urnham-on-Sea, Calne,* Castle Cary, Cheddar,* Cirencester,* Coleford,* Corsham,* Crewkerne,* Dawlish, Dorchester,* Exmouth, Fairford,* Frome,* Glastonbury, ydney,* Melksham,* Midsomer Norton, Minehead,* Radstock, Shepton Mallet, Street, Tetbury,* Thornbury, Totnes,† Trowbridge,* Wells, Westbury,* Weston-super lare, Weymouth,* and Yeovil.* Weston-super-Mare, craftsmen 1s. 4d., labourers 1s. Plymouth, Devonport and Stonehouse, painters 1s. 5d., other tradesmen . 6d., labourers 1s. 1½d. Newton Abbot and Paignton, Torquay, craftsmen 1s. 4½d., labourers 1s. 0½d. Barnstaple, Clevedon and Exmouth, craftsmen 1s. 3½d., bourers 11¾d. Exeter, painters 1s. 3½d., other craftsmen 1s. 4½d., labourers 1s. 0½d.

OUTH WALES AND MONMOUTHSHIRE :—

Grade A.—Aberavon, Aberdare, Abertillery, Ammanford, Barry, Bridgend, Briton Ferry, Brynmawr, Cardiff, Chepstow, Duffryn Valley, Ebbw Vale, East lamorganshire and Monmouthshire Valleys, Garw Valley, Gorseinon, Llanelly, Maesteg, Merthyr, Mountain Ash, Neath, Newport, Ogmore Vale, Pontardawe, ontardulais, Pontypool, Pontypridd, Porthcawl, Port Talbot, Rhondda and Rhymney Valleys, Sirhowy Valley, Swansea, and Tredegar. **Grade A2.**—Abergavenny. **rade B.**—Brecon, Carmarthen, Llandilo and Llandrindod Wells. **Grade B2**—Fishguard, Hay, Monmouth, and Talgarth.

COTLAND :—

Grade A.—Airdrie, Alloa, Alva, Armadale, Ayr, Bathgate, Bellshill, Bridge of Weir, Buckhaven, Burntisland, Clydebank, Coatbridge, Dumbarton, Dundee, unfermline, Edinburgh, Falkirk, Glasgow, Gourock, Grangemouth, Greenock, Haddington, Hamilton, Harthill, Irvine, Kennoway, Kilmarnock, Kirkcaldy, Larbert, args, Leith, Leslie, Leven, Markinch, Methil, Motherwell, Neilston, Newmains, Paisley, Pencaitland, Perth, Port Glasgow, Renfrew, Stenhousemuir, Uddingston, Uphall, emyss, Whitburn, Windygates, and Wishaw. **Grade A2.**—Arbroath, Montrose, and Peebles. **Grade B.**—Dumfries, Galashiels, Hawick, and Maxwelltown. Aberdeen, oiners 1s. 6d. Dumfries and Galloway, plumbers 1s. 5d.

[NOTE.—*The rates quoted do not apply to plasterers and painters in Scotland, who are not affiliated to the National Wages and Conditions Council. The rate for labourers at Leslie, Markinch, and Perth is reported as 1s. 2d., and at Arbroath, Bathgate, Irvine, and Montrose 1s. 1d. Aberdeen, and Dundee and District, plumbers, 1s. 7d.*

---

* From "The Labour Gazette."

Trade and Craft

Metal Cutting.

Full particulars of an important development in the use of the blow-pipe for the quick cutting of metal are contained in the current issue (No. 116) of "A Thousand and One Uses for Gas." With a new, ingenious and inexpensive machine, working on the pantagraph principle and using oxygen and towns gas, it is a simple matter speedily to cut out in metal the most intricate shapes, both regular and irregular. This publication, which deals also with die-casting, and branding advertisements on packing cases, casks, etc., can be obtained on application to the secretary, The British Commercial Gas Association, 30 Grosvenor Gardens, S.W.1.

Road Work at Middlesbrough.

Langbaurgh Place, North Ormesby, where the main stream of traffic between Ormesby, South Bank, Guisborough, and Middlesbrough concentrates, is being relaid under the direction of the Ministry of Transport. The daily wear and tear to which this road surface is subjected at this point is probably heavier than any where else in the district. A concrete foundation, 7 in. to 8 in. thickness, is being laid on an excavated formation, and the concrete layer is reinforced by "Maxweld" fabric—a special steel interlocked double layer reinforcement, supplied by Messrs. Richard Hill & Co., Ltd., of Middlesbrough and London, reinforced concrete engineers. The firm's double layer fabric, used in this roadway, is manufactured from steel to British standard specification, weight 10 lb. per yard super, and is designed to provide for flexure, contra-flexure, and shear stresses. "Maxweld" double layer fabric, for which a patent has been applied, is designed on the principle of a lattice girder, and is claimed to be quite capable of supporting workmen walking about on top without any fear of dislodging or displacing the top layer. It is, in fact, claimed to be a perfectly rigid double layer reinforcement. The underside of the reinforcement is laid 2 in. from the bottom of the concrete. In this way the steel fabric is brought within both tensile and contraction strains of the road arch foundation. The concrete is gauged 6 to 1, $4\frac{1}{2}$ to $4\frac{3}{4}$ broken slag, $1\frac{1}{2}$ to $1\frac{1}{4}$ sand, and 1 of Portland cement. This is all rammed round the steel fabric and so provides a practical safeguard against the formation of voids. A sand bedding is superimposed on the concrete and compressed to $\frac{3}{4}$ in. thickness. The road surface is completed on this bedding with 4 in. deep Whinstone setts, the joints being racked with chippings and grouted with Portland cement and sand gauged 3 to 1. The whole section from formation level to surface is solidified in one complete mass, the process being facilitated by keeping the traffic off the work for some considerable time. The road is designed effectively to withstand the heavy and ever-increasing motor lorry and wagon traffic over this busy thoroughfare.

"MAXWELD" ROAD AT MIDDLESBROUGH.

Fiberlic

"THE WALLBOARD WITH A REPUTATION."
MACANDREWS & FORBES LIMITED, 65 SOUTH MOLTON STREET, LONDON, W.1.

SUSPENDED SCAFFOLDING | TUBULAR SCAFFOLDING AND CRANE STAGINGS. | "SCAFFIXER" SCAFFOLD TIES

(For Sale) BUILDERS' PLANT (For Hire)

SCAFFOLDING (GREAT BRITAIN) LTD.

Incorporating—
The Tubular Scaffolding Co., Ltd., and The Patent Rapid Scaffold Tie Co., Ltd.
Telegrams: "Scaffixer, Claproad, London." 43 LANSDOWNE ROAD, STOCKWELL, LONDON, S.W.8. *Telephones:* London—Brixton 330. Birmingham—Victoria 187.

"LIMPET" PATENT BOLTS & WASHERS

"Limpet" Washers make an Absolutely Watertight Joint. They prevent Leakage and Corrosion round the Bolt Holes.
ADOPTED BY THE INDIAN GOVERNMENT, CROWN AGENTS FOR THE COLONIES, AND THE LEADING RAILWAY CO.'S

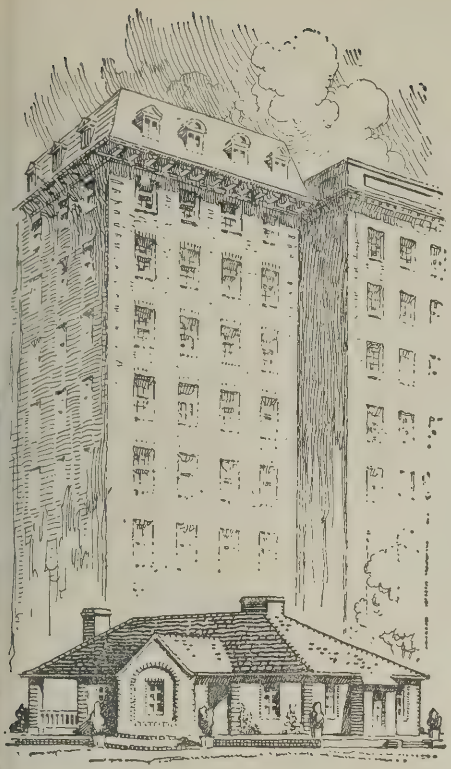
For CORRUGATED IRON SHEETS and Asbestos Cement Corrugated Sheets

PRICE'S PATENT

The most approved Fixing for Joining Corrugated Iron Sheeting together.

REGISTERED TRADE MARK
LIMPET

Full Particulars and Samples from
WILLIAM JACKS & CO. Winchester House, Old Broad Street, LONDON, E.C.2.
Agent for Scotland: FRANK G. PRICE & Co., 115 Bothwell St., Glasgow.



BRICK — the most Fire-resisting Material

Of all building materials, old and new, Brick is the most fire-resisting. The process of manufacture is in itself a test. In the kiln, fierce and sustained heat is developed, an average temperature for firing Brick being 1800° Fahr.

Is there any other material, of such strength and durability as Brick, which undergoes so searching a test of fitness before becoming part of a structure? Is there, indeed, any other material which could survive such a trial? There is none.

Build with BRICK
STRENGTH DURABILITY BEAUTY

Issued by The National Building and Engineering Brick Federation.

BUILD WITH BRICK

Inside and Out-

"We are satisfied that for outside painting, and for certain kinds of internal painting, there is at present no efficient substitute for lead paint."

A conclusion, after exhaustive investigation, arrived at by the Special Committee on Industrial Paints, appointed by the British Government.

Since 1797 we have made

Ground English Stack

WHITE LEAD

of the highest grade.

LOCKE BLACKETT & COMPANY LTD ESTD 1797. NEWCASTLE-ON-TYNE & LONDON.

GALLOWGATE LEAD WORKS,
NEWCASTLE-ON-TYNE.
Telegrams: "Locke, Newoastle."
'Phone: 280 Central.

YORK HOUSE 5/7, ST. MARY
AXE, LONDON, E.C.3.
Telegrams: "Peroxyde, Stock,
London." 'Phone: Central 1337.

LIGHTING & COOKING

IN THE COUNTRY.

The SILVERLITE GENERATOR starts and stops automatically, and is so simple that it can be attended to by a maid.

Erected under a three years' guarantee. Well known for its great reliability and wonderful economy.

Gives a soft light more brilliant than electric, and at a fraction of the running and maintenance costs.

NON-EXPLOSIVE
NON-POISONOUS

ALL FITTINGS SUPPLIED WITH SWITCH TAPS.

INSTALLATIONS planned to architects' requirements.

ESTIMATES FREE.

Tel. No. Padd. 2187

SPENSERS
Artistic Lighting Specialists,
6N London Street,
London, W. 2,
(opposite Paddington Stn.),
AND
119 George Street, Edinburgh.

SILVERLITE

Electrical Notes

How to Sell Heat.

Mr. A. F. Berry, in reading a paper on "How to Sell Heat, and Problems Related to the Warming of Air and the Body," at the Salesmanship Conference of the British Electrical Development Association, said that perhaps the greatest advantage that electricity had to offer was the purity of the heat—the whole of the electrical energy being converted into heat energy and nothing else. For electric furnaces, fires, irons, medical appliances, etc., this purity of heat was invaluable, but he did not think that those who were selling heat and heating appliances realized the all-important aspect of this question of purity when they came to the cooking appliances, especially the oven. The value of good food, well cooked, could hardly be over-estimated, and, in selling heat, the offer of a prospect of better health, and all that went with such betterment, was legitimate, and went far to effect a sale. The perfect control and purity combined permitted those using electricity to effect economies in roasting to an extraordinary extent, but hygienic considerations and safety probably came first.

Electrical energy was directly available for all services without any chemical conversion process, and for all heating purposes it gave a full return of 100 per cent. Electricity could not be made inefficient by misuse. He emphasized the importance of considering the purchaser's needs in selling heat, and pointed to the necessity for ensuring continuity and efficiency or economy of supply.

It was also important to show the goods properly. He was appalled at the manner in which electric fires were too often shown to would-be customers. Ill-placed, with the dust of ages upon them, flexible cords littered about, imitation oil-can ornaments bent sideways, feet pin-toed, on uneven floors, etc. He thought the electrical fire of to-day could claim to be sold in spite of the way it was shown rather than because of it. To try and sell a fire by showing it cold was like trying to sell a picture frame without the picture. The better the design of the fire, the greater the need for showing it well.

Mr. Berry also dealt with the fallacy in heating rooms, of giving so many watts per cubic foot. With the better types of fires in which roughly 50 per cent. of the heat was in convected form and 50 per cent. was radiated, it depended very greatly on the design as to whether the people in the room got a great deal of benefit from the convected heat or none at all; more often, perhaps, than not the convected heat went straight to the ceiling. This again necessitated consideration of the specific job. Electricity supply undertakings, he said, had scarcely scratched the surface of the great field of activities crying out for cultivation.

North London Electricity Supply.

Additional powers are being sought by the North Metropolitan Electric Power Supply Co. in a Bill to be introduced in the next session of Parliament. The company propose to extend their area of supply so as to include the Urban Districts of Baldock, Bishop Stortford, Hitchin, Royston, Sawbridgeworth and Stevenage, and the Rural Districts of Ashwell, Buntingford, Hadham and Hitchin, in the county of Hertford; and the Urban Districts of Buckhurst Hill, Epping, Loughton, Wanstead and Woodford, and the Rural District of Epping, in the county of Essex.

Extension of Overseas Electric Power Plant.

Information has been received in the Department of Overseas Trade to the effect that an electric power commission overseas is considering important extensions to its plant. This comprises several steam-electric plants of the largest type and a low-temperature plant for the carbonization of coal. The Commission would be interested to receive any information that would be of assistance to them in connection with the equipment and operation of such plant. It is particularly stated that the Commission is not interested in small plant. Firms supplying British material who wish to follow the matter up are invited to apply to the Department of Overseas Trade, 35 Old Queen Street, London, S.W.1 (quoting the reference D.O.T./12580/E.D.).

The Importance
OF TRUE REPRODUCTIONS

The value and importance of true and accurate reproductions of drawings cannot be over-estimated. By using "Velography" you may feel entirely confident of obtaining reproductions that will give every possible satisfaction.

For speed and accuracy "Velography" has long been recognised as the ideal process for the reproduction of hand tracings and inked original drawings if uncoloured and on good white paper.

Perfect copies, showing no trace of stains, dirt or cracks are obtained from old and dirty tracings provided the lines are good.

If you will send us one of your own tracings, mentioning "The Architects' Journal," we will supply you with a specimen "Velography" copy free of charge and a fully descriptive booklet on the process.

NORTON & GREGORY, LIMITED.

Castle Lane
Westminster

LONDON
S.W. 1

NORT
ON &
GREG
ORY

TRADE MARK REGISTERED

The Week's News

A Kingsbury Road Widening Scheme.

Church Road, Kingsbury, is to be widened and improved at a cost of about £33,800.

Housing at Manchester.

Manchester Housing Committee propose to arrange for the erection, by private enterprise, of a further 2,000 houses.

A New Church for Warrington.

In Ellesmere Street, Warrington, a church and schools are to be built on the site of the present mission.

Kensington Road Paving Scheme.

The Kensington Borough Council have decided to spend £13,179 in renewing the wood paving of several streets.

New Recreation Ground for Deptford.

Deptford Borough Council propose to buy 24 acres at Brockley for £12,000 for a recreation ground.

Margate's New Sea Wall.

A new £36,000 sea wall and promenade from Westbrook to Westgate is to be built by Margate Council.

Stockton Warehouse Alterations.

It is proposed to make some alterations to the goods warehouse at Stockton, and to renew the roof of the west bay.

More Shelters for Bournemouth.

The Bournemouth Corporation have decided to build a new pier head and shelters at Boscombe, at a cost of about £20,000.

Newcastle-on-Tyne Hotel Improvements.

Tenders will soon be invited for a new banqueting hall and bedrooms at the London and North Eastern Hotel at Newcastle-on-Tyne.

Proposed Recreation Hall for York.

A recreation hall for Tang Hall has been lately discussed by the residents of the estate and matters are being pressed forward.

Barnet Housing.

The Ministry of Health have sanctioned loans of £1,625, and £6,065 in connection with the Watling Street (Elstree) and Green Street (Shenley) housing schemes.

City of London School Memorial.

The City of London School are purchasing a new athletic ground at Grove Park. A war memorial pavilion will be built at a cost of £8,500.

New County Hall for Rotherham.

Sketch plans have been produced of the proposed new County Buildings and West Riding Court House to be erected on the site of the Cattle Market, Rotherham.

Proposed Model Dwellings for Somers Town.

Plans for the erection of five blocks of model dwellings at a cost of £52,450 in Somers Town are being considered by the St. Pancras Borough Council.

New School for Edlington.

The West Riding Educational Committee have decided to erect a school to accommodate 500 children at Edlington, a colliery district near Doncaster.

The Proposed New Bridge for Selby.

The Aire and Calder Navigation Company have offered to contribute £2,500 towards the building of a new bridge over the Selby canal. The new bridge will cost about £15,000.

New Stained Window for Kettlewell Church.

Mr. Cutcliffe Hyne, the author, has recently gifted to Kettlewell Church, Yorks, a stained-glass window to the memory of his son, Lieut. Hyne, of the Irish Guards. The window is by Mr. James Ballantine, F.S.A. (Scot.).

The Caird Hall, Dundee.

The entire mason work in connection with the Caird Hall, Dundee, was carried out by Messrs. Neil, McLeod and Sons, Ltd., of 81 Harrison Road, Edinburgh. The building was illustrated in our issues for October 31 and November 14.

The Preservation of St. Paul's.

Of the £120,000 raised for the preservation of the fabric of St. Paul's Cathedral, between £6,000 and £7,000 have been spent in the last twelve months, largely on investigations into the problems of restoring the stability of the dome.

More Houses for Bath.

The Housing Committee have decided to recommend the City Council to invite tenders for the completion of the Englishcombe Park Housing Scheme by the erection of 86 more houses.

New Electricity Plant for Greenwich.

The London County Council Highways Committee recommended the acceptance of a British tender for plant at Greenwich generating station at £57,740, although a Swiss tender was £15,000 lower.

The Civil Service War Memorial.

Masons are at work upon the Civil Service Rifles' War Memorial in the middle of the big quadrangle at Somerset House. It is to be a simple obelisk of stone, 15 ft. in height, and from it flags will depend as at the Cenotaph.

Extension of Hotel Motor Garage at York.

The London and North Eastern Railway Company are going to enlarge the existing hotel motor garage at York to accommodate one hundred cars. The scheme embraces several lock-ups for cars, waiting-rooms for drivers, and vulcanizing-room, etc.

A New School for Bently.

At the last meeting of the Riccall Rural District Council plans were presented by the East Riding County Council for the erection of a new infant school at the Selby end of Bently (East Riding). In addition to large class-rooms for boys and girls, cloak-rooms, lavatories, and teachers' rooms are to be provided.

A Monument to Mr. Bonar Law.

The Premier of New Brunswick is supporting a movement for the erection of a monument to Mr. Bonar Law in his native village—Rexton, County Kent, New Brunswick. A boulder of New Brunswick granite, with a bronze tablet, is suggested. The proposal originated with Dr. Webster, a member of the Canadian Historic Sites and Monuments Board.

New Park for Middlesbrough.

Middlesbrough Corporation have decided to purchase outlying portions of the Marton Hall estate at a cost of £35,000. It was announced at a recent meeting that, subject to this purchase, an anonymous donor had undertaken to buy the park and hall with a view to presenting them to the town. The park, which belongs to the famous Bolckow family, is more than 134 acres in extent.

Wren Ceiling Revealed.

The interior of All Hallows' Church, Lombard Street, has been cleaned. The beauty of the decorative work of Sir Christopher Wren, who built the church, is now fully revealed. The ironwork in the middle of the ceiling, which has been black for many years, shows the remarkable gilding, said to be inimitable to-day, while the rich moulding surrounding the paintings of various saints is also displayed in all its beauty.

City Street Improvements.

The Corporation of the City of London have decided to postpone indefinitely the proposal of the Improvements and Finance Committee for the construction of a new street from St. Martin's-le-Grand to Gresham Street, across the old General Post Office site, and to proceed with the original scheme for the widening of St. Martin's-le-Grand to 80 ft. from Newgate Street to Gresham Street; the widening of Gresham Street from St. Martin's-le-Grand to Foster Lane, and the widening of Cheapside at Sweeting's corner to the junction with St. Martin's-le-Grand to about 95 ft. The Wholesale Textile Association are protesting against the construction of the proposed new street, asserting that it will cause great dislocation and loss of business in the textile market area, which is the largest area of any industry in the City. It is urged that the new street will introduce the danger of fast-moving traffic into a closely packed area of narrow streets and lanes, already occupied with traffic peculiar to it.

Coming Events

Wednesday, December 12.

Royal Society of Arts, John Street, Adelphi, W.C.2.—"The Preservation of Historic Buildings and Ancient Monuments." By Sir Frank Baines, Director of Works, H.M. Office of Works. 8 p.m.

L.C.C. Central School of Arts and Crafts, Southampton Row, W.C.1.—Lecture XI. "Origin and Evolution of the Corinthian Order."

Inst. of Civil Engineers, Gt. George Street, S.W.1.—Informal meeting. "The Lighting of Factories." 7 p.m.

Thursday, December 13.

British Museum.—"Mediterranean Origins of Early Beliefs," etc. By Miss Claire Gaudet. 4.30 p.m.

Friday, December 14.

Art-Workers' Guild, Queen Square.—Annual General Meeting. 8 p.m.

Royal Photographic Society of Gt. Britain, 35 Russell Square, W.C.1.—Lantern Lecture on various cities. By Mr. Wm. Archer Clark, F.R.P.S. 7 p.m.

Town Planning Institute, 92 Victoria Street, S.W.1.—"Streets." By Mr. E. R. Abbott. 6 p.m.

Monday, December 17.

R.I.B.A., 1 Wimpole Street, W.1.—General Meeting. "Higher Buildings in Relation to Town Planning." By Mr. Raymond Unwin, F.R.I.B.A. 8 p.m.

Competition News

The Masonic Memorial Building.

At the Quarterly Communication of the Grand Lodge of English Freemasons it was decided to approve the recommendation of the Special Committee to invite competitive designs for the new Masonic Memorial Building. The proposals of the Special Committee were referred to in our last issue, page 851. The building is estimated to cost £1,000,000.

List of Competitions Open

Date of Delivery.	COMPETITION.
Jan. 1	The Imperial War Graves Commission invite architects who served during the war as members of the Military, Naval, or Air Forces raised in any part of the British Empire to send in their names for admission to a competition for the designing of memorials to the missing to be erected by the Imperial War Graves Commission at Bethune, Armentières, Cambrai, and Soissons. Applications for particulars of premiums and other regulations from those desiring to compete are to be addressed to the Secretary (Works Branch), Imperial War Graves Commission, 82 Baker Street, London, W.1, and must be received there not later than January 1, 1924, and must be accompanied by a statement giving particulars of the war service and professional career of the applicant and clearly stating which of the memorials it is desired to compete for. Deposit, two guineas for each set of plans. The Assessor is Sir Aston Webb, K.C.V.O., P.R.A.
Jan. 5	Memorial Building and Tower, Dudley. The Council of the County Borough of Dudley invite Competitive Designs from duly qualified Architects for the "Brooke Robinson Memorial" Building and War Memorial Tower comprising a public hall, coroner's court, small museum, and a new sessions court. Premiums £300, £200, and £100. Mr. W. Curtis Green, A.R.A., F.R.I.B.A., Assessor. Conditions of competition, together with a copy of the site plan, can be obtained on application to Mr. E. W. Tame, Town Clerk, Town Clerk's Office, Dudley, with deposit of £2 2s.
Feb. 1	Proposed Concert Hall and Public Baths for Newcastle-upon-Tyne. Premiums £750, £250, and £100 respectively are offered, the first premium to merge into the commission or other payment to be made to the author of the successful design. Assessor, Mr. Alfred W. S. Cross, M.A. Apply, with deposit of £2 2s., to Mr. A. M. Oliver, Town Clerk, Town Hall, Newcastle-upon-Tyne.
Feb. 14	Proposed New Cottage Hospital for Durham. The Holmside and South Moor Collieries Welfare Scheme Committee invite designs for a new cottage hospital, and premiums of £75, £50, and £25 respectively are offered. Mr. T. R. Milburn, F.R.I.B.A., is the assessor. Apply not later than December 26. Joint Secretaries, Welfare Scheme Committee, South Moor Colliery Co., Ltd., South Moor, Stanley, S.O., Co. Durham.
Feb. 29	Architects practising in the West Riding of Yorkshire are invited to submit designs for the City of Leeds Branch Public Libraries, Cardigan Road, Burley, and Hough Lane, Bramley. Premiums, £35, £20, and £15. Assessor, Mr. Percy S. Worthington, M.A., Litt.D., F.R.I.B.A. Apply Mr. Robert E. Fox, Town Clerk, 26 Great George Street, Leeds, with deposit of one guinea.

Fiberlic

"THE WALLBOARD WITH A REPUTATION."
MACANDREWS & FORBES LIMITED, 65 SOUTH MOLTON STREET, LONDON, W.1.

SUSPENDED SCAFFOLDING | **TUBULAR SCAFFOLDING AND CRANE STAGINGS.** | **"SCAFFIXER" SCAFFOLD TIES**

(For Sale) BUILDERS' PLANT (For Hire)

SCAFFOLDING (GREAT BRITAIN) LTD.

Incorporating—
The Tubular Scaffolding Co., Ltd., and The Patent Rapid Scaffold Tie Co., Ltd.
Telegrams: "Scaffixer, Claproad, London." **43 LANSDOWNE ROAD, STOCKWELL, LONDON, S.W.8.** *Telephones:* LONDON—BRIXTON 330. BIRMINGHAM—VICTORIA 187.

"LIMPET" PATENT BOLTS & WASHERS

For CORRUGATED IRON SHEETS and Asbestos Cement Corrugated Sheets

"Limpet" Washers make an Absolutely Watertight Joint. They prevent Leakage and Corrosion round the Bolt Holes.

ADOPTED BY THE INDIAN GOVERNMENT, CROWN AGENTS FOR THE COLONIES, AND THE LEADING RAILWAY CO.'S

PRICE'S PATENT

The most approved Fixing for Joining Corrugated Iron Sheeting together.

REGISTERED TRADE MARK
LIMPET

Full Particulars and Samples from
WILLIAM JACKS & CO. Winchester House, Old Broad Street, LONDON, E.C.2.
Agent for Scotland: FRANK G. PRICE & Co., 115 Bothwell St., Glasgow.

fll B

The Architects' Journal.
Vol. LVIII. No. 1512.

December 26, 1923.
Price Sixpence.

THE ARCHITECTS' JOURNAL

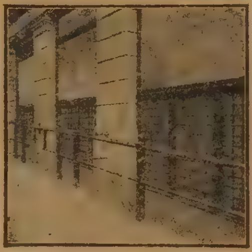
THE LIBRARY OF THE
FEB 1 1924
UNIVERSITY OF ILLINOIS

December 26, 1923

29 Tothill Street, Westminster

Registered as a Newspaper

Haywards Lights AND BUILDING SPECIALITIES



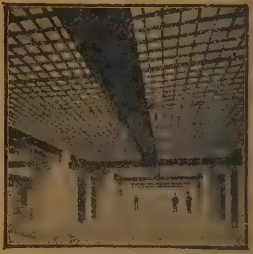
At Bouverie Street, E.C.

Haywards are the oldest and best known Experts in Daylight Lighting. They specialise in all forms of Glazings.

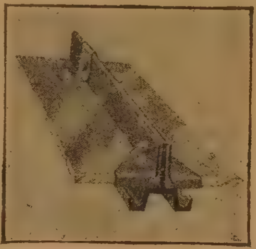
23 MEDALS AWARDED

And also in Fireproof Building Specialities. Consult their Experts and Save money and trouble. Secure best results.

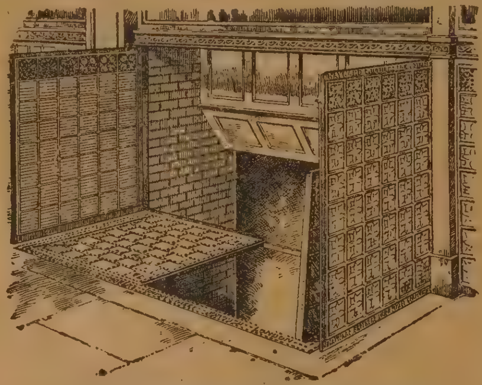
HAVE DAYLIGHT AND CLEAN BRIGHT PLACES.



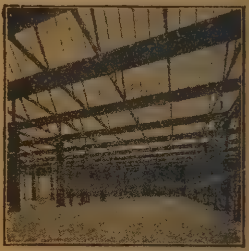
Admiralty Stores, S.W.



Haywards "Reform" Patent Puttyless Roof Glazing



Haywards Outward-Opening Stallboard Doors and Pavement Flaps with Gutter Frame.



"Reform" Roof at Daimler's Motor Works, Coventry (23,000 ft. super.).

HAYWARDS LTD. ENGINEERS & IRONFOUNDERS
UNION ST., BOROUGH, LONDON, S.E.
Telephones: Hop 3642 (3 lines). Telegrams: "Hayward Brothers, London."

Branches and Agents at
Manchester, Liverpool, Leeds, Birmingham, Cambridge, Cardiff, Newcastle, Plymouth, Glasgow, Aberdeen, Belfast and Dublin.

Economical Designs and Plans for all Classes of Steelwork submitted at Short Notice.

BRITISH STANDARD SECTIONS OF

JOISTS, CHANNELS, TEES, ANGLES, PLATES, ETC.

AND ALL

CONSTRUCTIONAL STEELWORK

CAN BE DELIVERED FROM LONDON STOCK.

WE WOULD LIKE TO SEND YOU PARTICULARS OF OUR WORK.

Address all Communications to

DREW-BEAR, PERKS & Co., Ltd.,
BATTERSEA STEEL WORKS,
WELLINGTON ROAD, S.W.11.
Telegrams: "MECHANURGY, BATT."
Telephone: 2263 BATTERSEA.

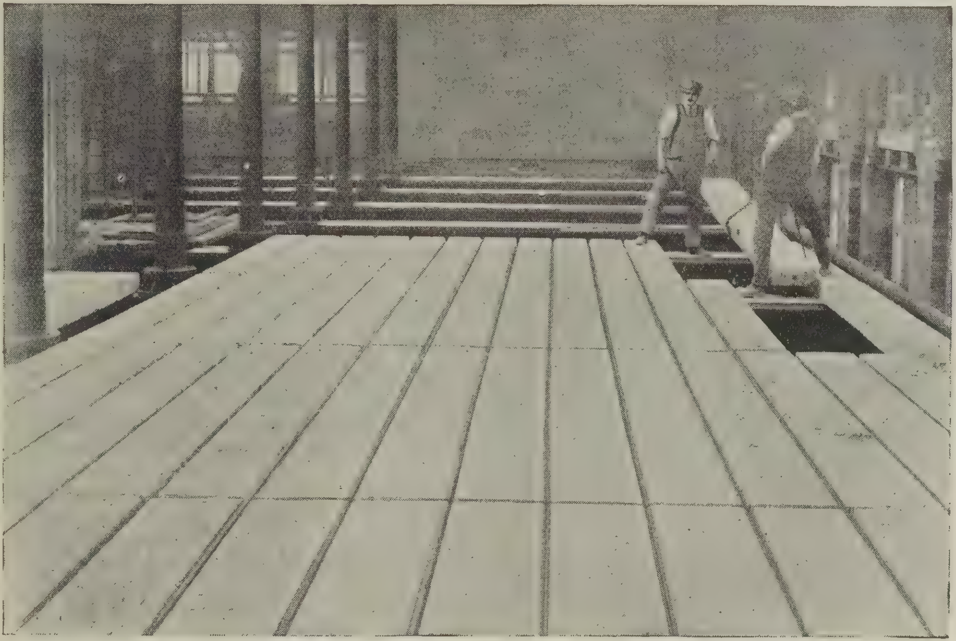
And at
30 GROSVENOR PLACE,
WESTMINSTER, S.W.1.
Telephone: 4806 VICTORIA.
Telegrams: "BEARBIND, SOWEST, LONDON."

"HOLLOCAST" FLOORS

Patent No. 168777

ECONOMICAL · LIGHT IN WEIGHT
SOUNDPROOF · FIREPROOF

SPECIALLY SUITABLE FOR OFFICES, SCHOOLS, HOSPITALS, HOTELS, FLATS, SHOPS, ETC.



Warehouse at Leicester, showing floor unit being placed in position.
Superimposed Load, 3 cwt. per sq. ft. . . . . Span, 10 ft.

"HOLLOCAST" FLOORS

Can be cast on the site.

Require no supports during construction.

Can be used immediately they are placed in position.

SCHEMES AND ESTIMATES SUBMITTED FREE OF CHARGE.

INDENTED BAR
AND
CONCRETE ENGINEERING COMPANY, LTD.,

Telegrams :
"Patinbar, London."
Telephone :
Victoria 1642 (2 lines).

QUEEN ANNE'S CHAMBERS,
WESTMINSTER, S.W. 1.

CONTENTS.

The Assessing of Competitions: A Plea for System 925
Notes and Comments: Lambeth Bridge: Why not an Open Competition?; Modern Indian Architecture; Our Special Issue .. 926
The First International Exhibition of Decorative Art at Monza. By Selwyn Brinton 927
Higher Buildings in Relation to Town Planning. Mr. Raymond Unwin at the R.I.B.A. 935
The Architectural Societies. 5.—Sheffield, South Yorkshire and District 939
Correspondence 941
Munster and Leinster Bank Extensions, Cork. A. and H. H. Hill, Architects 942
The Swansea Masonic Buildings Competition: A Criticism of the Designs 947
An Interesting Duplex Apartment House in Chicago. Rebori, Wentworth, and Dewey, Architects .. 950
"Academic Dress" at the Northern Architectural Association .. 954
Law Reports 955
R.I.B.A. Final Examinations: Alternative Problems in Design .. 956
The Gold Medal for Sculpture R.I.B.A. Notes and News; Cost of Building Materials; Competition News 957
List of Competitions Open .. 957
The Treatment of Wall Surfaces .. 958
Good and Bad Manners in London Architecture 958
Concrete Roads 958
The Royal Scottish Academy .. 959
The Manchester Society of Architects 959
The Origin and Use of the Corinthian Capital 959
Contemporary Art. By Kineton Parkes 959
The Week's News 960
Trade and Craft xvii
New Inventions xviii
Contracts Open xx

ILLUSTRATIONS.

The Alhambra Court at the Crystal Palace 923
Monikendam, Holland: A Detail of a Doorway and Window .. 924
First International Exhibition of Decorative Art at Monza .. 927–934
Mr. Raymond Unwin. From a Caricature by H. de C. 935
War Memorials. 40.—Bostock War Memorial, Cheshire. Darcy Braddell, F.R.I.B.A., and Humphry Deane, Architects 937
The late Mr. T. J. Flockton, F.R.I.B.A., F.S.I., First President, Sheffield Society of Architects .. 93
Mr. J. R. Wigfull, F.R.I.B.A., President, Sheffield Society of Architects 94
Mr. H. B. S. Gibbs, A.R.I.B.A., Hon. Secretary, Sheffield Society of Architects 94
Munster and Leinster Bank Extensions, Cork. A. and H. H. Hill, Architects 942, 94
Architects' Working Drawings. 71.—New Buildings in Marlboro Street, Cork, for the Munster and Leinster Bank, Ltd. 944–
A House at Welwyn Garden City, Herts. Louis de Soissons, A.R.I.B.A., S.A.D.G., Architect 94
The Swansea Masonic Buildings Competition. The Winning Design. Messrs. Wilmott and Smith, Architects 947–
Duplex Apartment Building, Chicago. Rebori, Wentworth, and Dewey, Architects 951
A Pictorial Review: Illustrations of Topical, Practical, or Curious Interest 952–
"Academically Dressed" 954

Distributing Agents in the United Kingdom.

LONDON.
ERNEST MATHEWS & CO., West Africa House, Kingsway, London, W.C. 2
THE PLYWOOD AGENCY, 112 Cannon Street, E.C. 4.

LIVERPOOL.
DAVID ROBERTS, SON, & CO., LTD., Cunard Buildings.

MANCHESTER AND HULL.
F. PARKER & CO., Little Newton Street, Ancoats, Manchester.

KENDAL.
A. PATTINSON, ESQ., Steam Sawing and Moulding Mills.

NEWCASTLE-ON-TYNE.
MILLER & CO., 2 Collingwood Street.

BIRMINGHAM.
GEORGE SHIPWAY, 246 Moseley Street.

SOUTHAMPTON.
H. J. HOLT, LTD., Bevois Valley.

PLYMOUTH.
SERVICE & CO., LTD., Octagon, Union Street.

SHREWSBURY.
BARKER BROS., SHREWSBURY, LTD., Smithfield Road Saw Mills.

GLOUCESTER.
SESSIONS & SONS, LTD.

EDINBURGH.
JOHN STEWART, ESQ., 40 Montgomery Street.

CARDIFF.
J. & R. GRIFFITHS, LTD., West Canal Wharf.

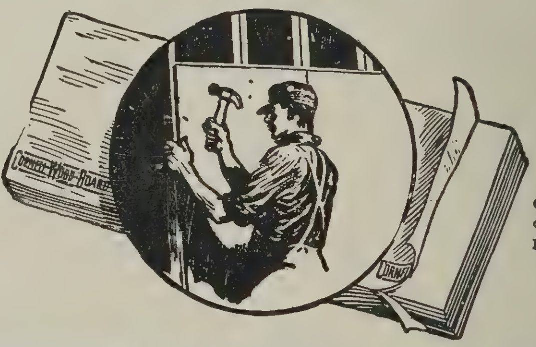
Distributing Agents in Ireland.

DUBLIN.
BROOKS, THOMAS & CO., LTD., Sackville Place.

BELFAST.
THOMAS DIXON & SONS, LTD., Milewater Road.

CORK.
EUSTACE & CO., LTD.

Walls and Ceilings Quickly and Easily Erected



Comes in clean, dust-proof packages.

Cornell Wood Board

This pure wood product can be applied directly to joists and studdings or over old walls without removing the old material.

Turn the attic, basement, spare room and other waste places into attractive useful quarters by finishing the walls and ceilings with strong, rigid panels of Cornell-Wood-Board.

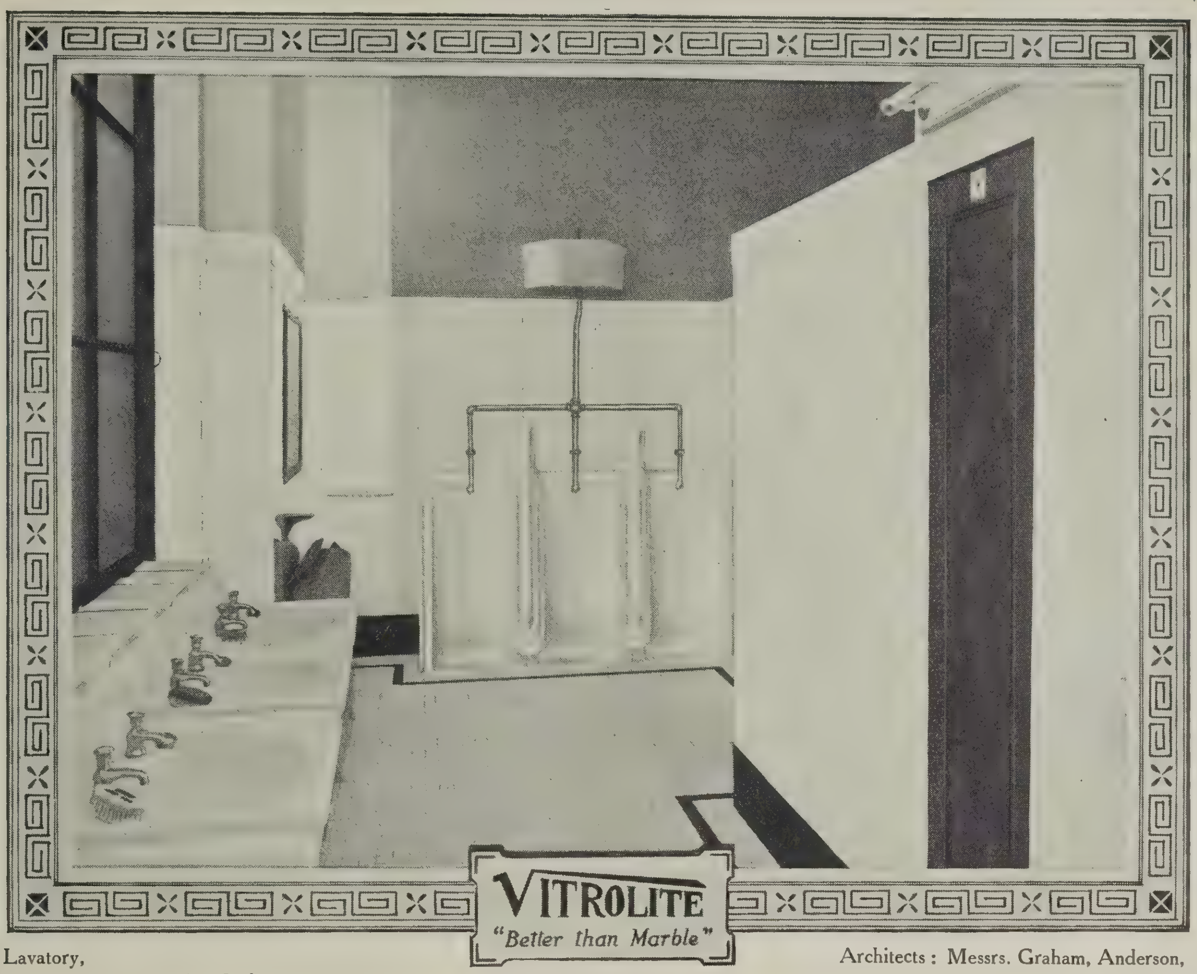
The pebbled surface of Cornell-Wood-Board takes a perfect spread of paint or calcimine because it is **Mill-Primed** (both sides) and it saves you the cost and labour of a priming or sizing coat.

The 32- and 36-inch widths, called "Cornell 32" and "Cornell 36," produce the most charming panels for hallways and small rooms. For large work the 48-inch width, called "Cornell 48," is recommended.

Cornell's Triple-Sizing process protects against moisture, expansion and contraction. Guaranteed not to crack, warp, buckle or chip, if the directions for applying are followed.

Let us give you samples of this remarkable board, estimates, and names of those who are delighted with the results it gives.

General Agents for United Kingdom: **EDWARD CHALONER & CO., Brown's Buildings, Liverpool.**



Lavatory,
Messrs. Selfridge & Co., Ltd.

Architects: Messrs. Graham, Anderson,
Probst & White.

WHEREVER the attractiveness of a brilliantly polished snow-white surface, ideally hygienic, is desired, Vitrolite should be specified. Vitrolite cannot be stained or discoloured, and always looks new and invitingly clean. It is many times harder than marble.

Vitrolite is cast in sheets up to 120 in. by 40 in., ¼ to 1 in. thick, so that joints can be practically eliminated altogether. It can be cut, bent to avoid angles and the edges bevelled and polished. It is fixed to walls and ceilings by a mastic, but if necessary it can be drilled to receive screws.

Vitrolite is supplied in two colours—white and black. If desired it can be etched with any design in any colour to harmonize with a scheme of decoration.

Once installed redecorating expense is reduced to a minimum, as its surface can be quickly and easily cleaned. By simply rubbing over with a damp cloth, its snow-white freshness is immediately restored.

Non-absorbent and impervious to acids, Vitrolite is undoubtedly the most suitable material for wall-linings, ceilings, counters, table-tops, shelves, and back slabs, in Hospitals, Shops, Kitchens, Bath-rooms, Lavatories, Hairdressing Saloons, etc. It is also much used for Shop Fronts as the sulphurous fumes in the air do not affect its whiteness.

VITROLITE CONSTRUCTION CO. (Europe), Ltd.

1 Victoria Street, Westminster, London, S.W. 1.

Telephone—Victoria 9777.

Select Books of the Architectural Press

ESSAYS AND MEMORIALS. By JOHN W. SIMPSON, PP.R.I.B.A. A noteworthy contribution to the literature of architecture and a book of rare distinction and charm. These essays will be appreciated alike by the profession and by the general public for their luminous exposition of architectural principles and history. *Price 12s. 6d. Net; Postage 6d. Inland.*

SMALL GEORGIAN HOUSES 1750 to 1820. In two Volumes. By STANLEY C. RAMSEY. Those who delight in the simplicity and charm of Georgian Domestic Architecture will find these volumes of great interest and value. *Vol. I: Exteriors, Price £1 1s. Net. Vol. II: Interiors and Details, Price £1 5s. Net; Postage 9d. each Vol., Inland.*

RECENT DOMESTIC ARCHITECTURE. By the late ERNEST NEWTON, R.A., and W. G. NEWTON, M.A., A.R.I.B.A. This volume is the harvest of ten years of domestic architecture, 1913–1923. It contains the work of the leading Architects, and is divided under the main headings of Country Houses, Town Houses, Suburban Houses, Bungalows, and Cottages. *Price £1 1s. Net; Postage 9d. Inland.*

THE SMALLER HOUSE. Being selected examples of the latest practice in Domestic Architecture. All the work illustrated is by distinguished architects. Plans and interior views are given showing interesting treatment for living-rooms, drawing-rooms, entrance halls, staircases, etc. *Price £1 5s. Net; Postage 9d. Inland.* (In the Press.)

THE ART OF E. A. RICKARDS. With a biographical sketch by Mr. ARNOLD BENNETT. A selection of the artist's work is finely reproduced in monochrome and colour, and his outstanding genius as draughtsman, designer, painter, and caricaturist may be adduced from the numerous examples given. *Price £3 3s. Net; Postage 1s. Inland.*

ARCHITECTURAL WATER COLOURS AND ETCHINGS OF W. WALCOT. This illustrates all Mr. Walcot's most famous works reproduced both in monochrome and colour, and also contains contributions by W. R. Lethaby, Sir Reginald Blomfield, R.A., W. G. Newton, Malcolm C. Salaman, and others. *Price £3 3s. Net; Postage 1s. Inland.*

ENGLISH RENAISSANCE WOOD WORK 1660 to 1730. By THOMAS J. BEVERIDGE, Architect. A magnificent series of measured drawings illustrating the best examples of this most flourishing period for decorative wood work is given in this volume. The book will be of unique value in employing models and motifs to both architects and craftsmen, and in furnishing inspiration for modern decorative designs. Eighty Plates, together with Introductory and Descriptive Text, bound full cloth gilt, large folio, 21½ in. × 14 in. *Price £6 6s. Net; Postage 1s. 3d. Inland.*

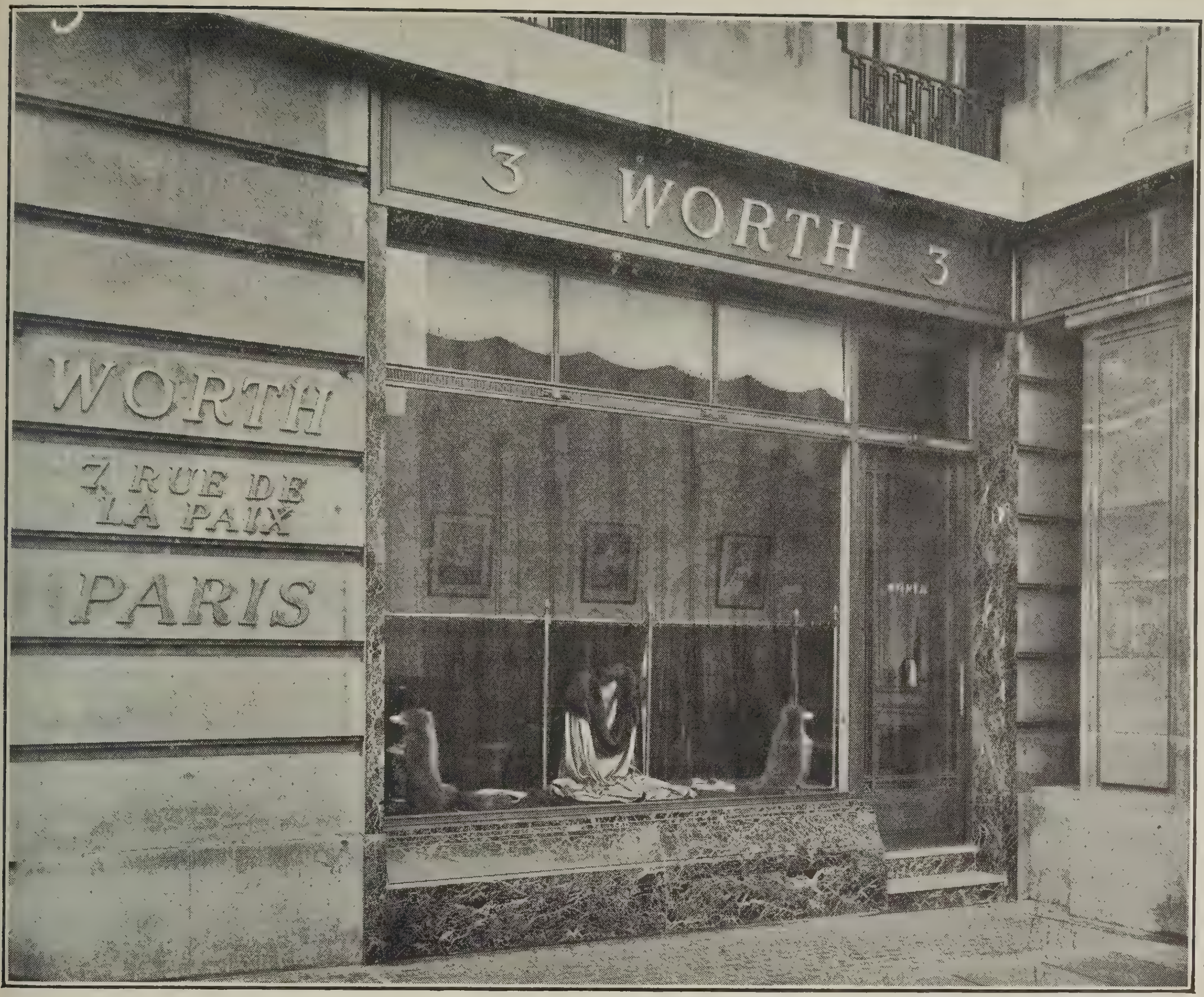
ENGLISH ARCHITECTURE AT A GLANCE. (Fourth Edition.) A simple review in pictures of the chief periods of English Architecture with historical notes by Frederick Chatterton, F.R.I.B.A. *Price 1s. 6d. Net; Postage 4d. Inland.*

COMPLETE CATALOGUE SENT ON REQUEST.

THE ARCHITECTURAL PRESS
27–29 Tothill Street, Westminster, S.W. 1

A JOLLIE GOOD BOOKE WHEREON TO LOOKE
IS BETTER TO ME THAN GOLDE

J.D.M.H. 1923



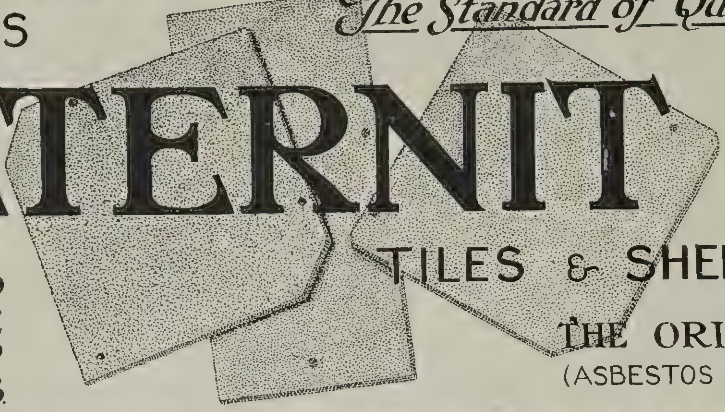
THE SAGE SERVICE TO ARCHITECTS
FOR THE CAREFUL AND INTELLIGENT
EXECUTION OF ARCHITECTURAL CONCEPTIONS

THE SHOPFRONT OF THE FAMOUS LONDON GOWN HOUSE, MESSRS. WORTH OF HANOVER SQUARE, W., CARRIED OUT IN GREEN TINOS MARBLE, WITH BRONZE METAL FACIA, SASHES, AND ENTRANCE DOOR, TO THE SPECIFICATION OF THE ARCHITECT,

J. J. JOASS, F.R.I.B.A.

FREDK. SAGE & CO. LTD.
Head Office & Showrooms-
58-62, GRAY'S INN ROAD, LONDON, W.C.1

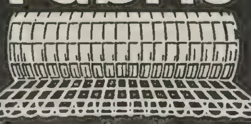
92 WOOD ST., LONDON, E.C. 2.
8 PORTLAND ST., MANCHESTER.



SPEAKER'S
The Standard of Quality......
ETERNIT
TILES & SHEETS
THE ORIGINAL
(ASBESTOS CEMENT)

G.R. SPEAKER & Co
ETERNIT HOUSE
STEVENAGE RD
LONDON S.W.6.

BRC
Fabric



COMPETITIVE PRICES
"MAGBESTIC"
ALL WORK GUARANTEED
JOINTLESS FLOORING

LAID TO BOARDS OR CONCRETE IN ANY COLOUR
Specialities:-
"MAGBESTIC" Jointless Flooring.
"TENNISITE" Hard Courts.
ASPHALT Roofs and Floors.
Write for Particulars to:-
Phone- Clerkenwell 4121.
The British Magnesite Flooring Co.
City House, 158/60, City Road. E.C.1.

Some Famous Buildings and their Story

By W. A. Clapham, F.S.A., and W. H. Godfrey.

Buildings that have been the scene of historical events, or have played a distinctive part in the development of national life, are commonly dealt with either at tedious length and in unattractive style, or are dismissed in a few sentences detailing dates and particulars that are frequently inaccurate. After much original research the present authors have been able to throw a flood of fresh light on buildings that are of outstanding architectural character, or that have a story to tell.
The book is written in a most interesting style, and is a veritable mine of information.

One Volume (10 *in. by* 6½ *in.*). *Price* 5s. *net.* 275 *pages*
Postage 9d. extra.

THE ARCHITECTURAL PRESS
27-29 Tothill Street, Westminster, S.W. 1

"HEMPSTEAD" HOLLOW PARTITION BLOCKS AND FLOOR BLOCKS

IMMEDIATE DELIVERY OF STOCK SIZES.
FLOOR BLOCKS to suit Patentees' Requirements.

Address Enquiries:
THE HEMEL HEMPSTEAD PATENT BRICK CO., LTD.
326 GRAY'S INN ROAD, LONDON, W.C. 1
Telephone: MUSEUM 4588. Telegrams: "LUGGDOM," LONDON.

EASTWOODS LIMITED
STOCK FLETTON AND RED BRICK
MANUFACTURERS
CEMENT, LIME & BUILDERS' MERCHANTS
HEAD OFFICE. 47 BELVEDERE RD. LONDON, S.E.1.
PHONE. HOP 3448.

"EXPAMET"

EXPANDED METAL

The Ideal Reinforcement for Concrete.

Architects: *Messrs. Stone & Lloyd, Taunton.*

NEW GARAGE, BRISTOL, for
Messrs. Cox Co. and Howard Stephens, Ltd.
"Expamet" – Concrete Floors.

Specialities.

"EXPAMET" STEEL SHEET REINFORCEMENT FOR CONCRETE.

"B.B." LATHINGS FOR PLASTERWORK.

"EXMET" REINFORCEMENT FOR BRICKWORK.

"Expamet" is used in every class of building construction, plasterwork, concrete work, precast work, etc., and details of its innumerable uses and advantages together with designs and estimates will be sent free on application.

Write for Illustrated Literature.

THE EXPANDED METAL CO., LTD.,

YORK MANSION, PETTY FRANCE,
LONDON, S.W. 1.

Works: STRANTON WORKS WEST HARTLEPOOL.
ESTABLISHED OVER 30 YEARS.

The key to building economy
EXPAMET
REG.

Detail in Reproduction

Clarity of detail, and suitability to paper, combined with economy in use, are the essential points in all Printing Blocks.

From the photo or drawing of the object, to the original block and its duplicates, we endeavour to produce Printing Plates that will in every way help to ensure a well-printed result.

The *ALBERT GALVANO* and the *NICKELOID* are two of our special Duplicate Electros that are renowned for their quality and economy in printing.

Specimens printed from these Electros, Price Lists, and quotations are free.

ALBERT GALVANO

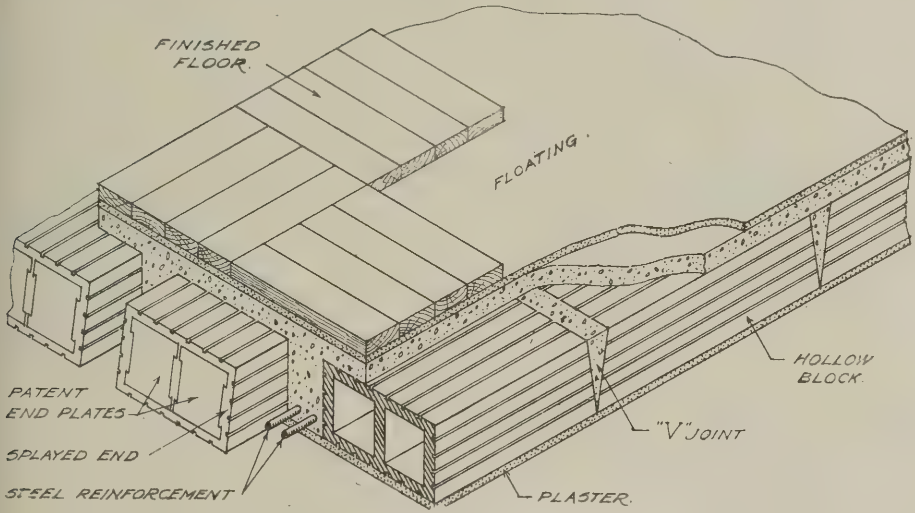
NICKELOID

The NICKELOID ELECTROTYPE Co. Ltd.

10 NEW STREET HILL, LONDON, E.C.4

'CULLUM' FLOORS

Are an Improvement on the usual type of hollow block Floors.



The "Cullum" Floor.

Large Numbers of Architects for whom we have carried out work will gladly confirm this statement.

The V Joint makes a Strong Job.

HORACE W. CULLUM & CO., Ltd.,
50/2 Britannia Street, KING'S CROSS, W.C.1.

Phone: Museum 1797. *Wires: "Kulmco, Kincross, London."* *Code ABC 5th Edition.*

THE URE
BACK-TO-BACK LIVING-ROOM GRATE & SCULLERY COOKER

The most efficient and widely-adopted *combination* fire doing the work of two which will ——— *successfully*

Boil or Stew on the Hot Plate,
Cook a 14 lb. Joint to perfection
and provide a ———
Plentiful Hot Water Service
at one and the same time.

The cheery open fire, in addition to warming the Sitting-room, assures a genial working atmosphere in the Scullery in the cold weather.

Permits clothes being rapidly dried in the Scullery.

In summer a simple gas attachment enables the oven to be used without the lighting of a fire.

ONE FIRE DOES THE WORK OF TWO EFFICIENTLY AND ECONOMICALLY.

Architects, Builders, Municipal and other Authorities responsible for Housing Schemes are invited to write for full illustrated particulars of the URE Back-to-Back Combination, which is now being used throughout the Kingdom with remarkable success.

ALLAN URE & CO., Springbank Foundry, 355 Keppochhill Road, GLASGOW,
& 19 Charing Cross Road, LONDON, W.C.2.

BRITISH FIBROCEMENT WORKS LTD.

CONTRACTORS TO THE ADMIRALTY AND WAR OFFICE

ASBESTOS-CEMENT MANUFACTURERS

CORRUGATED SHEETS

Sizes—4ft. to 10ft.

Width—30 inches.
¼" thick.

FIRE RESISTING
WEATHER PROOF
FIBRENT
LIGHT
EVERLASTING
REGISTERED TRADE MARK

CURVED SHEETS TO ANY RADIUS

ROOFING SLATES
12" × 12", 15¾" × 15¾", 24" × 24"
Duchess size for straight cover, 24" × 12"

FLAT SHEETS
For external and internal walls, ceilings, etc. In standard sizes.

PANEL SHEETS FOR SPECIAL INTERNAL DECORATIVE WORK.

MANUFACTURED ONLY AT **ERITH, KENT.**

Telephone: ERITH 89 (2 lines) HEAD OFFICE AND WORKS.

London Office—
Central House,
Kingsway, W.C. 2.
Telephone: GERRARD 6483.

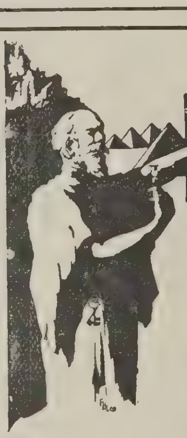
Birmingham Office—
14 New Street,
Birmingham.
Telephone: CENTRAL 7292.

Bristol Office—
28 Baldwin Street,
Bristol.
Telephone: BRISTOL 272.

Manchester Office—
97 Bridge Street,
Manchester.
Telephone: CITY 7856.

Also at GLASGOW, SWANSEA, DUBLIN and BELFAST.

Manufacturers also of "FIBRENT" High Pressure Jointings, Boiler Coverings, Millboard, etc.



"PETEROID" SPECIALITIES Regd

Permanently Coloured Waterproof Cements for Floor and Stucco Work, etc., in Red, Yellow, Brown, Cream, Green, etc., suitable for any Decorative Scheme.

We Specialize in White Cements, for facings, etc.

Send for Colour Card, and Samples.

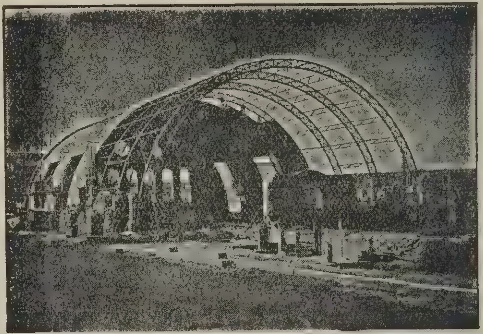
We provide all the essential materials for high-class Cement Work.

Our Carbolineum, in use for forty years for preserving wood, is still the best.

C. A. PETERS LTD., 5 Stores Road, Derby.

E. F. BLAKELEY & Co. (LIVERPOOL) LIMITED.

VAUXHALL IRONWORKS, BIRKENHEAD.
Contractors to H.M. Government. Established 1881.



Drill Hall, Royal Garrison Artillery, Lancaster.

STEEL AND IRON ROOFS

Principals. Lattice. Girders. Stanchions.

Estimates Free.

Tel.: "Corrugated," Birkenhead.
'Phone: 1568 Birkenhead

Kinnell's

CENTRAL HEATING

HOT WATER SUPPLIES
VENTILATION
STEAM COOKING APPARATUS
FIRE HYDRANTS

We undertake work in any part of the country. Expert advice and estimates free.

CHAS. P. KINNELL & CO., LTD.
65, 65a SOUTHWARK ST., LONDON, S.E.1.
Wire: Kinnell Boroh London. *Phone:* Hop 362 (3 lines).

JAMES ALLAN SENR. & SON, LTD.

CONSTRUCTIONAL ENGINEERS
LAMBHILL IRONWORKS - - - GLASGOW
Telegrams: "Erection, Glasgow" Telephones: Kelvin 33 & 34

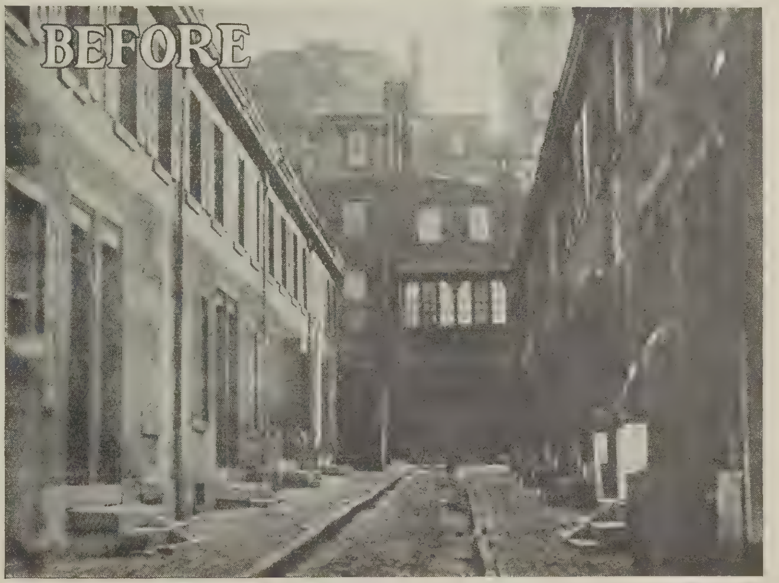
MESSRS. JAMES ALLAN SENR. & SON, LTD., will be pleased to wait upon and co-operate fully with Architects in any part of the country. The advice and service which their experience qualifies them to give to those interested in Constructional problems are freely offered.

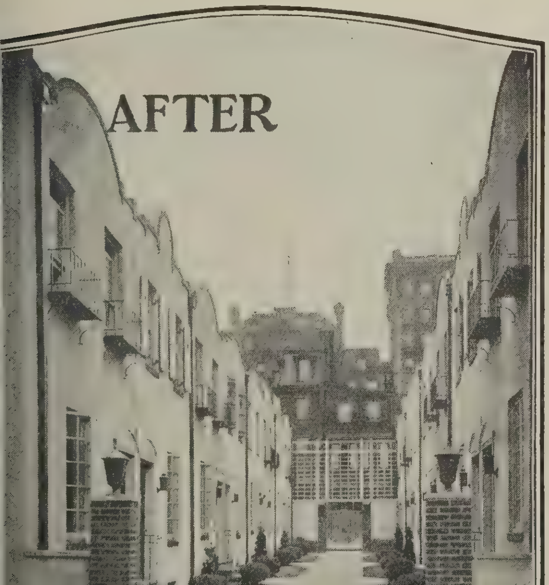
By reason of the large stock of materials always in hand, and efficient workshop facilities, delivery to specified time is assured.

London Office—39 Lombard Street, E.C. 3 Avenue 7899
Also at Manchester, Newcastle, Exeter & Belfast.

THE spirit of Christmas means goodwill to men. To a man who carries in his head and his heart the thought and the impulse to lighten the burdens and lift the cares of his fellow men, it's Christmas all the year round. The story of Lantern Lane reads like a Christmas tale. In Philadelphia, less than a year ago, was a slum called Uber Street. On either side of its eighteen-foot roadway were eight squalid brick houses. Uber Street was dirty, insanitary, a blot on the fair name of Philadelphia—the "City of Brotherly Love." Poor negroes lived in its noisome environs. One day a man named David Coons passed the sombre alley. n his heart he abhorred it. He was not n architect or a builder. He had no nterest in real estate. He was just avid Coons, a man with a heart. He onceived the idea of making that black, epressing hole a place fit to live in. le did something besides dream. He ut wheels in motion that made his ream come true. Eighty-seven negroes vho had occupied the sixteen houses vere moved to other quarters. On the ld walls and floor joists a miracle was chieved. In a few months Uber Street ecame Lantern Lane, lined with sixteen harming little houses in Spanish style, of vhite and buff stucco (stucco made from vhite Portland cement), with coloured le inserts. The roadway became a arden walk flanked with tiny lawns, decorative shrubs and evergreens. At every door of every house is a lantern. At night the lanterns of Lantern Lane give the cheeriest touch imaginable. Small ornamental iron balconies with hand rails, trimmed with bright brass and copper, doors and shutters in bright colours, all combine to produce a delightful effect. Lantern Lane is a shining example of what can be done to quickly, economically, and permanently beautify the dirty little back streets. The "Garden City" idea is not merely applicable to a city's suburbs. Why not brighten and lighten the dark spots in the heart of a great city? Write to me at Regent House, Regent Street, London, W.1, and let me send you a copy of "Guide to Good Stucco," which will open to you the "Atlas White" road to light and beauty. Do you know of a Uber Street that could be made a Lantern Lane?

Frederic Coleman





PETER ROBINSON'S REBUILDING.

Architects:
T. P. & E S. Clarkson,
H. Austen Hall

Steelwork Manufactured and Erected
by
Redpath Brown & Co., Ltd.

Consulting Engineers:
E. P. Wells, Cocking &
Meston.

REDPATH, BROWN & CO., Ltd.

CONSTRUCTIONAL ENGINEERS.

3 LAURENCE POUNTNEY HILL, E.C.4

WORKS AND STOCKYARDS

London
Riverside Works,
East Greenwich, S.E.

Manchester
Trafford Park.

Edinburgh
St. Andrew
Steel Works.

Glasgow
Westburn, Newton.
Office: 19 Waterloo St.

Birmingham
Office:
47 Temple Row.

Newcastle-on-Tyne
Office:
Milburn House.

Registered Office:—2 St. Andrew Square, Edinburgh.

Preventable Wastage

Most Contractors do all they can to effect economies in building work and to prevent wastage in large matters. Often, however, there is wastage, which is not discernible outwardly, but which has a considerable bearing on the execution of a contract.

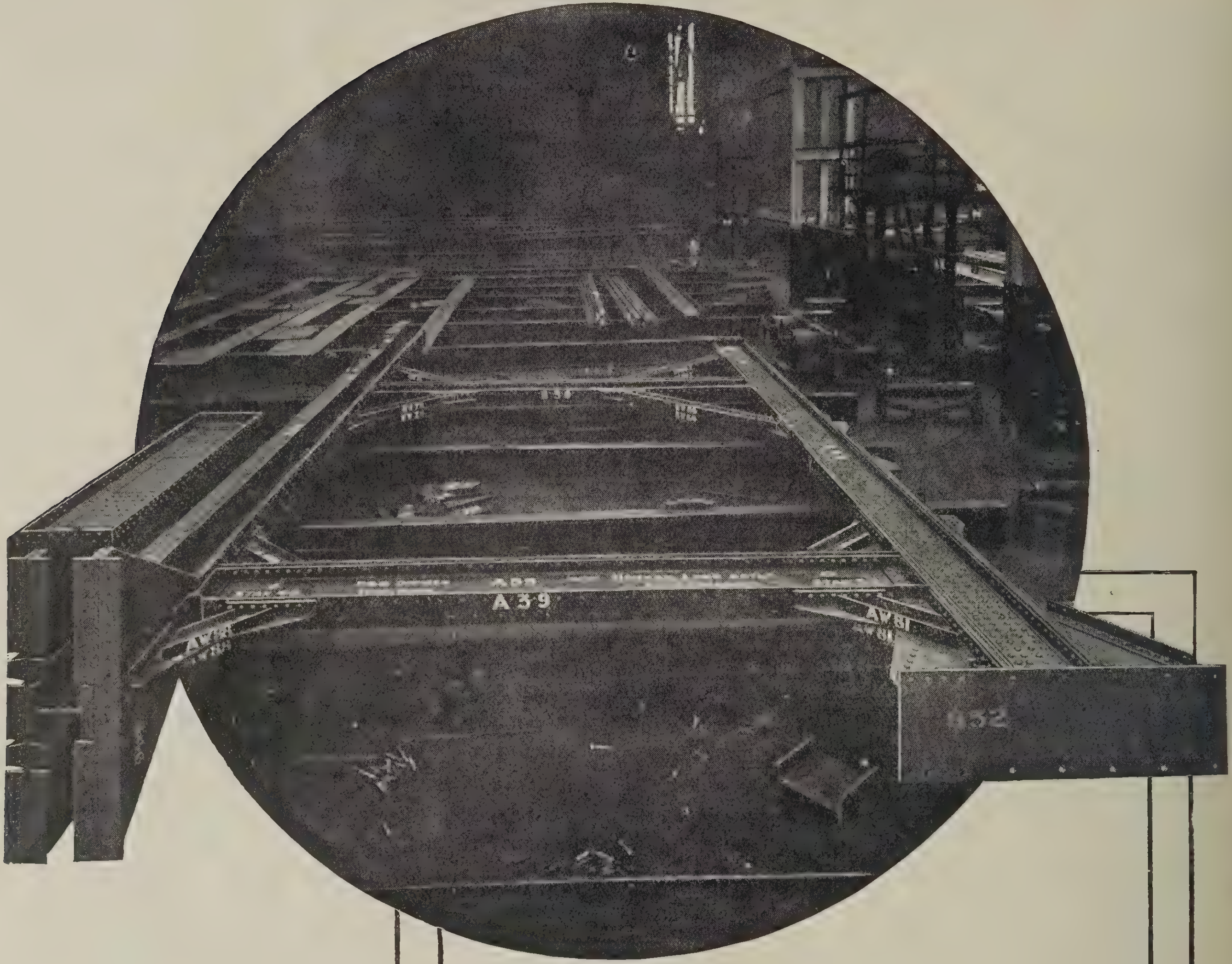
To stimulate execution so that it may be at its maximum without strain, it is necessary to plan the arrangement of work intelligently. The interest of the worker must be maintained, and his creative faculty be given full encouragement. Co-operation between management and labour fosters the right type of spirit in a contract. This gives a speed of execution impossible under other conditions.

Team-work and "pulling together" mean as much in business as in games. They are the secret of good service and result in time saving, waste prevention, and reduced costs.

The Modern Contractor of repute and standing is equipped to be the Architect's executant and co-operator.

HIGGS & HILL, Ltd.
BUILDING CONTRACTORS
Crown Works, South Lambeth Rd., S.W.8.
Telephone: Brixton 2340
City Office: 14 Godliman Street, St. Paul's
Churchyard, E.C.4. Telephone: Central 2311

P.G.



THIS view, taken in one of the fabricating shops at Middlesbrough, shows part of the steel frame for the new P. & O. Offices at Hong Kong. Each member is marked to key-plan before shipment, and assembly at destination is simple and expeditious.

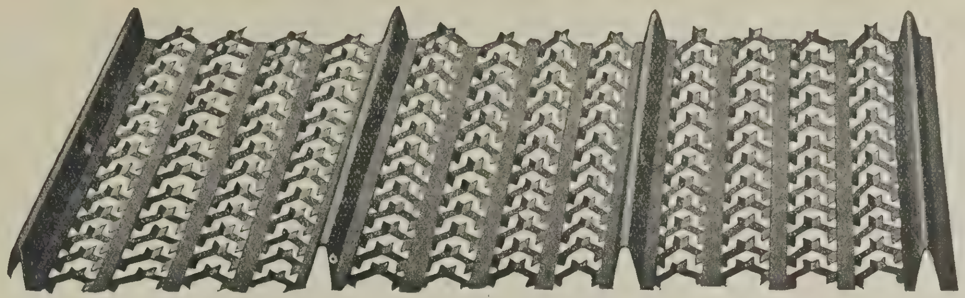
Production capacity is 1,000 000 tons of finished steel per annum and the situation of the steel works and constructional yards on the banks of the River Tees facilitates export.

Structural steel of every section: Steel plates; and Steel "Universal" plates with rolled edges: Rails, tram rails and conductor rails: Steel wire, steel rods: Galvanized and black sheets: Pig iron, steel blooms, billets: Ferro-Manganese and Spiegeleisen: Steam, coking and household coal: Chemical by-products of Coal: Crushed slag, tar-macadam and firebricks.

Steel frame buildings and bridges: Steel pipe-lines and tanks.

Dorman, Long
and Company Limited.
MIDDLESBROUGH
LONDON:- 4 CENTRAL BUILDINGS·WESTMINSTER·S·W·1·

34-127



HY-RIB

For Plaster and Concrete Work

HY-RIB is a steel sheathing of great rigidity, which is both a centering and a reinforcement for concrete work.
HY-RIB eliminates timber shuttering or "false-work."
HY-RIB is used for Concrete Floors, Walls, Roofs, Partitions, Suspended Ceilings, etc.
HY-RIB is used in conjunction with any kind of framework —Reinforced Concrete, Structural Steel or Timber.
HY-RIB is suitable for every type of construction—large or small.

The TRUSSED CONCRETE STEEL CO · LTD
22 Cranley Gardens · South Kensington · S.W.7

IMPERMEABILITY

Asphalte used for roofs and vertical damp courses should be permanently impervious. Porosity and cracking caused through gradual decomposition can only be prevented by using carefully prepared Asphalte.
We take every precaution possible to ensure that our Asphalte is of the highest quality. The result is Asphalte which can be depended upon to withstand the rigours of any climate without deteriorating.

FALDO'S
ASPHALTE
Its reputation is your guarantee

Thos. FALDO & CO., Ltd., Windsor House, Kingsway, London, W.C. 2, and at Manchester, Portsmouth & Newcastle.

CONTRACTS OPEN

Unless expressly stated to the contrary, all deposits required for bills of quantities, etc., are returned on receipt of bona-fide tenders. The words "Fair Wages Clause" inserted in certain paragraphs signify that persons tendering must conform to a fair wages clause in the contract, which requires them to pay the rates of wages current in the district.

BUILDING.

December 27.—**ALTERATIONS. Battle, Sussex.**—Alterations and additions to the infirmary and nurses quarters at the Union Institution, Battle, for the Guardians. Apply Union Institution.

December 27.—**HOUSES. Glasgow.**—Erection of 276 tenement houses at Crossmyloof, viz.: (1) Excavator, mason, and brick, etc., works; (2) carpenter, joiner, and ironmongery works; (3) slater work; (4) plumber work; (5) plaster work; (6) glazier work; and (7) iron railings. Apply Office of the Subscriber (Room No. 36).

December 27.—**HOUSES. Turriff, Scotland.**—Mason, carpenter, slater, plaster, plumber, and painter works of four three-roomed houses, in two blocks, on Manse Terrace site, Turriff, for the Town Council. Apply W. L. Duncan, Architect, Turriff.

December 27.—**ALTERATIONS. Yealmpton.**—Alterations at the Council School, Yealmpton, for the Devon Education Committee. Apply County Architect (Education), 1 Blackall Road, Exeter. Deposit £1 1s.

December 28.—**HOSTEL, &c. Sparsholt, Hants.**—Erection of new hostel at the Farm Institute, Sparsholt, near Winchester, for the Hants County Council. Apply County Architect, The Castle, Winchester. Deposit £5 5s.

December 28.—**TELEPHONE EXCHANGE. London, N.**—Erection of a telephone exchange at Palmer's Green, London, N. Apply Contracts Branch, H.M. Office of Works, King Charles Street, London, S.W.1. Deposit £1 1s.

December 28.—**SORTING OFFICE. Manchester.**—Erection of a sorting office and telephone exchange at Openshaw, Manchester. Apply H.M. Office of Works, King Charles Street, London, S.W.1. Deposit £1 1s.

December 28.—**RESIDENCE. Holyhead.**—Erection of minister's residence, Porthyfelin Road, Holyhead, for the trustees of the Hyfrydle C. M. Chapel, Holyhead. Apply T. E. Thomas, M.S.A., Architect, Central Chambers, Holyhead.

December 28.—**CONVERSION. Failsworth.** (a) The work and all materials (except sanitary fittings) required in the conversion of No. 18 privies to water-closets at certain dwelling-houses within the urban district of Failsworth, and (b) the supply and delivery at the Council's Sisson Street Yard, Failsworth, of No. 18 sets of sanitary fittings required in connection with the above conversions. Apply J. W. E. Brown, Town Hall, Failsworth, near Manchester.

December 28.—**CHIMNEY. Eastbourne.**—Erection of a brick chimney (60 ft. high) at their Institution, 123 Church Street, Eastbourne, for the Guardians. Apply F. G. Cooke, A.M.I.C.E., M.S.A., Architect, 21 Hyde Gardens, Eastbourne. Deposit £1 1s.

December 29.—**ADDITIONS. Salford.**—Additions to Union Infirmary, Pendleton, for the Salford Board of Guardians. Apply E. H. Inchley, Clerk, Poor Law Offices, Eccles New Road, Salford. Deposit £2 2s.

December 29.—**RESTORATION. Ennis.**—Partial restoration of Ennis Civic Guard Barrack, Co. Clare. Apply Office of Public Works, Dublin. Deposit £1.

December 29.—**SHED. Harrogate.**—Erection of a store shed at the rear of No. 5 Haywra Crescent, Harrogate, for the Harrogate Corporation. Apply C. E. Rivers, A.M.I.C.E., Borough Engineer, Municipal Offices, Harrogate.

December 29.—**LAVATORIES. Bideford.**—(1) Construction of lavatories at the Pannier Market, Bideford; (2) construction of ladies' lavatories in Queen Street, Bideford; and (3) painting and decorating the interior of the Town Hall, Bideford, and also lobbies, staircases, &c. Apply Borough Surveyor.

December 29.—**WALL. Bournemouth.**—Erection of a concrete retaining wall and the construction and tar-paving of playgrounds at the Lansdowne Council Schools, Madeira Road, Bournemouth, for the Education Committee. Apply Borough Engineer, Town Hall. Deposit £1 1s.

December 29.—**HOUSES. Bradford.**—Erection of the following houses: Housing scheme No. 12, Lower Grange estate, Thornton Road, 20 houses Class A and two houses Class B. Apply City Architect, Town Hall, Bradford.

December 29.—**HOUSES. Falmouth.**—Erection of 20 houses at Penwerris, for the Falmouth Town Council. Apply H. E. Tressider, F.S.I., Borough Surveyor, Municipal Offices, Falmouth.

December 31.—**HOUSES. Pontefract.**—Erection of 24 type A4 houses at Willow Park, Pontefract, and 20 type A3 at Wakefield Road, Pontefract. Apply J. E. Pickard, Borough Surveyor, Pontefract. Deposit £2 2s.

December 31.—**ENCLOSING STABLE YARD. Nottingham.**—Enclosing the stable yard for a garage at Bagthorpe. Apply Ernest R. Sutton and Son, Albion Chambers, King Street, Nottingham.

December 31.—**ALTERATIONS. Rhymney.**—Alterations and additions at The Lawns, Rhymney, to convert same into a central school. Apply John Bain, F.R.I.B.A., County Hall, Newport.

December 31.—**RENOVATION. Upton Cross.**—Renovation of the Wesleyan Church, Upton Cross. Apply T. Shovel.

December 31.—**HOUSES. Londonderry, Oldbury.**—Erection of 20 non-parlour type houses in Queens' Road, Londonderry, for the Oldbury Urban District Council. Apply R. Fletcher, A.M.I.C.E., Engineer and Surveyor, Public Buildings, Oldbury. Deposit £2 2s.

December 31.—**GARAGE. Nottingham.**—Enclosing the stable yard for a garage at Bagthorpe, for the Nottingham Board of Guardians. Apply E. R. Sutton and Son, Albion Chambers, King Street, Nottingham.

December 31.—**RECONSTRUCTION. Edinburgh.**—Reconstruction of sanitary equipment at 18 Wilkie Place, Leith, involving mason, drainage,, joiner, plaster, plumber, and painter works. Apply J. M. Johnston, 47 Charlotte Street, Leith.

January 1.—**HOUSES. York.**—Erection of 86 houses of the non-parlour type, in blocks as follows: 1 block of 2; 1 block of 5; 16 blocks of 4; and 5 blocks of 3, at their Heworth Housing Estate, York, for the Corporation. Apply F. W. Spurr, Architect, Guildhall, York.

January 1.—**HOUSE. Thornton Rust, near Aysgarth.**—Erection of a detached house at Thornton Rust, near Aysgarth, for Dr. J. Hutchinson Wood. Apply F. J. Lucas, Architect, 8 King William Street, Strand, London, W.C.2.

January 1.—**PAVILION. Ryde, I.W.**—Erection of a pavilion in the Esplanade Gardens, Ryde, I.W., for the Town Council. Apply Messrs. Vincent and West, 20 Portland Street, Southampton. Deposit £2 2s.

January 1.—**HOUSES. Tonbridge, Kent.**—Erection of two pairs of houses, and alternatively six pairs of houses, in Hectorage Road, Tonbridge, for the Urban District Council. Apply W. L. Bradley, Engineer and Surveyor, Tonbridge Castle. Deposit £1 1s.

January 1.—**HOUSES. Barnet.**—Erection of 23 houses at a net inclusive cost of £350 or thereabouts, for the Barnet Urban District Council. Apply Engineer and Surveyor, Council Offices, Wood Street, Barnet.

January 1.—**BUILDER'S WORK. Caersws.**—(1) Installation of domestic hot-water supply, (2) fixing of new pump and also for carrying out certain improvements to boardroom and master's office at the workhouse, Caersws. Apply Davies and Hill, Architects, Newtown.

January 1.—**ALTERATIONS. Cardiff.**—Alterations at 2 Neville Street, Cardiff, for the Guardians. Apply Willmott and Smith, 4 Park Place, Cardiff. Deposit £2 2s.

January 2.—**HOUSES. Widnes.**—Building 20 non-parlour houses on the Kingsway site in Lower House Lane, Widnes, for the Town Council. Apply Borough Surveyor's Office, Town Hall. Deposit £2 2s.

January 2.—**BALCONY. Brentwood.**—(1) Erection of steel-framed balcony and veranda at High Wood Hospital for Children, Ongar Road, Brentwood, Essex; and (2) repairs and painting to the laundry at the Eastern Fever Hospital, The Grove, Homerton, E.9. Apply Office of the Board, Victoria Embankment, E.C.4. Deposit £1.

January 2.—**LINING. Fulham.**—Lining an existing steel-framed building to form dustproof cubicles and an external concrete heating pit at the Mead Works, Carnwath Road, Fulham, S.W.6, for the Metropolitan Asylums Board. Apply Office of the Board, Victoria Embankment, E.C.4. Deposit £1.

January 2.—**HOUSES. Aberfeldy.**—Erection of one block of four four-apartment houses and one block of two four-apartment houses at Chapel Street, Aberfeldy, for the Town Council. Apply Town Clerk, Aberfeldy.

January 3.—**SCHOOL. Shirehampton.**—Builder's and plumber's work connected with the erection of a Council school at Shirehampton. Apply A. E. Oaten, P.A.S.I., Phœnix Chambers, 22 Clare Street, Bristol. Deposit £2 2s.

January 3.—**WALL. Southend-on-Sea.**—Construction of a boundary wall about 500 ft. in length in stone with wrought-iron railings, and incidental works in connection thereto, in connection with the Sutton Road Cemetery extensions, for the Corporation. Apply R. H. Dyer, Borough Engineer and Surveyor. Deposit £1.

January 4.—**POST OFFICE. Porth.**—Erection of a post office at Porth, South Wales. Apply Postmaster, Porth.

January 4.—**HOUSES. Stafford.**—Erection of 20 houses of the non-parlour type, in Backwalls, North and South, for the Corporation. Apply W. Plant, A.M.I.C.E., Borough Engineer, Borough Hall, Stafford. Deposit £2 2s.

January 5.—**ALMSHOUSES. Ripley.**—Erection and completion of six almshouses at Greenwich, Ripley Derbyshire, for the Ripley Urban District Council Apply G. W. Bird, C.E., Town Hall, Ripley, Derbyshire. Deposit 10s.

January 7.—**CONVENIENCES. Southport.**—Construction of underground conveniences, Lord Street, for the Corporation. Apply A. E. Jackson, M.I.C.E., Borough Engineer, Town Hall, Southport. Deposit £2 2s.

January 8.—**COTTAGE, &c. Windermere.**—Erection of a cottage, wash-house and garage at Ghyll Head, Windermere, for Mr. P. Musgrave. Apply J. W. Grundy and Son, F.R.I.B.A., Architects and Surveyors, Central Buildings, Ulverston.

January 9.—**ELEMENTARY SCHOOL. Tynemouth.**—Erecting a new elementary school at Spring Gardens, North Shields, to accommodate 845 children. Apply A. K. Tasker, A.R.I.B.A., Trinity Buildings, New Bridge Street, Newcastle-on-Tyne. Deposit £4 4s.

January 9.—**DWELLINGS. Southwark.**—Erection of a block of dwellings on the Tabard Garden Estate, Southwark. Apply Architect to the Council, The County Hall, Westminster Bridge, S.E.1. Deposit £3.

January 10.—**FLOORS, &c. Manchester.**—Red terra-cotta and for hollow tile floors required in connection with the extension of the Nurses' Home at their Booth Hall Infirmary, Charlestown Road, Blackley, Manchester, for the Guardians. Apply F. H. Overmann, F.M.S.A., Architect, 5 Cavendish Street, All Saints', Manchester.

January 12.—**ALTERATION. Dewsbury.**—Alteration of Moorlands Hall, for the Town Council. Apply Borough Surveyor, Town Hall.

January 17.—**HOUSES, &c. Salford.**—Erection of 62 houses and flats on the Weaste housing estate, Eccles Old Road, Pendleton, for the Corporation of Salford. Apply G. Westcott, Architect, 13 Bridge Street, Manchester.

January 21.—**LAUNDRY. Reigate.**—Erection of a new laundry and extension of the boiler-house at The Guardians' Institution, Earlswood. Apply O. J. Porter, F.S.I., 45 Bedford Row, W.C.2. Deposit £2 2s.

January 31.—**COTTAGES. Hemel Hempsted.**—Erection of 24 cottages, in two sections of 12, for the Corporation. Apply W. R. Locke, Borough Engineer and Surveyor, Market Square, Hemel Hempsted. Deposit £1.

February 2.—**EXTENSION. Woolwich.**—Proposed extension of premises of the Woolwich Catholic Club. Apply Secretary, 28-30 New Road, Woolwich, S.E.18.

May 28.—**HOUSES. Stewarton.**—Erection of 12 tenement and 14 flatted houses and double cottages as the first development of their housing scheme, viz.: (1) Brickwork, including excavation work; (2) carpenter and joiner work; (3) plumber work; (4) plaster and cement work; (5) slater work; (6) painter work (7) electric lighting, for the Council. Apply W. Macrae, Town Clerk, Council Chambers, Stewarton.

ELECTRICAL.

December 31.—**WIRING. Gravesend.**—Wiring houses, &c., under assisted wiring scheme, for the Corporation. Apply Borough Electrical Engineer, Suffolk Road, Gravesend.

December 31.—**INSTALLATION. Rugby.**—The Guardians of the Rugby Union invite tenders for installing electric lighting in their Board Room and Infirmary Buildings, Lower Hillmorton Road, Rugby. Apply Union Offices.

January 1.—**CABLE. Aldershot.**—Supply of 550 yards four-core, paper-insulated, armoured cable, for the Aldershot Borough Council. Apply F. Garside, Electricity Works, Laburnum Road, Aldershot.

January 1.—**CABLE. Bray.**—Supply, delivery, and laying of about 800 yards steel-tape armoured paper-insulated 4-core cable, and the provision of certain connecting boxes and connection of existing services thereto, for the Bri Chualann Urban District Council. Apply W. J. U. Sowter, M.I.E.E., Electricity Works, Bri Chaualann (Bray).

January 3.—**CABLE, &c. Melbourne.**—The State Electricity Commission of Victoria invites tenders for the supply, delivery, &c., of the following for the Morwell power scheme: Specification No. 24/1—aluminium steel-cored cable and accessories. Apply Agent-General for Victoria, Melbourne Place, Strand, London, W.C.2. Deposit 10s.

January 3.—**ELECTRIC PLANT. Amsterdam.**—Nederlandsche Handelmaatschappij (Nettherland Trading Society), at Amsterdam, invites tenders for the construction of high-voltage and low-voltage current electric plant for their new building there. Apply Company, Heerengracht 452, Amsterdam.

January 7.—**COAL UNLOADING, &c., PLANT. Sydney, N.S.W.**—The Municipal Council of Sydney, New South Wales, invites tenders for supply, erection, &c., of an electrically driven coal unloading and conveying plant at the Council's power house, Darling Island, Sydney. Apply Department of Overseas Trade, 35 Old Queen Street, London, S.W.1.

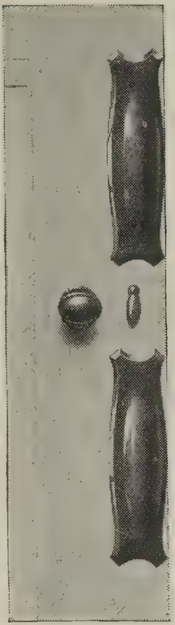
January 9.—**MOTORS, &c. London, S.W.**—Victorian Railways are calling for tenders for supply of two small induction motors, complete with starting apparatus. Apply Department of Overseas Trade, 35 Old Queen Street, Westminster, S.W.1.

January 14.—**CABLE DRUM CARRIAGE. Dublin.**—Supply of one cable drum carriage, for the Electricity, &c., Committee. Apply City Electrical Engineer, Fleet Street, Dublin.

January 14.—**TRANSFORMERS. Sydney, N.S.W.**—H.M. Trade Commissioner at Sydney reports that the Municipal Council is calling for tenders for stepdown transformers. Apply Department of Overseas Trade (Room 52), 35 Old Queen Street, London, S.W.1.

(*Continued on page* xxii.)

Roanoid
Door Furniture de Luxe



AFFORDS UNPRECEDENTED SCOPE FOR THE DECORATIVE ABILITY OF THE ARCHITECT.

ITS VARIED ART COLOURINGS AND LUSTROUS APPEARANCE MAKE IT A WELCOME ADDITION TO THE COLOUR SCHEME OF ANY ROOM.

Architects, House Designers, and Furnishers can have, post free, Booklet which gives full information, also Colour Card having samples of the actual Roanoid material affixed.

Sole Manufacturers:

Roanoid Ltd
29 West George Street, GLASGOW
Telephone: Central 3563–4 *Telegrams:* "Roanoid," Glasgow
Also at
LONDON, LIVERPOOL, BIRMINGHAM, & NEWCASTLE

Atmosphere

An atmosphere of quality clings to Ten Test just as inseparably as the solid fibre board clings to the decoration.

Panelling, with its convenience for plumbing, will never become distorted if carried out in Ten Test Solid Fibre Board. Simple, dignified or dainty effects can easily be achieved and the board's rich warm surface will take and retain every variety of decoration.

Staircases, halls, and rooms of Ten Test keep their charm permanently, because nothing will crack, warp, or blister this remarkable material.

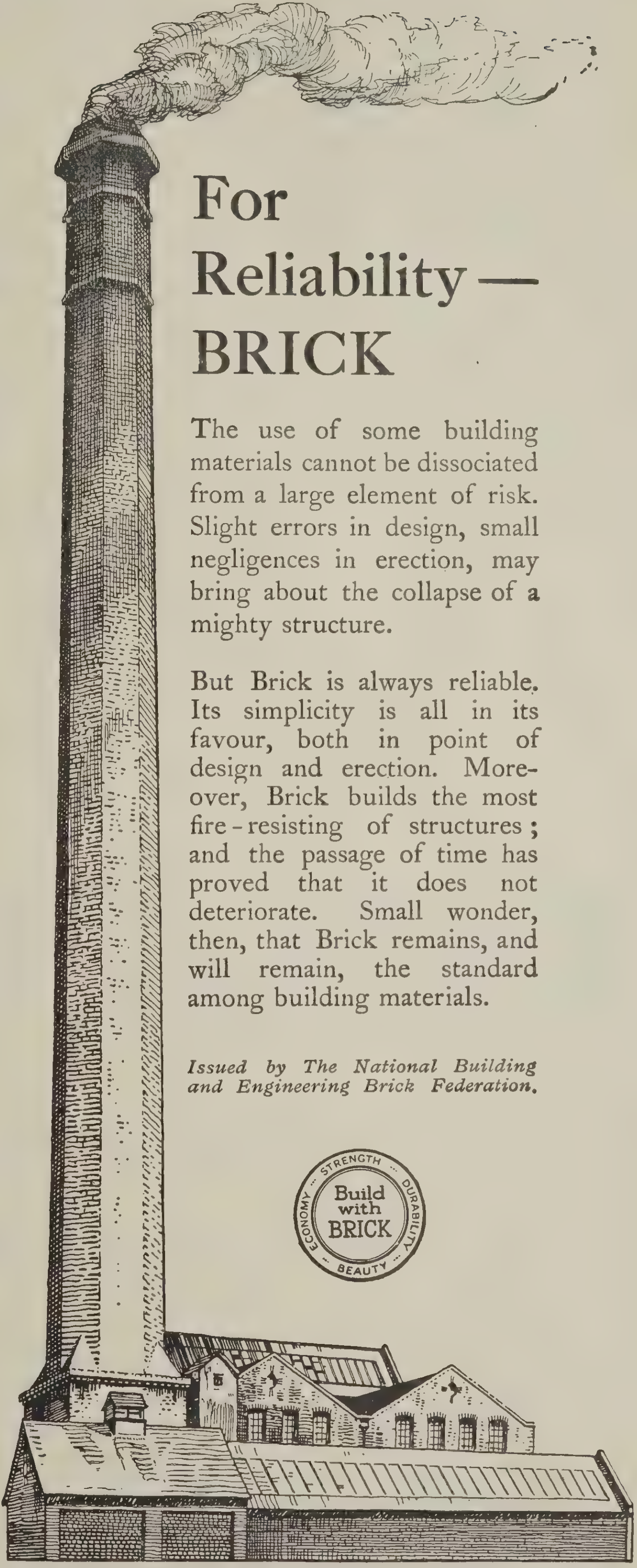
Distempered or painted walls of Ten Test give that indefinable note of "Quality." Neither do they lose it, because Ten Test defies time, vibration, and movement.

Nothing compares with Ten Test for SOLID COMFORT. It is the finest possible sound and heat insulator.

Send for Decoration Details.

TEN TEST FIBRE BOARD CO. LTD.
Telephone Avenue, Bristol.

Concessionaires, British Isles, who will put you in touch with your nearest stockholder.



For Reliability— BRICK

The use of some building materials cannot be dissociated from a large element of risk. Slight errors in design, small negligences in erection, may bring about the collapse of a mighty structure.

But Brick is always reliable. Its simplicity is all in its favour, both in point of design and erection. Moreover, Brick builds the most fire-resisting of structures; and the passage of time has proved that it does not deteriorate. Small wonder, then, that Brick remains, and will remain, the standard among building materials.

Issued by The National Building and Engineering Brick Federation.

STRENGTH DURABILITY BEAUTY ECONOMY
Build with BRICK

BUILD WITH BRICK ,

January 17.—**ELECTRICAL PLANT. Islington.**—Supply and erection of a 5,000-kw. 2-phase turbine alternator, condensing plant, condensate, circulating, exhaust, steam and water pipes and other accessories, for the Islington Borough Council. Apply Electrical Engineer, 60 Eden Grove, Holloway, London, N.7.

January 19.—**TRANSFORMERS. Melbourne.**—Supply, delivery, &c., of the following for the Morwell power scheme:—Specification No. 24/2—transformers, switchgear and accessories, sub-station B. Apply Agent-General for Victoria, Melbourne Place, Strand, London, W.C.2. Deposit £2 2s.

January 21.—**PLANT. Buenos Aires.**—Supply and erection of steam driven electrical generating plant for the waterworks at Posadas. Apply Department of Overseas Trade (Room 52), 35 Old Queen Street, London, S.W.1.

January 21.—**TRAM POLES, &c. Johannesburg.**—Supply and delivery to President Street Store of 240 steel tram poles, each complete with finial and centre clamp; five miles of 0000 s.w.g. (0.4 in. diameter) round section hard-drawn copper trolley wire with a conductivity of not less than 98 per cent. Mathieson's standard. To be supplied on stout wooden drums each containing half mile of wire. The drums to have a hole 3 in. in diameter through centre for mounting on bar for rolling off. Apply Department of Overseas Trade, 35 Old Queen Street, London, S.W.1. Reference No. 12736/E.D./E.C.(2).

February 11.—**ELECTRIC CAPSTANS. Sydney N.S.W.**—Sydney Harbour Trust Commissioners invite tenders for the supply and delivery at No. 6 Berth, Darling Harbour, Sydney, of two double-drum horizontal electric capstans or warping winches (Contract No. 23-34). Apply Department of Overseas Trade, 35 Old Queen Street, London, S.W.1 (Room 50).

February 14.—**ELECTRIC POWER STATION. Buenos Aires.**—Construction of a central electric power station of 15,000 h.p. Apply Department of Overseas Trade (Room 52), 35 Old Queen Street, Westminster, S.W.1.

February 18.—**SWITCHGEAR. Sydney.**—Electricity Department of the Municipal Council of Sydney is calling for tenders for armour-clad switchgear. Apply Department of Overseas Trade (Room 52), 35 Old Queen Street, London, S.W.1.

February 27.—**BATTERIES. London.**—The Chief Electrical Engineer's Branch of the New South Wales Government Railways and Tramways is calling for tenders for supply and erection of batteries for switch operating. Apply Department of Overseas Trade (Room 52), 35 Old Queen Street, London, S.W.1.

February 27.—**MOTOR GENERATOR SETS. London.**—The New South Wales Government Railways and Tramways are calling for tenders for supply of motor generator sets. Apply Department of Overseas Trade (Room 52), 35 Old Queen Street, Westminster, S.W.1.

ENGINEERING.

December 31.—**PUMPING ENGINES. Kempton.**—Supply and erection of two triple-expansion direct-acting reciprocating rotary-type pumping engines, cylinders approximately 30 in., 56 in., and 86 in. diameter by 5 ft. 6 in. stroke, at their Kempton Park pumping station, Middlesex, for the Metropolitan Water Board. Apply Offices of the Board (Room 173), Chief Engineer's Department, 173 Rosebery Avenue, Clerkenwell, E.C.1. Deposit £3 3s.

December 31.—**CRANE, &c. London, S.E.**—The London County Council invites tenders for (a) the manufacture, supply, delivery, erection on gantry, testing and maintenance (for six calendar months) of one three-ton three-motor-type overhead travelling crane, for the Council's tramway central repair depot, Charlton, London, S.E.; and (b) the manufacture, supply, delivery, testing and maintenance (for six calendar months) of one 30-cwt. motor-driven portable workshop crane, for the Council's tramway central repair depot. Apply General Manager, London County Council Tramways, Victoria Embankment, W.C.2. Deposit £2.

December 31.—**STEEL GIRDER ROAD BRIDGES. Durham.**—Supply and delivery and erection (optional) of a number of steel girder road bridges on prepared abutments. Apply Albert E. Brookes, M.I.C.E., County Engineer and Surveyor, County Surveyor's Office, Shire Hall, Durham. Deposit £2 2s.

January 2.—**ALTERATIONS. Dartford.**—Alterations and additions to existing low pressure hot water heating apparatus installed in Ward Blocks Nos. 5 and 7 at Darenth Training Colony, Dartford, Kent. Apply Office of the Board, Victoria Embankment, E.C.4. Deposit £1.

January 3.—**CONVEYING WATER. Llandefalle.**—Conveying water from a spring above Heolinon-fawr farmhouse to Penheolinon, in the parish of Llandefalle. Apply P. C. Lloyd, Estate Office, Hay.

January 4.—**HOIST. London, S.W.**—Supply of one 40-ton locomotive hoist, for the South Indian Railway Company, Ltd. Apply Company's Offices, 91 Petty France, Westminster, S.W.1.

January 7.—**ROOF, &c. London, S.E.**—Construction of a roof of steel and glass and of a machinery platform of steel girders and concrete in No. 1 shaft, Rotherhithe Tunnel, for the London County Council. Apply Chief Engineer at the Old County Hall, Spring Gardens, S.W.1. Deposit £3.

January 7.—**DOCK WORKS. Bristol.**—Construction of the Eastern arm of the Royal Edward Dock, Avonmouth, for the Docks Committee. Work will consist principally of the removal and carrying to spoil of the main excavation for the arm of the dock, together with the construction of a ferro-concrete-built wharf about 1,700 ft. long on each side; also the construction of two three-floor ferro-concrete-built transit sheds, each 500 ft. long, and a ferro-concrete-built silo granary of about 6,000 tons capacity. Apply T.A. Peace, Chief Engineer, Port of Bristol, Avonmouth Docks, Bristol. Deposit £15.

January 9.—**SPRING-MAKING MACHINERY. Newport, Australia.**—The Victorian Government Railways Commissioner invites tenders for the supply and delivery at the Railway Rolling Stock Workshops, Newport, of (Contract No. 36659) one spring coiling machine with electric motor, and one taper rolling machine with electric motor. Apply Department of Overseas Trade, 35 Old Queen Street, London, S.W.1.

January 9.—**LATHE, &c. Melbourne.**—The Victorian Government Railways Commissioners invite tenders for supply and delivery at the Railway Workshops, Laurens Street, North Melbourne, or Spencer Street, Melbourne, of one high-speed combination turret lathe, one high-speed gear-cutting machine, one automatic cross-cut saw with traversing saw carriage and traffic control, one cross-grooving and trenching machine to be belt driven, and one planing and thicknessing machine. (Contract No. 36583.) Apply Department of Overseas Trade, 35 Old Queen Street, London, S.W.1.

January 16.—**REFUSE DISPOSAL WORKS. Glasgow.**—Designs for proposed refuse disposal works at Govan, Glasgow. Apply W. Greig, Superintendent of Cleansing, 20 Trongate, Glasgow.

March 1.—**WATER WORKS. Athens.**—The Greek Legation notifies all those whom it may concern that the construction, upkeep and exploitation of the public works for the water supply of the towns of Athens and The Piraeus, including their suburbs, are being put up for international competition. Apply Greek Legation, 51 Upper Brook Street, W.1.

PAINTING.

December 28.—**PAINTING. Morley.**—Renovating two rooms at the Morley Secondary School. Apply H. Willis, Clerk to the Governors, Town Hall, Morley.

January 2.—**CLEANING AND PAINTING. London, S.W.**—Cleaning and painting and repairs at (1) Western Ambulance Station, Seagrave Road, Fulham, S.W.6; (2) South-Western Ambulance Station, Landor Road, S.W.9; (3) Mead Works, Carnwath Road, Fulham, S.W.6. Apply Office of the Board, Victoria Embankment, E.C.4. Deposit £1.

January 2.—**PAINTING, &c. Ossett, Yorks.**—Painting of 13 houses, Northfield Avenue, 14 houses, Wilson's Avenue, and 22 houses, Manor Road and Teall Street; also for the asphalting or concreting of the footpaths on the following sites, for the Town Council, viz.:—Northfield Avenue, Sowood Avenue, Wilson's Avenue, Manor Road and Teall Street. Apply H. Holmes, M.I.C.E.I., Borough Engineer and Surveyor, Town Hall, Ossett.

MEASURES BROS. 1911 LTD.

Section Sheets
and
Estimates
on
Application.

STEEL
JOISTS

Structural Steelwork
— OF —
Every Description.

Prompt
Delivery from
Stock at Lowest
Market Prices.

Telegrams:
"Measures, London."

Telephone Nos.:
585, 586 & 2103 Hop.

SOUTHWARK STREET, LONDON, S.E.

THE BEST ROOF LINING

Whether used under slates, tiles or metal, no roofing is so sure of giving permanent satisfaction as McNeill's **"Lionite,"** which was used in the palatial Royal Automobile Club building and many other important structures. **"Lionite"** is an extra thick and highly non-conducting resilient material, chiefly composed of hair and entirely free from any offensive smell.

Write for samples of this and other forms of roof linings.

McNeill's "LIONITE"

The Hall-Mark of Quality since 1833.

F. McNEILL & Co., Ltd.
14-24 LAMB'S PASSAGE, BUNHILL ROW, E.C.1
Telephone: CLERKENWELL 1643.
Telegrams: "EYEBALL," LONDON.

Also makers of all forms of Asphaltic Roofing, Sarking, Sheathing and Inodorous Felts, Slagbestos (McNeill's perfected Slagwool), Damp-courses, etc., etc.

B. J. HALL & Co. Ltd.
EVERYTHING
FOR *the* DRAWING OFFICE

DRAWING BOARDS :: ::
DRAWING INSTRUMENTS ::
PLAN CABINETS :: :: ::
DRAWING TABLES :: ::
SURVEYING INSTRUMENTS
"R. C." TRACING CLOTHS
TRACING & DRAWING PAPERS
ELECTRIC PRINTING MACHINES
PHOTO PRINTING PAPERS
PLAN REPRODUCTION :: ::
COMMERCIAL PHOTOGRAPHY
MAP MOUNTING :: :: ::

Branches—
IRMINGHAM.
EWCASTLE-ON-TYNE.
LASGOW.

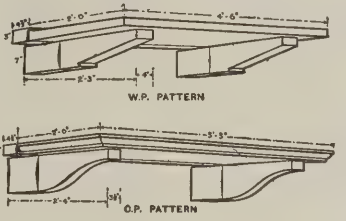
Head Office—
CHALFONT HOUSE,
GT. PETER STREET,
WESTMINSTER S.W.1

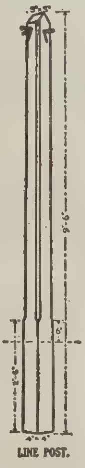
CROFT ADAMANT CONCRETE PRODUCTIONS

WHEN BUILDING ALWAYS SPECIFY CROFT ADAMANT

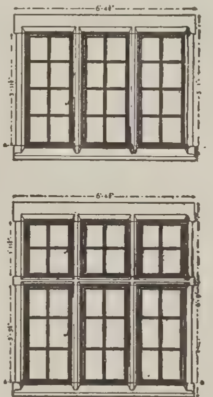
MANUFACTURED BY
THE CROFT GRANITE BRICK & CONCRETE COMPANY, LIMITED.
CROFT, NEAR LEICESTER.

CROFT ADAMANT DOOR HOODS AND BRACKETS STANDARD PATTERNS





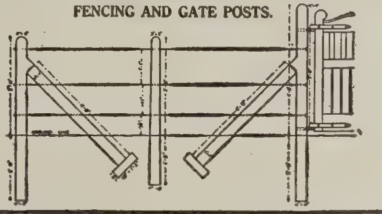
CROFT ADAMANT "ACME" WINDOWS



MAKERS OF ARCHITECTURAL STONEWORK OF EVERY DESCRIPTION

ENQUIRIES SOLICITED

STANDARDIZED REINFORCED CONCRETE FENCING AND GATE POSTS.



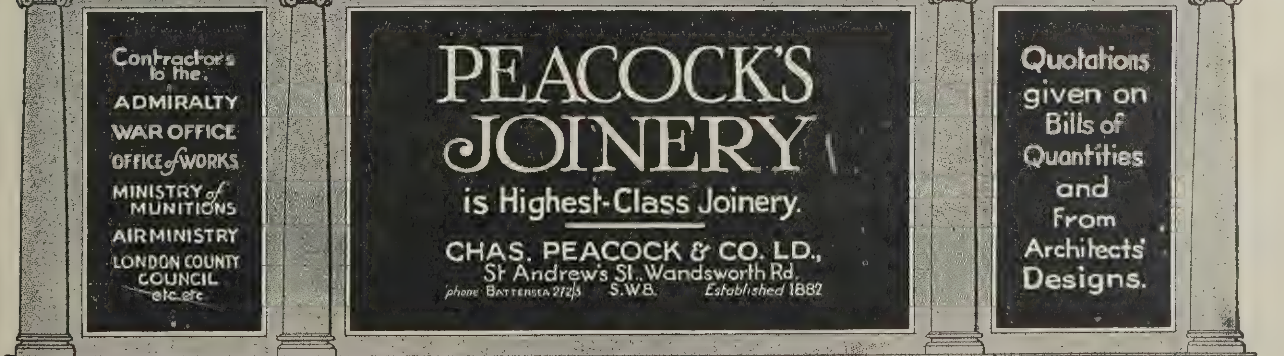
These Windows are standardized and made in 1, 2, 3 and 4 light, with and without transome, fitted with Steel Casements.

Economical in first cost and maintenance.

Largely used in Government Housing Schemes and in Private Building.

Striking in appearance and effective in any form of construction

London Office:
THE FOULIS CONSTRUCTION SUPPLY LIMITED, Agents
14, QUEEN'S GATE TERRACE, SOUTH KENSINGTON, S.W.7.
Telegrams: "Nerfail, Southkens, London." *Telephone:* Kensington 8410.



Contractors to the.
ADMIRALTY
WAR OFFICE
OFFICE of WORKS
MINISTRY of MUNITIONS
AIR MINISTRY
LONDON COUNTY COUNCIL
etc. etc.

PEACOCK'S JOINERY
is Highest-Class Joinery.

CHAS. PEACOCK & CO. LD.,
St Andrew's St., Wandsworth Rd.
phone BATTERSEA 272/3 S.W.8. Established 1882

Quotations given on Bills of Quantities and From Architects' Designs.

THE JOURNAL "WANTED" ADVERTISEMENT COLUMNS.

Appointments Wanted.

Four lines or under, 2s. 6d.; each additional line, 6d.

LONDON AGENCY. A Young Officer (Indian Cavalry) who has had, since leaving the army, considerable business experience, which has given him a valuable connection amongst London Architects, desires to become London Manager and representative for a Provincial House, or to take up an Agency for a material which offers, with efficient handling, prospects of successful business. Unexceptional references, Box 612.

BUYER of Building and Engineering Materials seeks engagement in London. 15 years' experience as chief buyer of all classes of building and engineering materials including Plant. Has thorough knowledge of best markets and sources of supply. Practical experience of construction work prior to buying. Unexceptional references. Apply Box 718.

SENIOR ASSISTANT requires position in Architects' office with a view to taking charge. Long and varied London experience in large public buildings. Would consider provincial practice with good prospects. Box 747.

EX-OFFICER, A.R.I.B.A., 39, 14 years' varied London experience, is prepared to offer whole or part time assistance to Architect needing temporary help with working drawings, details, specifications, surveys, reports, etc. Moderate terms. Write, Box 757.

REQUIRED IMMEDIATELY. Progressive position with Architect, with view to partnership, by thoroughly experienced and practical man. Academy Exhibitor. At present, and for several years past, chief assistant to prominent firm of West End Architects. Apply Box 758.

PARTNERSHIP, A.R.I.B.A., with wide experience, capable, and responsible, desires introduction to established Architect requiring Partner. Partner at present, but change of Locality desired. Provincial. Apply Box 761.

This space has been placed at the disposal of the **District Director, Ministry of Labour, 3-4 Clements' Inn, W.C.,** to whom all replies should be addressed, quoting number of advertisement, date of issue, and the name of this Journal.

EX-OFFICER. Age 26. Married, 2 years' Architectural Technical College. Practical experience in Architect's Office. Experience with West End Architect in Commercial and Domestic Building. Surveying existing buildings for dilapidations. Good practical Assistant Secretary. Willing to take any post. 3458/22

ASSISTANT ARCHITECT AND SURVEYOR. Age 38. Married. 3 years' War Service. Served Articles. 7 years in practice on own account. Experienced Invention Designer. Some patent experience (mechanical appliances). Good Drawing experience, knowledge of Internal Combustion. Willing to take any post. 4147/21

EX-OFFICER. Age 34. Single. 4 years' War Service. Educated Public School. Fair knowledge Italian, F.S.I. Sound experience Engineer and Surveyor, Buildings, Roads, Railways, Surveying, Estimating, Construction, Maintenance, Valuation and Rating of Large Public Works, including Harbour, Roads, Hospitals, Hotels, Jetties, Bridges, Culverts, Railways, and Water Supply. Willing to take any post. 60814

EX-OFFICER. Age 47. Married. Traveller or Valuer Building Trade. Thorough knowledge all branches. Experienced representative building material, paints, varnishes, Timber, Pipes, Ironmongery, etc. Willing to take any post. 5962/22

EX-OFFICER. L.C.C. School. Married. Age 30. 6 years' experience cable clerk, W.U. Cable Coy. 2 years' Builder's Cost Clerk, Costing, Buying Materials, also Brickmaking, Sand and Gravel Pit, good references. Seeks position as Builder's Cost Clerk. 23921

CIVIL ENGINEER. Age 23. "Testamur" Municipal and County Engineers. 2 years' practical office training, buildings, estates, etc. 2 years' College training structural design in steel and reinforced concrete, testing materials, Geodetic surveying, advanced Building Construction, with knowledge of quantities. Colloquial Hindustani, ex-officer R.N. Seeks opening with Public works Contractor or in Municipal Office. 1791/23

EX-OFFICER. Age 41. Married. 5 years' War Service. Educated Public School. Desires post as Clerk of Works. Good knowledge of reinforced concrete and lock work. Was employed on own account pre-war as Master Builder. Able to take charge of Estate, collect rent, supervise repairs. Willing to take any post. 1250/21

EX-OFFICER. Age 30. Single. Trained Agricultural Scientist. Colonial, Fellow of Surveyors' Inst.; National diplomas in Agriculture and Dairying. 3 years' experience W. Indies. 4¾ years' War Service. Knowledge of German. Athletically inclined. Wishes to join commercial undertaking, tropical production, preferably in East or late enemy possessions. 29221

EX-OFFICER. Age 46. Single. 5 years' War Service, 22 years' experience, architecture and building. Desires suitable position in or near London. 601/21

ARCHITECT'S ASSISTANT. Age 27. Married. 5 years' War Service. First-class experience alterations and re-measuring, estimating and building surveying, careful detailist. Builder's office and works experience. Desires any post in keeping with qualifications, preferably in London or district. 2856/22

EX-OFFICER. Age 35. Single. 4 years' War Service. Educated Public School. Some knowledge of Spanish and French. Good connection amongst Dublin Architects. Desires post as Representative or would accept agencies for building materials. 4816/23/TP

Miscellaneous.

Four lines or under, 4s.; each additional line, 1s.

WANTED. One copy of THE ARCHITECTURAL REVIEW for August 1919. THE ARCHITECTURAL PRESS, LTD., 27-29 Tothill Street, Westminster, S.W.1.

SECOND-HAND Optical Mart.
For the Purchase and Sale of
LEVELS, THEODOLITES, DRAWING INSTRS. Clarkson's, 338 High Holborn, London, W.C. (opposite Gray's Inn Road).

BOOKS on Building, Architecture, Engineering, Technical, and all other subjects; 1,000,000 vols. second-hand and new in stock; catalogues free; state wants; books sent on approval; books bought; best prices given.—W. and G. Foyle, Ltd. 121-125 Charing Cross Road, London, W.C.

STRODE & CO., LTD. Schemes and Estimates free for electric lighting, heating and ventilation, architectural metal-work, etc. 48 Osnaburgh Street, London, N.W., and 3 and 4 St. Paul's Churchyard, E.C., and 10 Orchard Street, Bristol.

SCARCE BOOKS FOR SALE. "Architectural Association Sketch Book," third Series, vols. I and II bound, vols. III and IV unbound, complete; "Later Renaissance Architecture in England," 2 vols. (subscription copies), Belcher and Macartney; "Le Costume Historique Racinet," 2 vols. 325 plates, 200 in colour, no text, in portfolio form. All these works are in splendid condition. Box No. 668.

MODELS
OF WORKS, BUILDINGS, ESTATES, &c.
EXECUTED BY JOHN B. THORP.
98 Gray's Inn Road (next to Holborn Hall), London, W.C.1
'Phone: Holborn 1011.

PLASTERING TROUBLES.
WHY NOT LET US TAKE THESE OFF YOUR SHOULDERS?
WE SPECIALISE, AND CAN DO YOUR PLASTERING WITH PERFECT SATISFACTION TO YOU AND AT THE LOWEST COST.
GIVE US A TRIAL.
THOMAS R. RUDD & CO.
Fibrous Plaster Specialists, Architectural Modellers, Artificial Stone and Plastering Contractors.
2a Lansdowne Gdns., South Lambeth Rd., London, S.W.8.
Brixton 2637.

TYPEWRITING. Specifications, Estimates, Valuations, Schedules, Reports, Correspondence, etc., carefully and promptly typed. Strand Typewriting Bureau, Clun House, Surrey Street, Strand, W.C. 2. 'Phone City 9176. 749

Competitions.

Six lines or under, 8s.; each additional line, 1s.

CITY AND ROYAL BURGH OF DUNFERMLINE WAR MEMORIAL.

NOTICE TO ARCHITECTS AND SCULPTORS.

The Dunfermline War Memorial Committee invite Architects and Sculptors in the United Kingdom to submit designs for a Monument to be erected on a Site in the immediate vicinity of the Ruins of the Abbey and Palace above Pittencrieff Glen, at a cost of £3,000. On receipt of One Guinea—which will be returned on receipt of a bona-fide design—Competitors will receive Conditions of Competition, Plan of Site, and photographs of surroundings.

ASSESSOR—Sir John J. Burnet, A.R.A., R.S.A.

Applications, which will be received on or before January 1, 1924, should be made to:—

ANDREW SHEARER, Esq.,
Town Clerk,
Hon. Secretary to Committee.

City Chambers,
DUNFERMLINE,
December 15, 1923.
770

Educational Announcements.

Four lines or under, 4s.; each additional line 1s.

R.I.B.A. EXAMS.
Courses by
BOND & COCKRILL (Late Bond and Batley).
Mr. A. G. Bond, M.A., F.R.I.B.A.
Mr. G. Scott Cockrill, A.R.I.B.A.
Telephone: 5661 Museum. 115 Gower Street, W.C. 1

EXAMINATIONS.
ROYAL INSTITUTE OF BRITISH ARCHITECTS
Correspondence Preparation by
Mr. W. HERBERT HOBDAY, F.R.I.B.A.

These courses are conducted on the soundest educational lines, and every possible assistance is given to candidates.

For full particulars of Courses and Fees, apply The Chestnuts, 3 Beckenham Grove, Shortlands, Kent (late of 5 Bedford Row).

Tenders.

Six lines or under, 8s.; each additional line, 1s.

Contractors desirous of Estimating for the construction of a Concert Hall at Ilfracombe for the Urban District Council are invited to apply to the Architects, Frank Matcham & Co., 9 Warwick Court, Holborn, W.C.1. 771

Alperton.—Tenders invited for the erection of 6 houses. Plans and Specification obtained from the Architect, Mr. Alfred A. Ospalak, M.S.A., 25 Victoria Street, S.W.1, on payment of £1 1s., which will be refunded upon the return of a bona-fide tender.

Teddington.—Tenders invited for the erection of 6 houses. Plans and Specification obtained from the Architect, Mr. Alfred A. Ospalak, M.S.A., 25 Victoria Street, S.W.1, on payment of £1 1s., which will be refunded upon the return of a bona-fide tender. 772

Auctions.

Six lines or under, 8s.; each additional line, 1s.

G. R.

By Direction of the Eastbourne Waterworks Company
EASTBOURNE.
THE
FREEHOLD COMMERCIAL SITE
of about
4½ ACRES
with Railway facilities and including
DETACHED DOUBLE-FRONTED RESIDENCE
and
FACTORY or WAREHOUSE BUILDINGS
formerly used by the Eastbourne Waterworks as
PUMPING STATION.
The Property occupies an important position in
BEDFORD WELL ROAD,
EASTBOURNE,
to which thoroughfare there is a frontage of about 225 ft. 6 in.

To be offered for Sale by Auction as a whole or in 3 Lots,

by Messrs.
KNIGHT, FRANK & RUTLEY,
in conjunction with Messrs.
OAKDEN & CO.,
In the Hanover Square Estate Room, on Thursday, February 7, 1924, at 2.30 p.m. (unless previously sold privately).

Solicitors: Messrs. Currey & Co., 21 Buckingham Gate, London, S.W.1.

Auctioneers: Messrs. Oakden & Co., 10 Cornfield Road, Eastbourne, Sussex, and Messrs. Knight, Frank and Rutley, 20 Hanover Square, London, W.1.
773

Publishers' Notices.

Offices: ADVERTISEMENTS, EDITORIAL, COUNTING HOUSE, AND PUBLISHING—27-29 Tothill Street, Westminster.

Telegraphic Address: "Buildable, Vic., London."

Telephone: ADVERTISEMENTS, EDITORIAL, COUNTING HOUSE, AND PUBLISHING—6936 Victoria (2 lines).

Date of Publication—THE ARCHITECTS' JOURNAL is published every Wednesday, price 6d.

The Subscription Rates per annum are as follows:—

	£	s.	d
At all newsagents and bookstalls.........	1	6	0
By post in the United Kingdom	1	7	6
By post to Canada..............................	1	10	0
By post elsewhere abroad	1	12	6

Subscribers can have their volumes bound complete with Index, in cloth cases, at a cost of 10s. each. Carriage extra. A useful Binder has been specially prepared, allowing the copies to open flat for reading. Price 4s. 6d., post free.

Advertisements for the current week, alterations to serial Advertisements, etc., must reach the office not later than first post on Saturday.

Rates for serial Advertisements, Special position, etc., sent upon application.

27-29 TOTHILL STREET, WESTMINSTER,
LONDON, S.W.1.

Particulars of Standard
Works published by
THE
RCHITECTURAL
PRESS, Ltd.,
7-29 Tothill Street,
S.W.1
ill be forwarded post free
on application.

Specifications
— and —
Bills of Quantities
accurately Lithographed, or "Type Litho^d"
Specimens & Reduced Prices on application
Plans copied by "TRUE TO SCALE"
PROCESS, Blue Prints, Ferro Gallic &c.
Architectural Lithographers
Tele: No 1045
F. BAKER & Co
[Lieut Col. F. Baker O.B.E.]
136. 137. 170. 171, ARCADE,
NORTHAMPTON.
Photo Plan Printers

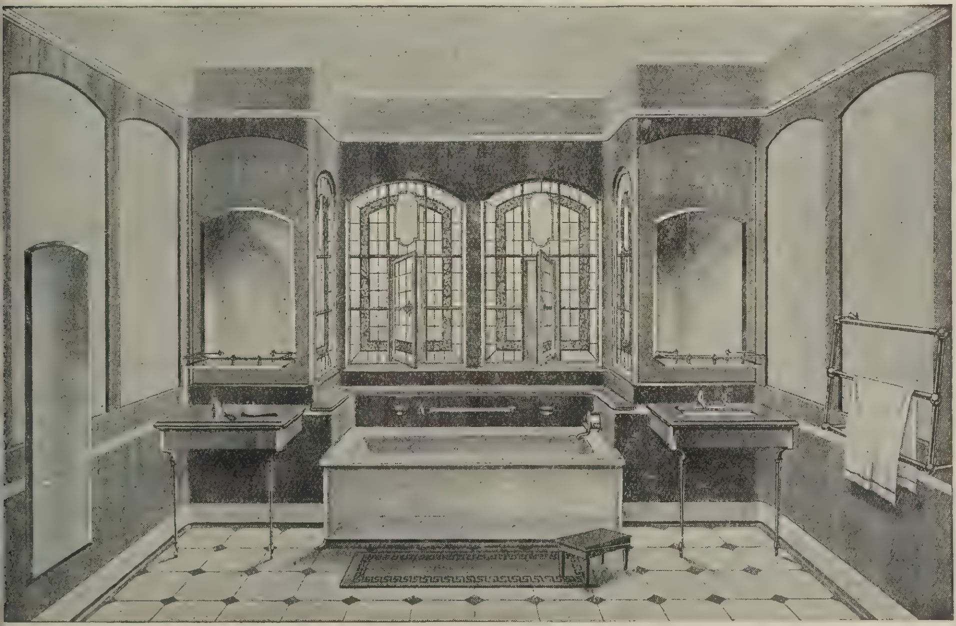
WM. OLIVER & SONS LTD.
Thoroughly Seasoned Wainscot.
Mahogany, Walnut, Teak, and other
Hardwoods, in all Thicknesses.
Seasoned English Wainscot Oak,
and cut through and through.
Seasoned English Walnut.
Office: 120 BUNHILL ROW, LONDON, E.C.1

PATENT PORTABLE SPRING DANCING FLOORS.
(*Patent No. 183402*)
THE NATIONAL FLOORING CO., LTD.
183 Hammersmith Road, London, W. 6
Telephone : Hammersmith, 476
Telegrams : Floorcloth, Hammer, London

"COATOSTONE"
Effect of Natural Stone. Waterproof.
Any Painter can use it.
PRICE LISTS, ETC., FROM THE MAKERS
THE COATOSTONE DECORATION CO.
9a Little James St., Gray's Inn Rd., London, W.C.1.

SUSPENDED SCAFFOLDING (For Sale)
TUBULAR SCAFFOLDING AND CRANE STAGINGS. BUILDERS' PLANT
"SCAFFIXER" SCAFFOLD TIES (For Hire)
CAFFOLDING (GREAT BRITAIN) LTD.
Incorporating—
The Tubular Scaffolding Co., Ltd., and The Patent Rapid Scaffold Tie Co., Ltd.
43 LANSDOWNE ROAD, STOCKWELL, LONDON, S.W.8.
Telegrams : caffixer, Claproad, London."
Telephones : LONDON—BRIXTON 330. BIRMINGHAM—VICTORIA 187. BRISTOL—1797.

MELLOWES & CO., LIMITED



SPECIALISTS
in
SANITARY EQUIPMENT.

MELLOWES' ENCLOSED BATHS, LAVATORIES, URINALS, SINKS, WATER CLOSETS and KITCHEN EQUIPMENT.

Competitive estimates and designs for all classes of Sanitary Fittings.

Illustrated and Priced Catalogue, new edition on application.

Showrooms & Offices:
26 VICTORIA STREET, WESTMINSTER, S.W. 1
Works: SHEFFIELD.
Telephone : ictoria 4568.
Telegrams : "Mellowes, Sowest, London."

BEAUTIFUL
PICTURES

Etchings by Frank Brangwyn, R.A.,
and by William Walcot, R.E.
(Collector's Edition.)

This collection of fine reproductions has been especially prepared, under the direction of the artists mentioned, so that choice and scarce works of art may be brought within the reach of all those who appreciate beautiful pictures.

(The original Frank Brangwyn Etchings are published by the Fine Art Society, of New Bond Street.)

Mr. Brangwyn's subjects are magnificent scenes in Italy, France, Belgium, and England, and Mr. Walcot's pictures are reproductions of his famous Roman compositions—"Scenes in Ancient Rome."

Prices: £1 1 0 for each picture
mounted, or £1 11 6 framed.

Illustrated Catalogues will be sent on application.

THE ARCHITECTURAL PRESS,
27-29 Tothill Street, Westminster, S.W. 1.

BURN BROS'

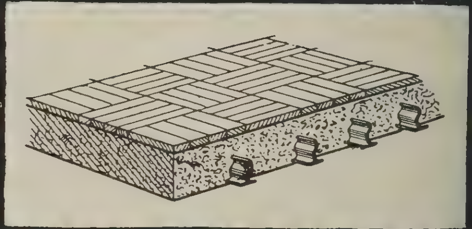
*Cast Iron Gas=tight
House Drains,
& L.C.C. Soil Pipes
& Fittings.*

LARGEST STOCK IN THE TRADE FOR INSTANT DELIVERY.

Endless variety of
Patterns to Select
from.

ROTUNDA WORKS,
3 Blackfriars Road,
LONDON, S.E.

HOMAN & RODGERS
PATENT
FIRE RESISTING
FLOORS & ROOFS



Maximum Strength
at Minimum Cost

WOOD BLOCKS
GRANITIC FINISH
SEYSSEL ASPHALTE

CONSTRUCTIONAL·STEELWORK

Tel. Add.
NAMOH.

Tel. No
637 City.

Drawings, Estimates, Free on
receipt of Particulars.

10, Marsden Street,
MANCHESTER.

The Architects' Journal

New Year Special Issue

JANUARY 2nd, 1924

Principal Contents:

THE DESIGN AND CONSTRUCTION OF MODERN SHOP FRONTS.

A SURVEY OF RECENT DOMESTIC ARCHITECTURE
(With special reference to Smaller Houses).

DOMESTIC INTERIOR EQUIPMENT.

IMPORTANT BUILDINGS OF THE YEAR.

PRINCIPAL ARCHITECTURAL EVENTS OF THE YEAR.

This number will be published at the price of 2/6 net, but annual subscribers obtain the copy without extra charge.

THE ARCHITECTS' JOURNAL
27–29 Tothill Street, Westminster, S.W.1

Alphabetical Index to Advertisers.

PAGE
A. 1 Engraving Co., Ltd. xxix
Adamite Co., Ltd. xiii
Adams, Robert ——
Albion Iron Co., Ltd. ——
Allan, James, Senr., & Son, Ltd. xii
Anderson, D., & Son, Ltd. ——
Architectural Press, The vi, viii, xxv, xxvi, xxvii
Art Metal Construction Co. ——
Art Metal Equipment Co., Ltd. ——
Associated Crafts, Ltd ——
Associated Portland Cement Manufacturers, Ltd. ——
Atlas White (Adamite Co.) ——

Baker, F. & Co. xxv
Beaver Board Co., Ltd. ——
Blakeley, E. F., & Co. (Liverpool), Ltd. xii
Boulton & Paul, Ltd. ——
Briggs, W., & Sons, Ltd. ——
British Commercial Gas Association ——
British Doloment Co., Ltd. ——
British Fibrocement Works, Ltd. xii
British Luxfer Prism Syndicate, Ltd. xxix
British Magnesite Flooring Co. viii
British Portland Cement Manufacturers, Ltd. ——
British Reinforced Concrete Engineering Co., Ltd. viii, xviii
British Thomson-Houston Co., Ltd. ——
Brooke, Joseph, & Sons ——
Brookes' Ltd. ——
Brown & Tawse, Ltd. ——
Bruster, O., & de Launoit ——
Bryden, John, & Sons ——
Burn Bros. xxvi

Cable Makers' Association ——
Cafferata & Co. ——
Callender, G. M. & Co., Ltd. ——
Cement Marketing Co., Ltd. ——
Changeable Sign Co., Ltd. ——
Churchill, C., & Co., Ltd. ——
Clark, Robt. Ingham, & Co., Ltd. ——
Coatostone Decoration Co. xxv
Colemanite (Adamite Co.) ——
Cornell-Wood-Board iv
Crane-Bennett, Ltd. ——
Croft Granite, Brick, & Concrete Co., Ltd. xxiii
Cullum, H. W., & Co., Ltd. xi

Dawnay, Archibald D., & Sons, Ltd. ——
Dent & Hellyer, Ltd. ——
Diespekers' ——
Dorman, Long, & Co., Ltd. xvi
Drew-Bear, Perks & Co., Ltd. ii
Dunkerley, C. C., & Co., Ltd. ——

Eastwoods, Ltd. viii
Elliott, S., & Sons, Ltd. ——

PAGE
Empire Stone Co., Ltd. ——
Expanded Metal Co., Ltd. ix
Faldo, Thos., & Co., Ltd. xix
Farmiloe, T. & W., Ltd. ——
Ferodo, Ltd. ——
Fortis Reinforced Concrete Safe Co., Ltd. ——
Frowde, Henry, and Hodder & Stoughton ——

General Electric Co., Ltd. ——
Glazed Brick Information Bureau ——
Gray, J. W., & Co. ——

Hall, B. J. & Co., Ltd. xxiii
Hardtmuth, L. & C. xxviii
Harland, W., & Son ——
Haskins, Samuel, & Bros., Ltd. ——
Haywards, Ltd. ii
Hemel Hempstead Patent Brick Co., Ltd. viii
Higgs & Hill, Ltd. xv
Hill, Richard, & Co., Ltd. ——
Holophane, Ltd. ——
Homan & Rodgers, Ltd. (London) ——
Homan & Rodgers (Manchester) xxvi
Hy-Rib (Trussed Concrete Steel Co., Ltd.) xix

Indented Bar and Concrete Engineering Co., Ltd. iii
Interoven Stove Co., Ltd. ——
Ioco Rubber and Waterproofing Co., Ltd. xxviii
Ironite Co., Ltd. xxx

Jacks, Wm., & Co. ——
Jackson, G., & Sons, Ltd. ——
Jackson & Boyce, Ltd. ——
Johnson's Reinforced Concrete Engineering Co., Ltd. ——

Kaye & Co., Ltd. ——
Kerner-Greenwood & Co., Ltd. ——
King, J. A., & Co. ——
Kinnell, C. P., & Co., Ltd. xii, xviii
Kleine Patent Flooring Syndicate, Ltd. ——

Laing, John, & Son, Ltd. ——
Lind, Peter, & Co. ——
Line, J., & Sons, Ltd. ——
Locke, Blackett, & Co., Ltd. ——
Locke, Lancaster & W. W. & R. Johnson & Sons, Ltd. ——
London Brick Co. & Forders, Ltd. ——

Macandrews & Forbes, Ltd. xviii
McNeill, F., & Co., Ltd. xxiii
Mander Bros. ——
"Manu" -Marble Co., The ——
Marble Mosaic Co., Ltd. ——
Martin, Earle & Co., Ltd. ——
Martyn, H. H., & Co., Ltd. ——
Mathews, E., & Co. ——
Measures Bros. (1911), Ltd. xxii

PAGE
Mellowes & Co., Ltd. xxv
Messenger & Co., Ltd. ——

National Building and Engineering Brick Fed. xxi
National Flooring Co., Ltd. xxv
Nickeloid Electrotype Co., Ltd. x
Norton & Gregory, Ltd. ——

Oliver, Wm., & Son, Ltd. xxv

Peacock, Chas., & Co., Ltd. xxiii
Peters, C. A., Ltd. xii
Pilkington Bros., Ltd. ——
Polden, F., & Co., Ltd. ——

Ragusa Asphalte Co., Ltd. ——
Ravenhead Sanitary Pipe & Brick Co., Ltd. ——
R.-C. Lift Co. ——
Redpath, Brown & Co., Ltd. xiv
Relay Automatic Telephone Co., Ltd. ——
Rendle, W. Edgcumbe, & Co., Ltd. ——
Roanoid, Ltd. xxi
Ruberoid Co., Ltd. ——
Rubery, Owen & Co. ——
Ruston & Hornsby, Ltd. ——

Sage, Fredk. & Co., Ltd. vii
Scaffolding (Great Britain) Ltd. xxv
Siegwart Fireproof Floor Co., Ltd. ——
Simplex Conduits Ltd. ——
Smith, J., & Son (Haltwhistle), Ltd. ——
Smith, Samuel, & Sons, Ltd. ——
Speaker, G. R., & Co. viii
Spensers ——
Steam Cleaning Corporation ——
Stephens, H. C. ——
Stone Preservation Co., Ltd. ——
Stuarts Granolithic Co., Ltd. ——
Sulzer Bros. ——
Swanser & Son ——

Ten Test Fibre Board Co. xxi
Thames Mills, Purfleet, Essex ——
Thornley & Knight, Ltd. xxx
Trussed Concrete Steel Co., Ltd. xix
Tullis, D. & J., Ltd. ——

Ure, Allan, & Co. xi

Vaughan, H. R., & Co. ——
Vickers, Archibald, Ltd. ——
Vitrolite Construction Co. (Europe), Ltd. v
Vulcanite, Ltd. ——

Waygood-Otis Lifts ——
Whitehead, J., & Sons, Ltd. ——
Wild, James & Co. ——
Willcox, W. H., & Co., Ltd. ——
Willesden Paper and Canvas Works, Ltd. ——
Wouldham Cement Co., Ltd. ——

For Appointments (Wanted and Vacant), Competitions Open, Contracts Open, Drawings, Tracings, etc., Education, Legal Notices, Miscellaneous, Property and Land Sales—see pages xx, xxii, xxiv.

Just this little stump

is all that is left
of the best pencil
I've ever had—my
KOH-I-NOOR
—but I treasure
it still.

KOH-I-NOOR
The Perfect Pencil

In 17 different degrees from 6 B to 9 H.
From Stationers, Artists' Material Dealers, and Stores.
L. & C. HARDTMUTH, 29 Kingsway, London, W.C.2

Are you using PELICAN Waterproof Drawing Inks?

The IOCO
RUBBER and WATERPROOFING
Company, Limited,
Netherton Works, Anniesland,
GLASGOW.

Telephone:
2328 Western (3 lines).

Telegrams:
"Ocoproof, Glasgow."

Specialists in

India Rubber Flooring,
Stair Treads, Nosings & Tiling.
Supplied in Plain and Marble types.

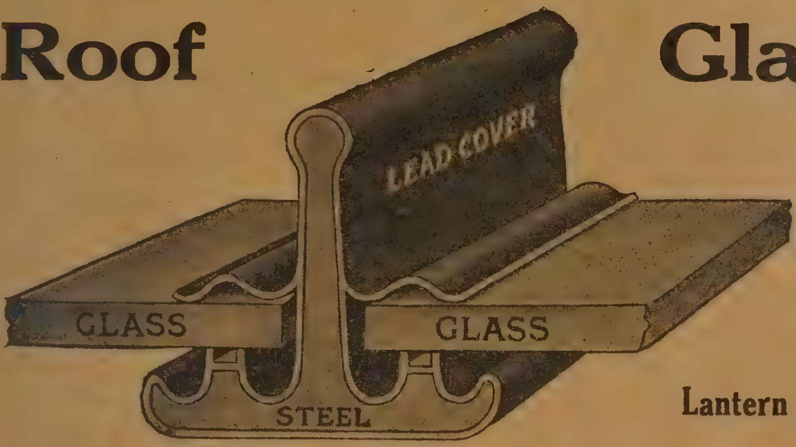
Quotations given for
laying in any part
of the Country.

Prices and Samples
on application.

LUXFER

Telegrams: "LUXFER, LONDON."
Telephone: 1217 CLERKENWELL.

Roof Glazing

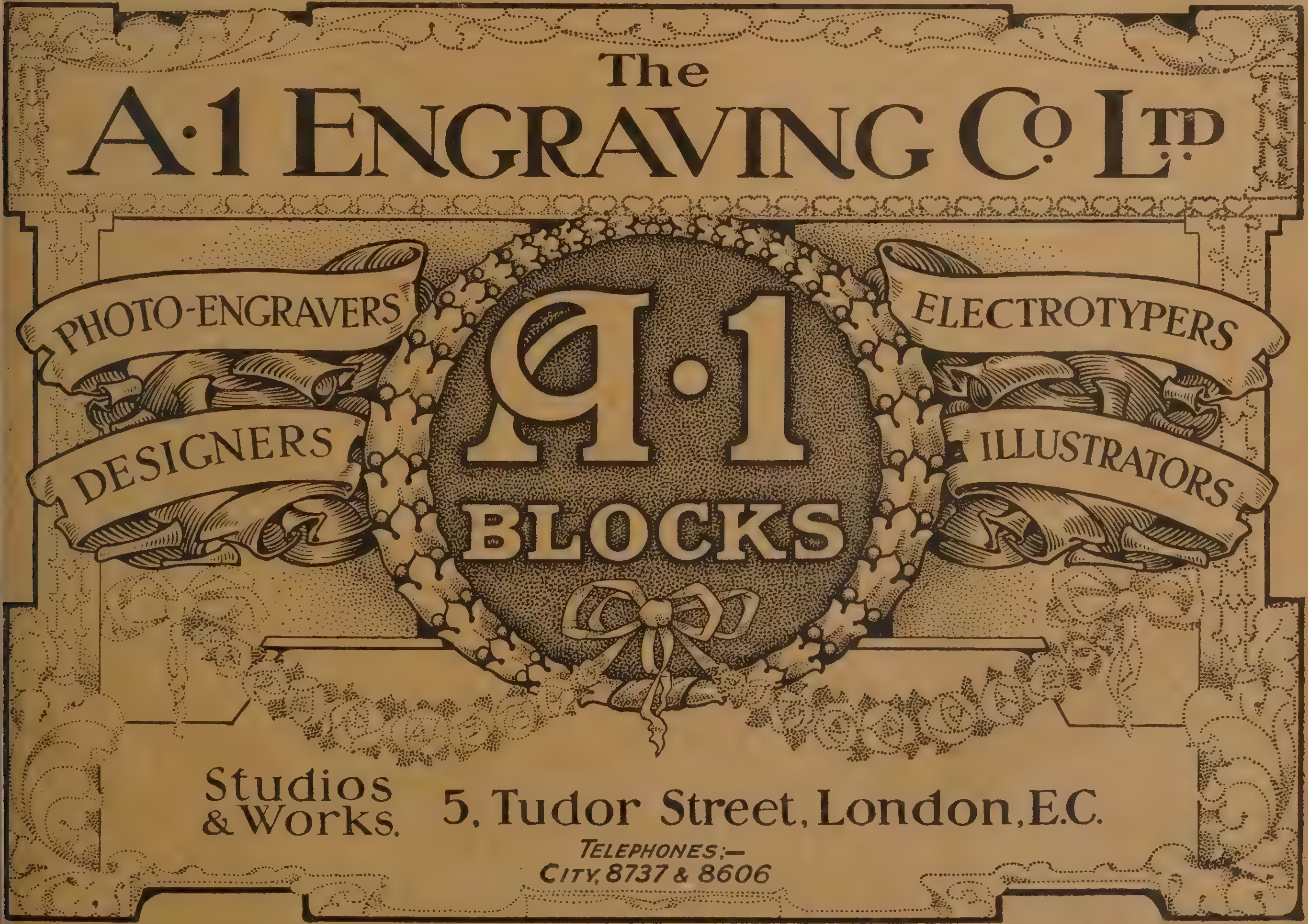


Combines
Strength, Simplicity
& Durability

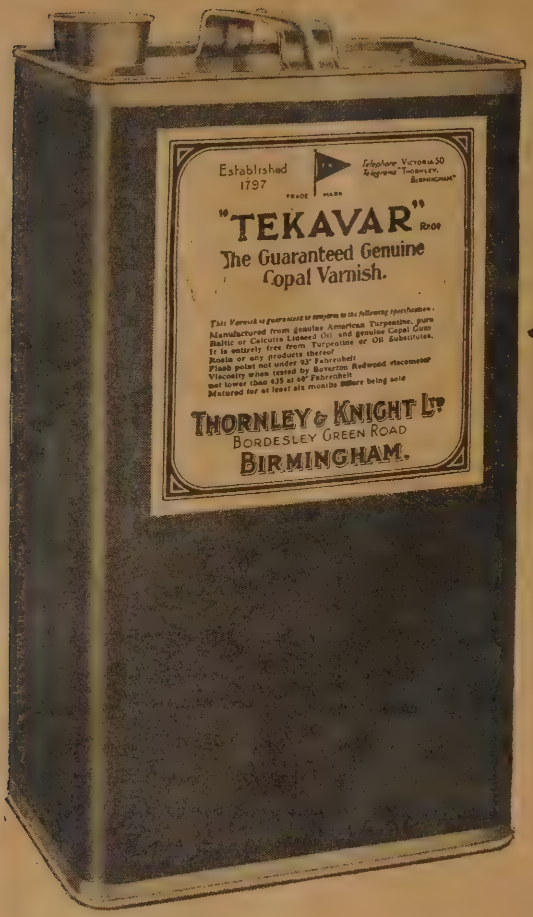
Lantern Lights, Roof Lights, Skylights, etc.

¶ *THE LUXFER CO. MANUFACTURE ALL CONSTRUCTIONS THROUGH WHICH* Day-light *IS ADMITTED INTO A BUILDING: PRISMATIC FIRE-RESISTING, ORNAMENTAL AND ROOF GLAZINGS, DOME LIGHTS, CEILING LIGHTS, PAVEMENT LIGHTS, FLOOR LIGHTS, LEADED LIGHTS, METAL CASEMENTS, Etc.*

The British Luxfer Prism Synd., Ltd., 16 Hill Street, Finsbury, London, E.C.



Studios
& Works. 5, Tudor Street, London, E.C.
TELEPHONES:—
CITY, 8737 & 8606



Nothing created a greater interest at the recent Decorators' Show in London

than

"TEKAVAR"

(Registered)

THE GUARANTEED GENUINE COPAL VARNISHES

For Indoor and Outdoor Work.

These Varnishes will, by their own merits, prove a big factor in the Painting Programme for 1924.

If you have not tried them, write to us for free samples and prices before placing your stock order for next year.

Sole Manufacturers:

THORNLEY & KNIGHT LTD.

Varnish, Japan, and Colour Manufacturers,

Bordesley Green Rd., BIRMINGHAM

'Phone: Victoria 50. Wires: "Thornley, Birmingham."
Established 1797.

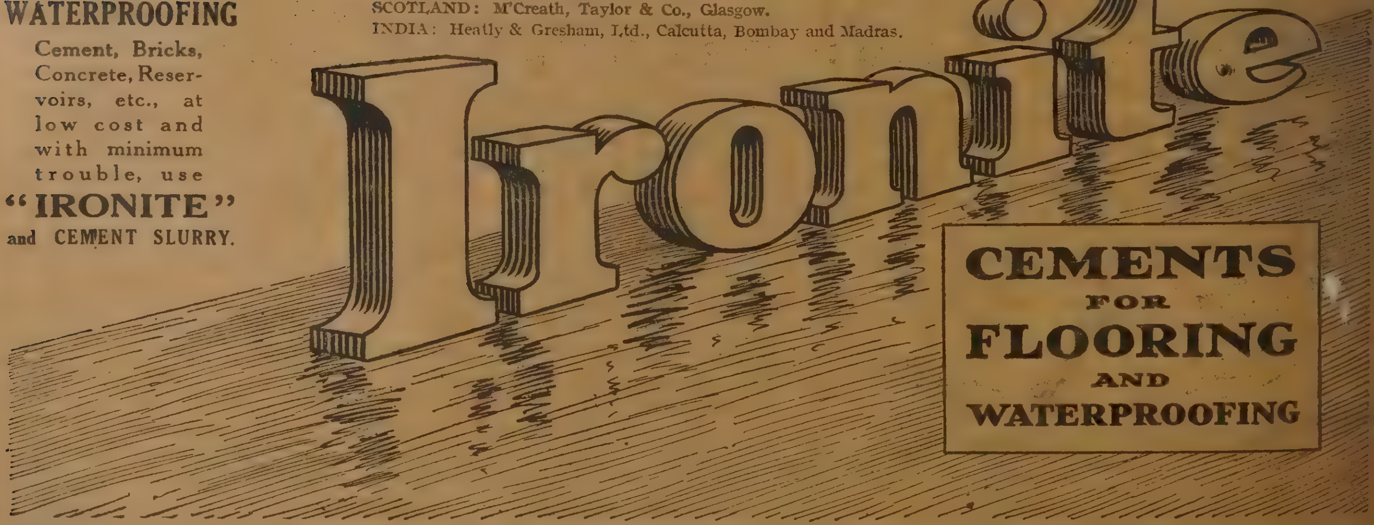
Impervious to Oil and Water

Excessive moisture, oil and grease, extremes of heat and cold, heavy traffic—none of these has any effect on the durability of "IRONITE" Flooring. Wherever it is essential to provide a floor surface that will really be *Wear-proof, Water-proof, Oil-proof, and Dustless,* specify "IRONITE."

FOR FURTHER PARTICULARS AND PRICES WRITE TO

THE IRONITE COMPANY, LIMITED,
11 OLD QUEEN STREET, WESTMINSTER, LONDON, S.W.1.
Telephone: Victoria 5618. Telegrams: "Thormotvin, Parl, London."
MANCHESTER: Lyons Road, Trafford Park.
Telephone: Trafford Park 27. Telegraphic Address: "Conucoy, Manchester."
NEWCASTLE: Day & White, Ltd.
SCOTLAND: M'Creath, Taylor & Co., Glasgow.
INDIA: Heatly & Gresham, Ltd., Calcutta, Bombay and Madras.

For
WATERPROOFING
Cement, Bricks, Concrete, Reservoirs, etc., at low cost and with minimum trouble, use
"IRONITE"
and CEMENT SLURRY.



CEMENTS
FOR
FLOORING
AND
WATERPROOFING

Printed for the Proprietors of "THE ARCHITECTS' JOURNAL" (The Architectural Press, Ltd.), 27-29 Tothill Street, Westminster, S.W.1, by EYRE AND SPOTTISWOODE, LTD., His Majesty's Printers, Downs Park Road, London, E.8.
YEARLY SUBSCRIPTION: at Home, £1 7s. 6d.; Canada, £1 10s. od.; Elsewhere Abroad, £1 12s. 6d.
Agents—Canada: THE TORONTO NEWS CO., Ltd., THE MONTREAL NEWS CO. U.S.A.: THE INTERNATIONAL NEWS CO., Duane Street, New York, WILLIAM HELBURN, New York, J. H. JANSEN, Cleveland, Ohio, G. BROES VAN DORT CO., Chicago, J. SCUDNEY, Boston. South Africa: THE CENTRAL NEWS AGENCY, Ltd., Cape Town. India: THE UNION AGENCY, Bombay, D. B. TARAPOREVALA SONS & CO., Ltd., Bombay. Australia: E. S. WIGG & CO., Adelaide, G. JERVIS MANTON, Melbourne. WHITCOMB & TOMBS, Ltd., Melbourne. Japan: MARUZEN CO., Tokyo. Holland: J. G. ROBBERS, Amsterdam.

UNIVERSITY OF
ILLINOIS LIBRARY
AT URBANA-CHAMPAIGN
BOOKSTACKS

UNIVERSITY OF ILLINOIS-URBANA
3 0112 079756844